AUSTRALIAN
ENVIRONMENTAL AUDITORS

Environmental Audit Report (53X)

47 Progress Drive, Nightcliff, Northern Territory – Lot B (Lots B1, B2 & B3)

Prepared for:
Department of Infrastructure, Planning and Logistics

Prepared by:
Australian Environmental Auditors Pty Ltd

Date:
8 September 2022

Project Number:
EA0729

EPA Service Order No.:
PRL8565 (NTEPA2019/0099-199)

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Prepared for:
Department of Infrastructure, Planning and Logistics
Level 5, Energy House
18-20 Cavenagh Street, Darwin, NT 0801

Prepared by:
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Suite 21, 1 Ricketts Road
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Date of Report:
8 September 2022

Author:

Jean Paul Pearce
Environmental Auditor (Contaminated Land)
(Appointed pursuant to section 53S (1) of the *Environment Protection Act 197*0)

Version Control Record

DATE ISSUED	DOCUMENT VERSION	SUBMITTED TO	Authors/Reviewers
8 September 2022	Final	NT EPA, Environmental Audit Unit – Attention Christopher Coombes Department of Infrastructure, Planning and Logistics	Auditor: JPP Principal Assistant: BR Internal Auditor Reviewer: PH

ENVIRONMENT PROTECTION ACT 1970 (Vic)

STATEMENT OF ENVIRONMENTAL AUDIT

I, Jean Paul Pearce of Australian Environmental Auditors Pty Ltd, a person appointed by the Victorian Environment Protection Authority ('the Authority') under the Environment Protection Act 1970 ('the Act') as an environmental auditor for the purposes of the Act, having

1. been requested by Ms Sinead Redmond of HK Solutions on behalf of Department of Infrastructure, Planning and Logistics (DIPL) to issue a Certificate of Environmental Audit in relation to the site located at 47 Progress Drive, Nightcliff, Northern Territory – Lot B (Lots B1, B2 and B3) ('the site' shown in Figure 1), owned by the Northern Territory Government as a Department of Territory Families, Housing and Communities asset,
2. had regard to, among other things,
    i. guidelines issued by the Authority for the purposes of Part IXD of the Act,
    ii. the beneficial uses that may be made of the site,
    iii. relevant State environment protection policies/industrial waste management policies, namely,
        - SEPP (Air Quality Management)
        - SEPP (Ambient Air Quality)
        - SEPP (Waters)
        - SEPP (Prevention and Management of Contamination of Land)
        - Victorian Environment Protection (Industrial Waste Resource) Regulations 2009
3. in making a total assessment of the nature and extent of any harm or detriment caused to, or the risk of any possible harm or detriment which may be caused to, any beneficial use made of the site by any industrial processes or activity, waste or substance (including any chemical substance), and
4. completed an environmental audit report in accordance with section 53X of the Act, a copy of which has been sent to the Authority and the relevant planning and responsible authority.

HEREBY STATE that I am of the opinion that the site is suitable for the beneficial uses associated with:

- Sensitive use – High density;
- Public open space;
- Commercial use; and
- Industrial use,

subject to the following conditions attached thereto:

1. Asbestos containing materials (ACM) have been identified within fill materials on the external eastern site boundary for a portion of Lot B2. A geofabric marker layer has been installed along this portion of the site as shown in Figure 9 and extends from the surface to a depth of approximately 1.2 mbgl. This marker layer must be maintained until an Environmental Auditor determines that it is not required.
2. ACM have been identified in fill materials beyond the external site boundaries. Excavation crossing the site boundaries must not result in ACM contaminated fill being imported to the audit site.

The condition of the site is detrimental or potentially detrimental to any (one or more) beneficial uses of the site. Accordingly, I have not issued a Certificate of Environmental Audit for the site in its current condition, the reasons for which are presented in the environmental audit report. The terms and conditions that need to be complied with before a Certificate of Environmental Audit may be issued are set out as follows:

- ACM contamination in boundary soils would need to be cleaned up such that all relevant beneficial uses of soil are restored.

Other related information:

- ACM were found on the audit site and have been removed as far as reasonably practicable. No known ACM remains on the audit site. However, small quantities of ACM may remain within the soil and be uncovered during excavation works. These ACM fragments are not anticipated to represent a health risk to workers or occupiers of the completed development. If encountered during future development or use of the audit site, any fragments must be handled and disposed in accordance with the *Code of Practice How to Safely Remove Asbestos 2011* (or its relevant future revisions).
- Groundwater at the site contains naturally elevated concentrations of pH, cobalt, copper, nickel, lead, manganese and zinc. The levels are considered typical of the natural groundwater quality surrounding the site and do not constitute pollution in accordance with clause 10(2)(c) of State environment protection policy (Waters) 2018.
- If groundwater is to be extracted from the site, advice including testing, should be sought from a suitably qualified professional to ensure the groundwater is suitable for the intended use.
- Any material excavated from the site and disposed of off site should be classified and managed in accordance with IWRG 621 (or its relevant future revisions) or NT EPA equivalent. Analysis of fill materials should include asbestos and PFAS due to the previous on-site asbestos contamination and importation of fill materials from a Defence site;
- Not all land uses for which the land is considered suitable by this audit may be allowed under the existing zoning;
- A separate Environmental Audit Report and Statement of Environmental Audit will be issued for Lot A and another for the Road Reserve and Lot C; and
- In accordance with Section 53ZE of the Act, the owner/occupier of the site must provide a copy of this Statement to any person who becomes or proposes to become an occupier of the site.

This statement forms part of an Environmental Audit Report (Australian Environmental Auditors Pty Ltd, Environmental Audit Report (53X), 47 Progress Drive, Nightcliff, Northern Territory – Lot B (Lots B1, B2 and B3), AEA Ref: EA0729, Service Order No. PRL8565 (NTEPA2019/0099-199), 8 September 2022).

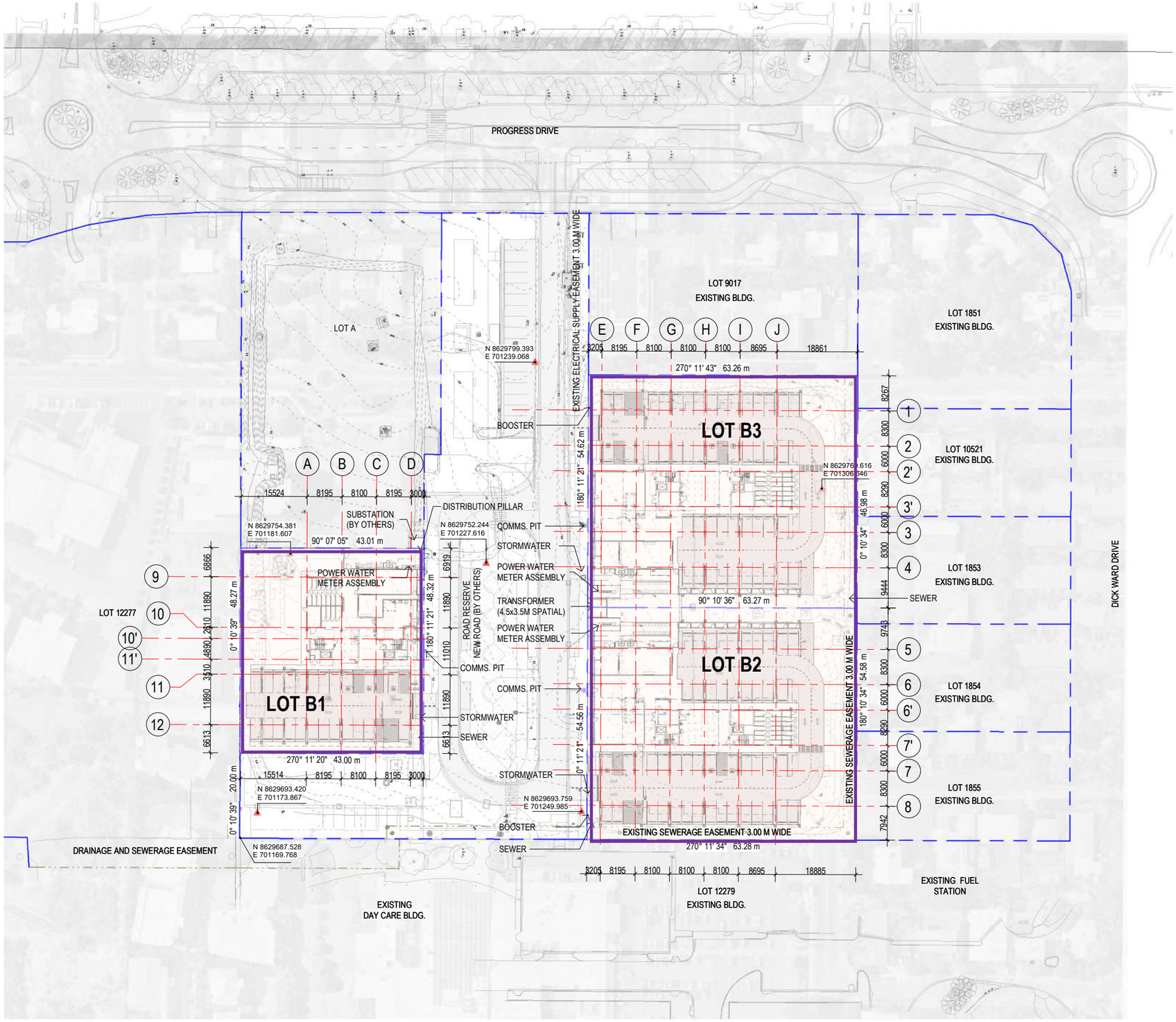
Further details regarding the condition of the site may be found in the environmental audit report.

DATED: 8 September 2022

Signed:

Jean Paul Pearce

ENVIRONMENTAL AUDITOR
(Appointed pursuant to the *Environment Protection Act 1970)*



1 OVERALL SITE PLAN
1 : 500

0 2500 10000 20000 25000
1:500mm

GENERAL NOTES

BCA
CLASS: GROUND FLOOR - **5, 6 & 7a** LEVEL 1 to 3 - **2**
CLIMATE ZONE: 1
CLIMATE REGION: A
SECTION J: COMPLY WITH BCA 2009 SECTION J
FIRE RESISTING CONSTRUCTION: TYPE A
WIND REGION: C

78 APARTMENT UNITS

LOT B1 = TOTAL 18 1 BEDROOM UNITS
LOT B2 = TOTAL 30 UNITS (24 -1 BEDROOM UNITS, 6 -2 BEDROOM UNITS)
LOT B3 = TOTAL 30 UNITS (24 -1 BEDROOM UNITS, 6 -2 BEDROOM UNITS)

LOT B1 NGO OFFICE = approx. 70 sqm.
LOT B2 NGO OFFICE = approx.153 sqm.
LOT B3 NGO OFFICE = approx.153 sqm.

1. VERIFY ALL DIMENSIONS PRIOR TO ORDERING & FABRICATION OF MATERIALS. DO NOT SCALE THE DRAWINGS UNLESS OTHERWISE NOTED.

2. ALL NEW MATERIALS & CONSTRUCTION METHODS ARE TO BE IN ACCORDANCE WITH THE CURRENT N.T. DEEMED TO COMPLY, BUILDING CODE OF AUSTRALIA, SAA STANDARDS & THE MANUFACTURER'S DIRECTION/SPECIFICATIONS.

3. NEW FINISHES AND MATERIALS TO COMPLY WITH BCA FIRE HAZARD INDICES SPECIFICATION C 1.10

4. INSTALL FIRE EXTINGUISHERS TO THE REQUIREMENTS OF NT FIRE SERVICES & IN ACCORDANCE WITH BCA CLAUSE E1.8 & AS 2444.

6.SURVEY BACKGROUND DRAWINGS PREPARED BY **EJA SURVEY** ref.*11397-1 (2020-01-10)*

DEMOLITION NOTES

1. CONTRACTOR TO DEMOLISH ALL EXISTING ABOVE & BELOW GROUND STRUCTURES & SERVICES AND MAKE SITE READY FOR NEW WORKS

2. ALL DEMOLITION WORKS SHALL BE IN ACCORDANCE WITH RELEVANT CODES INCLUDING SAA, AS2601 AND ALL LOCAL AUTHORITY REQUIREMENTS

3. ANY OR ALL SERVICES AFFECTED BY DEMOLITION WORKS ARE TO BE MADE GOOD OR CAPPED OFF, AS REQUIRED, AND DETERMINED ON SITE.

4. REMOVE DEMOLISHED MATERIALS AND RUBBISH FROM SITE UNLESS NOTED OTHERWISE

5. WHERE EXISTING SURFACES ARE DAMAGED BY DEMOLITION WORKS, THEY SHALL BE MADE GOOD TO MATCH EXISTING ADJACENT SURFACES.

6. ENSURE STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE MODEL WORK HEALTH AND SAFETY REGULATIONS

LOT AREA SUMMARY TABLE	
LOT	Area
LOT B2	3452.59 m²
LOT B3	3454.74 m²
LOT B1	2077.13 m²
	8984.47 m²

CARPARK SUMMARY

BUILDING 1	23
BUILDING 2	47
BUILDING 3	47
TOTAL CARPARKING	117

CONTRACT DRAWING

No.	DESCRIPTION	DATE	NAME	DEPT/COMPANY
2	CONTRACT DRAWINGS - ISSUED FOR APPROVAL	24/08/2020	CD	CD
1	CONTRACT DRAWINGS (100% DOCUMENTATION)	01/05/2020	AW	CD
0	CONTRACT DRAWINGS (50% DOCUMENTATION)	06/03/2020	AW	CD

AMENDMENTS

DISCLAIMER
THIS IS NOT A CONTROLLED DOCUMENT, VERIFY IT IS CURRENT BEFORE USE.
THIS IS A REPRESENTATIONAL DRAWING. DO NOT ASSUME THAT THIS DRAWING IS COMPLETE, ACCURATE OR DRAWN EXACTLY TO SCALE.
THIS DRAWING IS CERTIFIED AS IS AND ONLY FOR THIS PROJECT (UNLESS NOTED OTHERWISE).
ANY ALTERATION OF THIS DRAWING IN ANY WAY RENDERS THE CERTIFICATION INVALID. USE OF INFORMATION FROM THIS DRAWING FOR ANY OTHER PROJECT OR OTHER ELEMENT OF THIS PROJECT REQUIRES VERIFICATION OF ITS ADEQUACY AND NEW CERTIFICATION.

concept designs
Concept Designs JOB No: 20036JST

DRAWN	KA	CHECKED	GS
DATE	14/09/20	DATE	14/09/20
DESIGNED	DKJ Projects Architecture	CHECKED	GS
DATE	14/09/20	DATE	14/09/20
DESIGN PROJECT LEADER	GS	NTG PROJECT MANAGER	SR
DATE	14/09/20	DATE	14/09/20

Northern Territory Government

DARWIN REGION
LOT 9077, PROGRESS DRIVE, NIGHTCLIFF

REDEVELOPMENT OF JOHN STOKES SQUARE - RESIDENTIAL PRECINCT

OVERALL SITE PLAN

NTG PROJECT No.	NTG ASSET No.	SHEET No.	NTG DRAWING No.	AMENDMENT	SHEET SIZE
HOD34932 /HOD35051	86/22030	A050 OF 70	B20-4396	2	A1

Z:\Concept Designs\Concept Designs Projects\20\20036JST - Greenspace John Stokes\New Revit Central\194041_AR_DKJ_NTG-JSSR_DD_RVT20_LIVE Central_model.rvt

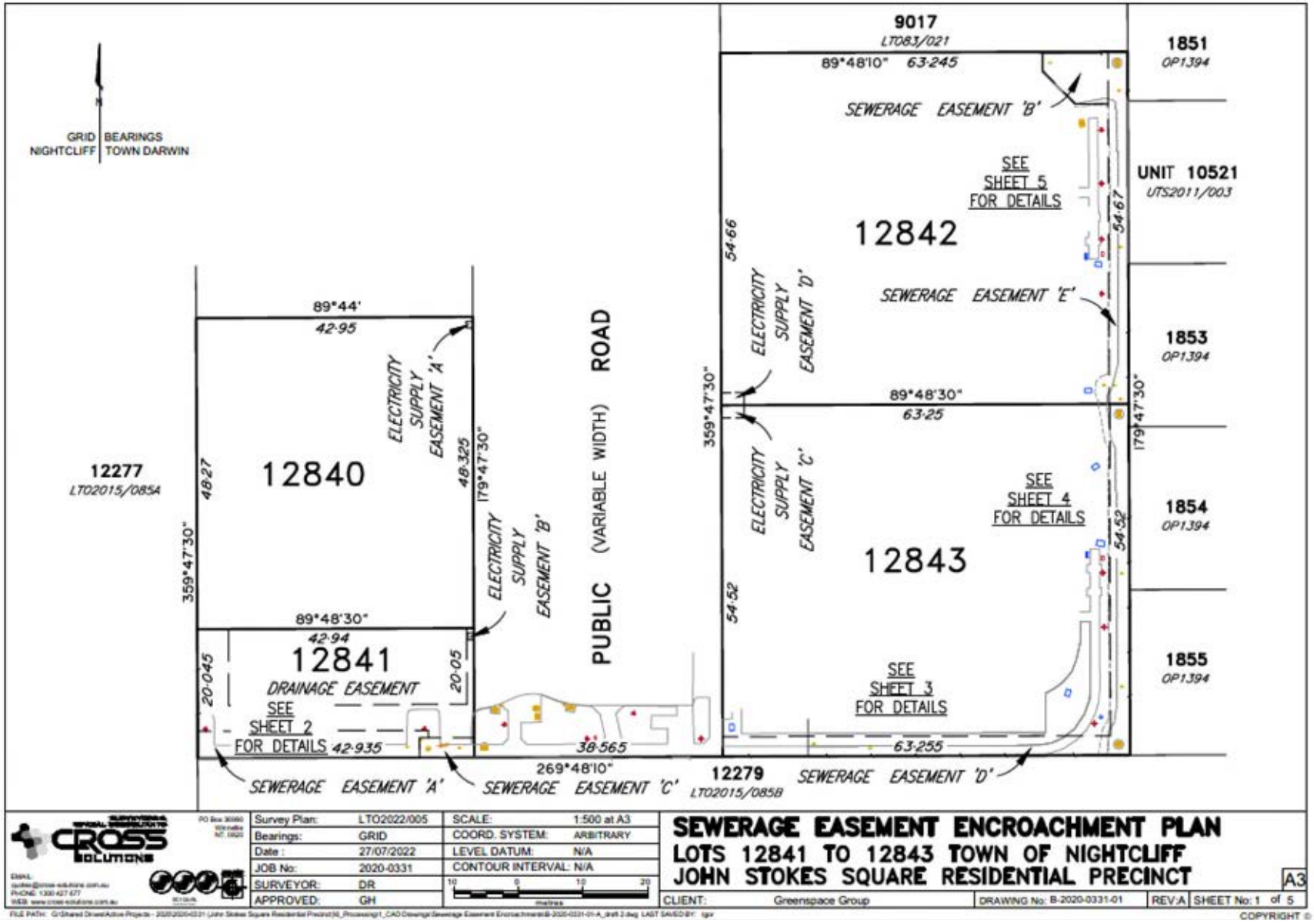


Figure 1: Site Plan – Lot B (Lots B1, B2 and B3)

Executive Summary

This report is in response to a request for a Certificate of Environmental Audit in accordance with Part IXD of the *Victorian Environment Protection Act 1970*. In accordance with EPA Victoria Publication 1147, summary information on this audit is presented in the following two tables.

Table 1: Summary of Audit Information

Item	Detail
Auditor	Jean Paul Pearce
Auditor account number	289162
Auditor appointment end date	26 November 2022
Audit type	53X
Date EPA notified of audit	21 November 2019
Audit service order number	PRL8565 (NTEPA2019/0099-199)
Name of person requesting audit	Ms Sinead Redmond Project Management Lead Northern Territory Department of Infrastructure, Planning and Logistics Land Development Unit
Relationship of person requesting audit to site	Authorised representative of the site owner
Name of premises owner	Department of Territory Families, Housing and Communities
Date of auditor engagement	20 November 2019
Completion date of the audit	8 September 2022
Reason for audit	Due to the identified pesticides and asbestos contamination, we understand EPA has required an Auditor to determine the site is suitable for use
Audit categorisation	Risk
Environmental segments	Air, Land, Groundwater, Surface water
If the audit was required by an EPA notice, licence or other, please provide EPA reference number	Not applicable
Current land use zoning	Zone MR (medium density residential), recently changed to Specific Use (SU) Zone SD49.
EPA region	Darwin
Municipality	Nightcliff
Dominant – Lot on plan	Lot 9077 Town of Nightcliff Lot 9077 has since been subdivided creating Lot 12840 (Lot B1), Lot 12842 (Lot B3) and Lot 12843 (Lot B2), refer to Attachment 1.
Additional – Lot on plan(s)	The project area has been split into three audit areas based on the proposed development. This audit is the second audit area (Stage 2 of 3 stages) and comprises three residential lots referred to as Lot B1, B2 and B3 (referred to as Lot B) Lot B is defined as Lot 12840 (Lot B1), Lot 12842 (Lot B3) and Lot 12843 (Lot B2), refer to Attachment 1.

Item	Detail	
Site/premises name:	John Stokes Square Nightcliff Development	
▪ Building/complex sub-unit No	-	
▪ Street/Lot – Lower No.	47	
▪ Street/Lot – Upper No.	-	
▪ Street Name	Progress	
▪ Street type (road, court, etc.)	Drive	
▪ Street suffix (North, South etc.)	-	
▪ Suburb	Nightcliff	
▪ Postcode	0810	
GIS coordinate of site centroid:		
▪ Latitude (GDA94)	-12.388587	
▪ Longitude (GDA94)	130.850751	
Site area (in square metres)	2,077 m^2 (Lot B1) 3,453 m^2 (Lot B2) 3,455 m^2 (Lot B3)	
Plan of site/premises showing the audit site boundary attached	Yes, refer to survey plan, Attachment 1.	
Plan of site/premises showing the audit site boundary attached in a spatial data format	No	
Members and categories of support team utilised	Shandel Coleman (AEA) for technical audit support Bridget Roder (AEA) for technical audit support	
Further works or requirements	No	
Nature and extent of continuing risk	Risks in groundwater have not been found to be significant, however the condition of the groundwater should be tested by an appropriately qualified environmental consultant (to determine the suitability thereof) prior to being utilised for extractive use. Risks in soil vapour have not been found to be significant. Risks in soil have not been found to be significant apart from residual ACM on the site boundary covered by a geofabric marker liner and slightly beyond the site boundary. This is not a risk to future site users, but excavation workers in the area should be aware of this. This is located within a PWC sewer easement and excavation works are therefore restricted to PWC accredited contractors who would be familiar with and have procedures in place to deal with asbestos finds.	
Outcome of the audit	Statement of Environmental Audit with conditions	
Has EPA determined CUTEP at this site?	No	
Has the auditor determined CUTEP at this site?	No	
Has a GQRUZ been identified at the site/beyond the site by EPA?	No	
Does NAPL remain at the site?	No – never encountered	
Please indicate which of the Protected Beneficial Uses of groundwater are precluded due to pollution	**Protected Use (Segment A1)**	**Precluded?**
	Water Dependent Ecosystems and Species	No
	Potable Water Supply (Desirable)	No

Item	Detail	
	Potable Water Supply (Acceptable)	No
	Potable Mineral Water Supply	n/a
	Agriculture and Irrigation (Irrigation)	No
	Agriculture and Irrigation (Stock Watering)	No
	Water-based Recreation (Primary Contact Recreation)	No
	Industrial and Commercial	No
	Traditional Owners Cultural Values (on-site)	n/a
	Cultural and Spiritual Values (on-site)	n/a
	Geothermal Properties	n/a
	Buildings and Structures	No

Table 2: Physical Site Information

Item	Detail
Historical land use	Residential
Current land use	Recently redeveloped for residential properties
Proposed future land use	High density residential
Surrounding land use – north	The police station (Lot A) north of Lot B1 and existing offsite residential north of Lot B2 and B3. Progress Drive then commercial, with low density residential beyond A service station is located to the north-east of the site
Surrounding land use – south	Proposed public open space (Lot C) Child care centre and tyre retailer then commercial A service station is located south-east of the site
Surrounding land use – east	Road Reserve, proposed residential (Lot B3), then Dick Ward Drive
Surrounding land use – west	Proposed residential (Lot B1), Lot A, vacant land and laneway then commercial
Proposed land use zoning	Specific Use (SU) Zone SD49
Nearest surface water receptor – name	Outer Estuary of Darwin Harbour
Nearest surface water receptor – direction	West
Likely point of groundwater discharge	Outer Estuary of Darwin Harbour, 160 m west of the site
Site aquifer formation	Unconsolidated soils
Groundwater flow direction	West
Groundwater TDS range (mg/L)	120 to 430 mg/L
Groundwater segment	Segment A1
Are there multiple aquifers impacted by pollution at the site?	No
Perched groundwater depth – upper (metres below ground level (mbgl))	n/a
Perched groundwater depth – lower (mbgl)	n/a
Regional groundwater depth – upper (mbgl)	6
Regional groundwater depth – lower (mbgl)	10
Number of bores within 2 km	46
Closest extractive use (distance in m)	Bore RN000130 (300 m from the site).
Zone of groundwater plume influence (m from site boundary)	Not applicable – non-source site
Year groundwater last monitored	2020
Have you attached electronic copies of Current Groundwater Analytical Results presented as a summary table?	Yes, refer to Appendix A

Read in Conjunction with Audit Report

This Executive Summary summarises the key points of the Audit Report. The Executive Summary must be read in conjunction with the full Audit Report (Service Order No. PRL8565 (NTEPA2019/0099-199); Australian Environmental Auditors Pty Ltd, ref. EA0729, *Environmental Audit Report (53X), 47 Progress Drive, Nightcliff* – Lot B (Lots B1, B2 and B3).

Table of Contents

Executive Summary i
1 Introduction 1
1.1 Background 1
1.2 Site Definition 1
1.3 Proposed Development 1
1.4 Reason for the Environmental Audit 1
1.5 Independence of the Environmental Auditor 2
2 Audit Framework and Scope of Works 3
2.1 General 3
2.2 Legislation, Regulations and Guidelines 3
2.3 Audit Scope 5
2.3.1 Previous Environmental Audits 5
2.3.2 Reports Reviewed 5
2.4 Correspondence with Client and their Consultants 6
2.5 Correspondence and Liaison with EPA 6
2.6 Audit Team and Expert Support 6
2.6.1 Site Inspections 6
2.7 Auditor's Verification of Site Conditions 7
2.8 Uncertainties of the Audit Process 7
3 Site History and Characterisation 8
3.1 Site History Summary 8
3.2 Potential Contamination Sources and Contaminants of Concern 8
3.3 Adequacy of Site History Information 9
4 Site Characterisation 11
4.1 Site Description and Observations from AEA Site Inspections 11
4.2 Surrounding Land Uses 12
4.3 Council Planning Scheme 12
4.4 Topography and Surface Waters 12
4.5 Geology and Hydrogeology 12
4.5.1 Regional Geology 12
4.5.2 Site Geology 12
4.5.3 Regional Hydrogeology 12
4.5.4 Registered Bore Search and Current Extractive Uses 13
4.5.5 Site-specific Hydrogeology 13
4.6 Conceptual Site Model 13
4.6.1 General 13
4.7 Known and Potential Sources of Contamination 13
4.8 Contaminants of Potential Concern 13
4.9 Potential Mechanisms of Contamination 13

4.10 Potentially Affected Media 14
4.11 Human and Ecological Receptors 14
4.12 Potential and Complete Exposure Pathways 14
4.13 Post Remediation Conceptual Site Model 15
5 Assessment of Beneficial Uses 16
5.1 Beneficial Uses of Land 16
5.2 Adopted Soil Assessment Criteria 17
5.2.1 Maintenance of Ecosystems 18
5.2.2 Protection of Human Health 19
5.2.3 Asbestos 20
5.2.4 Soil Vapour 20
5.2.5 Buildings and Structures 21
5.2.6 Aesthetics 21
5.2.7 Production of Food, Flora and Fibre 21
5.3 Beneficial Uses of Groundwater 22
5.4 Adopted Groundwater Assessment Criteria 23
5.4.1 Water Dependent Ecosystems and Species (WDES), Traditional Owner Cultural Values (TOCV) and Cultural and Spiritual Values (CSV) 23
5.4.2 Potable Water Supply 23
5.4.3 Agriculture and Irrigation (Irrigation) 23
5.4.4 Agriculture and Irrigation (Stock Watering) 24
5.4.5 Industrial and Commercial 24
5.4.6 Water-Based Recreation (Primary Contact Recreation) 24
5.4.7 Buildings and Structures 24
5.5 Beneficial Uses of Surface Water 25
5.6 Beneficial Uses of Ambient Air 26
6 Summary of Investigation Process and Findings 28
6.1 Soil Investigations 28
6.1.1 Area-Specific Data (Lots B1, B2 & B3) 30
6.2 Groundwater Investigations 30
6.3 Potential for Vapour Intrusion 31
6.4 Auditor's Opinion on Investigations – Lot B 31
7 Remediation 33
7.1 Remediation and Validation of OCP Impacts – Agon 2019 33
7.2 Remediation and Validation of Asbestos Impacts – Agon 2019 33
7.3 Remediation and Validation of Asbestos Impacts – SLR 2020 33
7.4 Off-site Soil Disposal and Re-use of Soil Stockpiles within Lot B 34
7.5 Sewer Easement 35
7.6 Importation of Fill Material 35
7.7 Auditor's Opinion on Remediation Data 36
8 Beneficial Use Assessment – Land 37

8.1 Final Soil Condition 37
8.1.1 Maintenance of Ecosystems (MoE) 40
8.1.2 Human Health 40
8.1.3 Aesthetics 41
8.1.4 Production of Food, Flora and Fibre 41
8.1.5 Buildings and Structures 41
8.2 Consideration of Whether a Certificate or Statement Should be Issued 42
8.3 Determination of Whether the Condition of the Site is Detrimental to the Proposed Development 42
9 Beneficial Use Assessment – Groundwater 43
9.1 Groundwater Pollution Assessment Process 43
9.1.1 Is Groundwater Likely to be Polluted? 43
9.1.2 Is Groundwater Polluted? 43
9.1.3 Are Precluded Beneficial Uses Relevant or is the Site the Source? 43
9.2 Final Groundwater Condition 44
9.3 Source and Extent of Groundwater Pollution 45
9.3.1 Background/Regional Pollution 45
9.4 Significance (Risk) of Groundwater Pollution 46
9.4.1 Extractive Groundwater Uses 46
9.4.2 Water Dependent Ecosystems and Species, Traditional Owner Cultural Values, Cultural and Spiritual Values 46
9.4.3 Other Non-Extractive Groundwater Uses 47
9.4.4 Consideration of Potential NAPL 47
9.4.5 Consideration of Potential Vapour Risks 47
9.5 Summary of Precluded Beneficial Uses of Groundwater 47
9.6 Determination of Whether a Certificate or Statement Should be Issued 48
9.7 Determination of Whether the Condition of the Site is Detrimental to the Proposed Development (Statement of Environmental Audit) 48
10 Beneficial Use Assessment – Surface Water 49
11 Beneficial Use Assessment – Ambient Air 50
12 Other Factors Affecting Use of the Site 51
13 Conclusions 52
13.1 Audit Requirement 52
13.2 Verification of Assessor's Conclusions 52
13.3 Auditor's Conclusions 52
14 References 54

List of Tables

Table 1: Summary of Audit Information i
Table 2: Physical Site Information iv
Table 3: Adequacy of Site History Information 9
Table 4: Summary of Auditor Inspections 11
Table 5: Initial Source – Pathway – Receptor Assessment 14
Table 6: Final Source – Pathway – Receptor Assessment 15
Table 7: Beneficial Uses of Land to be Protected 17
Table 8: Indicators and Objectives for Beneficial Uses of Land 17
Table 9: Beneficial Uses of Groundwater to be Protected 22
Table 10: Beneficial Uses to be Protected (Inland Waters) 25
Table 11: Summary of Soil Investigations at the Site 28
Table 12: Summary of Groundwater Investigations at the Site 30
Table 13: Residual Soil Analytes Comparison with Ecological/Human Health Direct Contact Criteria (mg/kg) 38
Table 14: Validation Soil Analytes Comparison with Ecological/Human Health Direct Contact Criteria (mg/kg) 39
Table 15: Stockpile Soil Analytes Comparison with Ecological/Human Health Direct Contact Criteria (mg/kg) 39
Table 16: Groundwater Results Exceeding Adopted Tier 1 Criteria 44
Table 17: Summary of groundwater contaminant exceedances 46
Table 18: Precluded Beneficial Use Summary Table 47

List of Attachments

Attachment 1: Site Location Plan
Attachment 2: Development Plan
Attachment 3: Historical Site Layout
Attachment 4: Soil Investigation Locations
Attachment 5: Groundwater Investigation Locations
Attachment 6: Conceptual Site Model
Attachment 7: Sewer Easement
Attachment 8: Validation Locations
Attachment 9: Location of Geofabric

Appendices

Appendix A - EPA Summary Information
Appendix B - Certificate of Title
Appendix C - Consultants' Reports
Appendix D - Client and Consultant Correspondence

Abbreviations

Abbreviation	Description
ACM	Asbestos-containing materials
AF/FA	Asbestos fines/fibrous asbestos
ANZECC	Australian and New Zealand Environment and Conservation Council
ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
BTEXN	Benzene, Toluene, Ethylbenzene, Xylenes and Naphthalene
CCME	Canadian Council of the Ministers of the Environment
CEA	Certificate of Environmental Audit
CSM	Conceptual Site Model
CSV	Cultural and Spiritual Values
DIPL	Department of Infrastructure, Planning and Logistics
DQO	Data Quality Objectives
DSI	Detailed site investigation
EAR	Environmental Audit Report
EIL	Ecological Investigation Level
EPA	Environment Protection Authority
ESL	Ecological Screening Level
GME	Groundwater Monitoring Event
HEPA	Heads of Environmental Protection Agencies
HIL	Health-based Investigation Level
HSL	Health-based Screening Level
IWRG	Industrial Waste Resource Guidelines
LOR	Limit of Reporting
mbgl	Metres below ground level
mbtoc	Metres below top of casing
MoE	Maintenance of Ecosystems
NAPL	Non-aqueous phase liquid
NATA	National Association of Testing Authorities
NHMRC	National Health and Medical Research Council
NT EPA	NT Environment Protection Authority
OCP/OPP	Organochlorine pesticides/Organophosphate pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PFAS	Per- and poly-fluoroalkyl substances
SBWMF	Shoal Bay Waste Management Facility
SEA	Statement of Environmental Audit
SEPP	State Environmental Protection Policy
TDS	Total Dissolved Solids
TOCV	Traditional Owners Cultural Values
TRH	Total Recoverable Hydrocarbons
WA DoH	WA Department of Health
WDES	Water Dependent Ecosystems and Species

(*Intentionally blank*)

1 Introduction

1.1 Background

This Environmental Audit Report (EAR) and accompanying Statement of Environmental Audit (SEA) were prepared by Jean Paul Pearce, an employee of Australian Environmental Auditors Pty Ltd (AEA) and Environmental Auditor (Contaminated Land) appointed pursuant to the *Environment Protection Act 1970* (*Victorian EP Act*).

This EAR was prepared in response to a request from Ms Sinead Redmond, a project manager for Department of Infrastructure, Planning and Logistics (DIPL) to conduct an environmental audit of the site under section 53X of the *Victorian EP Act* to satisfy an NT EPA requirement.

DIPL contracted Greencap Pty Ltd (Greencap), Agon Environmental Pty Ltd (Agon) and SLR Consulting Australia Pty Ltd (SLR) to undertake environmental site investigations and remediation for the purpose of providing sufficient information to allow this audit to be completed.

This EAR has been prepared in accordance with Section 53X of the *Victorian EP Act* and relevant Victorian and Northern Territory EPA guidance (particularly EPA Victoria Publications 759 and 1147). The SEA has been prepared in accordance with Section 53Z of the *Victorian Environment Protection Act 1970* and relevant Victorian and Northern Territory EPA guidance (particularly EPA Victoria Publication 759).

1.2 Site Definition

The site subject to this environmental audit is identified as 47 Progress Drive, Nightcliff, Northern Territory – Lot B comprising Lots B1, B2 and B3 (the site), and is 0.90 hectares in area. Further details are provided in Table 1.

The project area has been split into three audit areas based on the proposed development. This audit is the second audit area (Stage 2 of 3 stages) and comprises three residential lots referred to as Lot B1, B2 and B3 (referred to as Lot B). The boundaries are shown in Attachment 2.

A separate audit report has been prepared for Lot A (police station) which has been constructed (audit report dated 31 March 2022). The remainder of the project area comprises Lot C and the Road Reserve, this stage of work will be documented in a separate audit report (currently pending). These areas are currently being redeveloped.

The site is located approximately 8 km north of the Darwin central business district, Northern Territory. The site location is shown in Attachment 1, the certificate of title is included in Appendix B and a plan showing the boundaries of the site and the audit areas is provided as Attachment 2. Note that the certificate of title reflects the original Lot boundaries, as the certificates of title for the new Lots (B1, B2 and B3) allotments are not available at this time.

1.3 Proposed Development

The site is currently being redeveloped for high density residential use. A plan showing the proposed residential development is provided as Attachment 2.

The proposed development is consistent with *Residential* under the Land SEPP. Surrounding uses are a mix of sensitive use (existing residential), commercial and industrial.

1.4 Reason for the Environmental Audit

The audit of the site was completed to meet NT EPA requirements. Due to the identified pesticides and asbestos contamination, we understand EPA has required an auditor determine the site is suitable for use. The audit included assessing the site with regard to historical activities potentially impacting on beneficial uses. The Auditor considered the site conditions relative to the proposed use and assessed the suitability

of the site for the proposed use, as well as all potential protected beneficial uses, as required by EPA guidelines.

1.5 Independence of the Environmental Auditor

The environmental audit system depends on the Auditor undertaking an independent assessment of the site condition and risks to beneficial uses. EPA guidelines provide guidance on the Auditor maintaining their independence and avoiding potential conflicts of interest.

To the best of the Auditor's knowledge, the Auditor and his support team have had no involvement with this site prior to this audit. The Auditor and his support team have no financial association with the consultant or client beyond the payment for audit services by the client. Based on EPA guidance, the Auditor is therefore not aware of any real or perceived conflicts of interest which should prevent the audit from being completed.

2 Audit Framework and Scope of Works

2.1 General

The *Victorian EP Act* defines an environmental audit as a *'total assessment of the nature and extent of any harm or detriment caused to, or the risk of any possible harm or detriment which may be caused to, any beneficial use made of any segment of the environment by any industrial process or activity, waste, substance (including any chemical substance) or noise'.*

The segment of environment for the purposes of an environmental audit (contaminated land) is the audit site which is defined in terms of *'a parcel of land and all other elements (i.e. land, groundwater, surface water, air) of the environment associated with the land within the boundary of the parcel of land'* (Victorian EPA Publication 759).

A beneficial use is defined in the *Victorian EP Act* as '*a use of the environment or any element or segment of the environment which –*

(a) is conducive to public benefit, welfare, safety, health or aesthetic enjoyment and which requires protection from the effects of waste discharges, emissions or deposits or of the emission of noise; or

(b) is declared in State Environment Protection Policy to be a beneficial use;'

Furthermore, a beneficial use is considered relevant *'if the beneficial use is existing or is likely to be realised at the site'* (Victorian EPA Publication 759).

The assessment of whether a specific beneficial use is precluded or not is undertaken using an assessment of site condition against published qualitative and quantitative assessment criteria.

If the contamination status of the site is not detrimental to any beneficial use, then the outcome of the environmental audit will be a Certificate of Environmental Audit (CEA), in which case there is no restriction on the use of the site due to its contamination status.

If the contamination status of the site is detrimental to any beneficial use, then the outcome of the environmental audit will be an SEA, which indicates that the site is either:

- Not suitable for any use;
- Suitable for specific uses (that is, not detrimental to the beneficial uses associated with the nominated land use) without conditions or limitations; or
- Suitable for specific uses (that is, not detrimental to the beneficial uses associated with the nominated land use) subject to conditions and/or limitations relating to its use and management.

2.2 Legislation, Regulations and Guidelines

Section 68 of the Northern Territory Waste Management and Pollution Control Act 1998 (WMPC Act), Register of qualified persons, specifies that:

(1) The NT EPA must cause to be established and maintained a register of:

(a) persons qualified to perform environmental Audits for the purposes of an environmental Audit program…

It is understood that in early 2011 persons accredited under the NSW Site Auditor Scheme or the Victorian Environmental Auditor Scheme were approved as a class of person suitable to undertake environmental Audits in the Northern Territory.

The Audit was undertaken in accordance with Section 47d of the WMPC Act which states in part that:

An environmental Audit is an evaluation of any of the following:

(d) the likelihood of waste management problems or pollution resulting in environmental harm occurring and the adequacy of safeguards in place to prevent their occurrence or limit their impact on the environment;

(f) the types, amount, distribution or mobility of contaminants or waste present in the environment.

When conducting this environmental audit, the following key pieces of legislation (and subordinate legislation) were considered:

- *Environment Protection Act 1970* (Act No. 8056/1970) Victoria;
- SEPP (State Environment Protection Policy) (1999) *Ambient Air Quality*. Victorian Government Gazette, S19, 9 February 1999;
- SEPP (State Environment Protection Policy) (2001) *Air Quality Management*. Victorian Government Gazette, S240, 21 December 2001;
- SEPP (State Environmental Protection Policy) (2002) *Prevention and Management of Contamination of Land*. Victorian Government Gazette, S95, 4 June 2002; and
- SEPP (State Environmental Protection Policy) (2018) *Waters.* Victorian Government Gazette, S499, 23 October 2018.

Key guidance documents for environmental auditing include, but are not limited to, the following:

- NT EPA, *Guideline for the Preparation of an Environmental Management Plan*, May 2015;
- NT EPA, *Northern Territory Contaminated Land Guideline,* June 2017;
- EPA Victoria Publication 865.12, *Environmental Auditor Guidelines for Appointment and Conduct*, December 2016;
- EPA Victoria Publication 952.5, *Preparation of Environmental Audit Reports on Risk to the Environment*, December 2015;
- EPA Victoria Publication 953.2, *Environmental Auditor Guidelines for Conducting Environmental Audits*, August 2007; and
- EPA Victoria Publication 1147.2, *Environmental Auditor Guidelines – Provision of Environmental Audit Reports, Certificates and Statements*, December 2015 and its replacement Publication 2022, *Environmental Auditor Guidelines – Provision of Statements and Reports for Environmental Audits and Preliminary Risk Screen Assessment*, August 2021.

Additional guidance documents include, but are not limited to, the following:

- ASC NEPM (2013) National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM), as amended May 2013, National Environment Protection Council. Australian Government;
- WA DoH (2021) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, Department of Health;
- HEPA (2020) PFAS National Environmental Management Plan (NEMP), Heads of EPAs Australia and New Zealand;
- CRC CARE 'Technical Report 16: Safe onsite retention of contaminants Part 2: A risk based approach' (2013); and
- ANZECC (Australian and New Zealand Environment and Conservation Council), Guidelines for the Assessment of On-Site Containment of Contaminated Soil, September 1999.

The NT EPA requirements for summary information are provided in the Executive Summary.

The EPA requirements for summary information are provided in Appendix A, including:

- A completed Pro Forma for the Completion and Issue of Statement or Certificate of Environmental Audit, as per Appendix 9 of EPA Publication 759;
- A site survey plan; and
- A summary of current groundwater analytical results as per Attachment C of EPA Publication 840.

The Victorian *Environment Protection Act 2017* commenced on 1 July 2021, replacing the *Environment Protection Act 1970* and Vic EPA publications have been in a state of preparation and revision since then to help industry comply with the new Act. Victorian EPA Publication 1978 *Transition guidance for environmental auditors*, June 2021, provides guidance to Auditors on how to manage the transition of the new Act for their audits. An email from the Victorian Environmental Audit Unit on 26 October 2021 noted the extension of transition arrangement until October 2022. Effectively, audits commenced under the 1970 Act can be completed in accordance with that Act at any time (preferably by October 2022) or can be completed under the new Action from 1 July 2021. The site investigations were largely completed prior to 1 July 2021 and following discussions with NT EPA, it was agreed to complete the audit under the old Act. It is noted that science and technical publications upon which the Auditor determines site suitability have not changed.

2.3 Audit Scope

2.3.1 Previous Environmental Audits

The project area has been split into three audit areas based on the proposed development. This audit is the second audit area (Stage 2 of 3 stages) and comprises three residential lots referred to as Lot B1, B2 and B3 (referred to as Lot B). A separate audit report has been prepared for Lot A (dated 31 March 2022), and the final audit report to be prepared is for the remainder of the site which includes Lot C and the Road Reserve.

2.3.2 Reports Reviewed

The following documents were finalised prior to commencement of the audit, and were reviewed primarily for background purposes:

- Greencap, *Limited Soil Investigation, John Stokes Square, 47 Progress Drive, Nightcliff,* 14 July 2019;
- Greencap, *Detailed Site Investigation, John Stokes Square, 47 Progress Drive, Nightcliff,* draft 2 September 2019;
- Greencap, *Additional Soil Investigation, John Stokes Square, 47 Progress Drive, Nightcliff,* October 2019;
- Greencap, *Asbestos Management Plan, John Stokes Square, 47 Progress Drive, Nightcliff,* October 2019;
- WANT Geotechnics Pty Ltd, *Geotechnical Investigation, Proposed Redevelopment of John Stokes Square, Lot 9077 Progress Drive, Nightcliff,* 23 October 2019; and
- Agon Environmental, *RE: John Stokes Square – Environmental Summary,* 25 October 2019

The following documents were provided to the Auditor for review and comment during the audit period, and were subsequently revised to meet auditor requirements (only the final versions are listed below):

- Agon Environmental (2020a), *Detailed Site Investigation, John Stokes Square, 47 Progress Drive, Nightcliff, NT* (Ref JF1006.DSI/Final, 21 April 2020;

- SLR (2020a) *Memorandum: Remediation Strategy, John Stokes Square – Residential Lots (Lots B1, B2 and B3)* (Ref.680.10679.00000-M04-v2.0 20200603, 3 June 2020)
- SLR (2020b) Sampling, Analysis and Quality Plan, Detailed Site Investigation, John Stokes Square (ref. 680.10679-R01-v1.0, 3 June 2020)
- Halikos (2020), *Construction Environmental Management Plan Revision 2.0, John Stokes Square, Broad Scale Site Remediation and Construction Preparation Works* (Ref PMP-3.03 Rev3, June 2020).
- Greenspace Group (2020) Construction Environmental Management Plan (Ref. T20-1056 V1, 5 July 2020)
- SLR (2022a) *Sewer Easement Remediation and Validation Report – John Stokes Square Redevelopment, Residential Allotments B1, B2 and B3* (ref. 680.10679.00200-R13 V1.0, dated 14 January 2022)
- SLR (2022b) *Validation Report – John Stokes Square Redevelopment, Proposed Residential Lots B1, B2 and B3* (ref. 680.10679.00100-R05 V4.0, January 2022)

A copy of both Validation Reports (2022a and 2022b) are provided in Appendix C.

A review of the above reports did not identify reference to any relevant reports that have not been provided for review by the Auditor.

2.4 Correspondence with Client and their Consultants

During the audit, the Auditor issued a series of formal review letters to the client and their consultant. These letters typically document the outcome of the Auditor's review of work plans and draft reports. A copy of the Auditor's letters is provided in Appendix D.

In addition, the Auditor also provided numerous e-mails to the client and consultant. Copies of these documents are held with AEA.

2.5 Correspondence and Liaison with EPA

The Auditor submitted a *Notification of Request to Issue a Certificate of Environmental Audit* to the EPA on 22 November 2019. A copy is provided in Appendix D.

The Auditor corresponded with NT EPA regarding the use and reporting against the 1970 Victorian EP Act as per e-mail dated 8 November 2021.

A copy of the draft audit report and statement were provided to EPA on 24 August and EPA comments provided on 30 August were taken into consideration when finalising this audit report.

2.6 Audit Team and Expert Support

The Auditor consulted with the following expert support team:

- Shandel Coleman, Principal Environmental Scientist – project management, review of assessor's reports and sampling plans and draft audit reporting; and
- Bridget Roder, Senior Environmental Engineer – project management, review of assessor's reports and sampling plans and draft audit reporting.

2.6.1 Site Inspections

A summary of the site inspections and pertinent observations is provided in Section 4.

2.7 Auditor's Verification of Site Conditions

The Auditor has undertaken work to verify that the environmental activities and quality of the site is as reported by the various reports reviewed.

The Auditor and/or his assistant undertook site inspections via video conference and physically to:

- familiarise with the site and surrounding area;
- verify observations noted by the consultant;
- observe a portion of the remediation work; and
- confirm final site condition.

A number of site inspections were undertaken via video conference due to COVID-19 travel restrictions which were in place during the majority of the project. Final site inspections were undertaken by the Auditor in person on 28 October 2021 and the Auditor's Assistant in person on 24 July 2022.

The Auditor considered that verification sampling was not necessary to complete the audit. This determination was made based upon:

- the lack of unexpected or unexplained pollution;
- the competency of the consultant who conducted the sampling and the laboratories which conducted the analysis;
- the quality of the documentation provided by the consultant and laboratories; and
- the verification between consultant's documentation and site observations by the audit team.

2.8 Uncertainties of the Audit Process

This audit report has been prepared for the client for the purposes described in the audit report. This document may not be suitable for other purposes.

The Auditor has prepared this document in good faith, but is unable to provide certification outside of areas over which he had some control or is reasonably able to check.

It is not possible in an Environmental Audit Report to present all data, which could be of interest to all readers of this report. Readers are referred to the referenced investigation reports for further data. Users of this document should satisfy themselves concerning its application to, and where necessary seek expert advice with respect to, their situation.

The Auditor notes that any comments and conclusions provided in this document regarding the suitability of the site for the proposed land use are implicitly limited to consideration of contamination related issues as defined under the *Victorian EP Act*.

3 Site History and Characterisation

3.1 Site History Summary

Site history information was provided primarily from Agon DSI (2020a). Aerial photography showed that until between approximately 1944 and 1969 the site was native bushland which was subsequently cleared. In 1969 the site had been cleared of vegetation but remained undeveloped, however significant residential development and road infrastructure had occurred to the north of the site. From 1969 land surrounding the site continued to be developed for residential and commercial use. The site was most recently (from the 1980s until 2019) used for high density residential use. Demolition occurred in late 2019.

In December 1974 Cyclone Tracy devastated the city of Darwin destroying buildings and infrastructure across the city (and greater Darwin region). The destruction of buildings resulted in the spread of asbestos debris, resulting in its presence within surface soils across Darwin. Based on the timing of development of the site, it is possible that legacy asbestos debris is present in fill on site associated with Cyclone Tracy.

Based on historical aerial photographs, the Auditor considers that the structures visible in 1974 were potentially constructed using asbestos cement and the bonded asbestos identified in soils may also have originated from the demolition of structures prior to 1990 or importation of asbestos contaminated fill.

No other evidence of point sources of contamination or significant contaminating activities were identified at the audit site, such as underground fuel storage tanks or industrial activities.

The site history identified the following off-site land uses that have potential relevance to the audit:

- Service stations located to the north-east, east and south-east of the site; and
- Other surrounding properties comprised a mix of residential and commercial purposes, and mostly low risk of being a source of significant contamination (uses included supermarket, newsagency, post office, hairdresser, restaurants).

3.2 Potential Contamination Sources and Contaminants of Concern

The Auditor considers that the key on-site potential contaminants of concern and likely location for the site include:

- Historical application of pesticides/herbicides such as termiticides;
- Historical use of ACM construction materials; and
- Imported fill across the site (heavy metals, total recoverable hydrocarbons [TRHs], polycyclic aromatic hydrocarbons [PAHs], asbestos, pesticides).

Attachment 3 shows the former site layout.

The Auditor considers that the key potential contaminants of concern from the off-site sources include:

- Service stations with underground fuel storage tanks (USTs), located to the north-east, east and south-west of the site (TRHs, benzene, toluene, ethylbenzene and xylenes [BTEX], PAHs); and
- Urbanisation, sewage disposal and management (nitrate and ammonia).

The results of the site history investigation indicate that the site is a potential source of contamination, particularly in shallow soil/fill. The site history also determined there are potential off-site sources of contamination which may be impacting on the site, particularly groundwater.

3.3 Adequacy of Site History Information

Table 3: provides information on the site history information sources investigated and adequacy for the audit purpose.

Table 3: Adequacy of Site History Information

Information Requirements	Undertaken	Auditor's Comments
Land uses (previous and current)	Yes	Historical certificates of title, historical aerial photographs and other sources were reviewed to obtain this information and were documented in the consultants' reports.
Owners, occupiers and users (previous and current)	Yes	Historical certificates of title were reviewed to obtain this information and were documented in the consultants' reports.
Current and historical title search	Yes	Reviewed back to 1986 (original title).
Historical aerial photographs for the Site and adjacent properties	Yes	Historical aerial photographs (1944, 1969, 1974, 1985, 1990, 2001, 2012 and 2019) reviewed by Agon.
Environmental Audit Reports and Statements and Certificates for site and surrounding area	Yes	A search of the NT EPA's Contamination Register was documented in the consultants' reports.
Landfill Register	Yes	There is no NT EPA register. The Auditor undertook a review of landfills in the area. No landfills were identified within 500 m of the site.
Unexploded Ordnance (UXO)	Yes	The Auditor undertook a review on the Department of Defence online UXO map and the site and surrounds were not identified as having a potential for UXO.
Groundwater database review	Yes	Agon undertook a search for groundwater data near the site using Northern Territory Groundwater Data Portal, documented in the consultants' reports.
Local planning scheme and environmental overlays	Yes	Documented in consultant's report.
Search of dangerous goods register	No	Formerly residential land use, no storage of dangerous goods expected.
Review of asbestos register (if applicable)	No	No asbestos register available. Asbestos identified in soils and remediation undertaken.
Interviews with person knowledgeable with the site	No	Formerly residential land use, no notable activities expected.
Detailed site inspection	Yes	Numerous site inspections undertaken.
Chemical inventory and storage details (including USTs)	No	Formerly residential land use, no storage of chemicals expected.
Review of previous investigations and critique on adequateness of data	Yes	Documented in consultant's DSI report and undertaken by the Auditor.
Chronological list of land use activities including potential information gaps and uncertainties	Yes	Documented in the consultant's report.
List of potential contaminating activities, likely contaminants and locations	Yes	Documented in the consultant's report.
Potential off-site sources of contamination identified	Yes	Documented in the consultants' reports.

Information Requirements	Undertaken	Auditor's Comments
Site plan showing historical site layout (if relevant)	Yes	Documented in the consultant's report.
Environmental setting (i.e. nearby ecological receptors)	Yes	Documented in the consultant's report.
Local geology and hydrogeology	Yes	Documented in the consultant's report.
Potential for acid sulfate soils	Yes	Documented in the consultant's report.

Based on the information provided, the Auditor considers that the site history investigations have been generally undertaken with regard to relevant legislations and guidelines. The Auditor notes that the data gaps identified in the above table and those inherent within site history investigations have been adequately addressed through broad screen analysis of both soil and groundwater, and excavation of surface soils across the entire site.

The Auditor considers that there is sufficient site history information to provide a suitable level of confidence regarding the historical uses of the site as they relate to the potential for contamination and to inform the requirements for detailed site investigations. The Auditor therefore considers the site history investigations as adequate.

4 Site Characterisation

4.1 Site Description and Observations from AEA Site Inspections

At the time of the Auditor's initial site inspection on 28 January 2020, the site had been cleared of structures with crushed concrete present on Lot B. The former site layout is shown in Attachment 3.

At the final site inspection on 24 July 2022, the residential properties on Lots B1, B2 and B3 were under construction with the superstructure commenced and the landscaping pending. The on-site road next to the Lot B allotments was completed and landscaping of the verge was complete. The construction of the police station in Lot A had been completed.

The Auditor undertook several site inspections over the course of the audit. Due to the travel restrictions from COVID 19, a number of the site inspections were undertaken via video conference or using a local representative. A summary of the key observations is provided in Table 4: below.

Table 4: Summary of Auditor Inspections

Date	Reason for Inspection	Observations
28 January 2020	Initial inspection and meeting with client and consultant to observe site condition	Site vacant and structures demolished. Isolated fragment of potential bonded ACM in good condition. Crushed concrete evident on Lot A with no surface ACM observed. No visual or olfactory indicators of staining. Groundwater wells in situ with no hydrocarbon odours evident. Inspection of surrounding area did not identify groundwater monitoring wells on public land. With the exception of potential ACM, no other indicators of contamination identified.
11 June, 6 August, 14 and 19 October 2020	Video inspections to observe civil/remediation works in progress	Observe remediation works across the general area associated with civil works, including removal of redundant underground services across the wider site and boundary asbestos to the north-east (Lot B). Observations consistent with SLR reporting.
12 August 2021	Video inspection and in person by Chris Gamble of Agon to observe management of unexpected finds	Wider site under construction with civil works and ad hoc asbestos removal occurring within Road Reserve via unexpected finds protocols. Police station structure completed and Lot A fully covered by concrete. Inspection report provided in Appendix D.
28 October 2021	Final site inspection – in person by the Auditor	Construction of the police station (Lot A) was complete with Lot A fully covered by concrete. Construction of the residential apartments with slab installed and awaiting fit-out and landscaping. Boundary works completed. Construction of road partially completed with landscaping in the verge underway. No potential ACM or other visual or olfactory indicators of contamination observed.
24 July 2022	Final site inspection – in person by the Auditor's Assistant	Construction of the police station (Lot A) was complete with Lot A fully covered by concrete. Construction of the residential apartments with superstructure commenced and landscaping pending (Lots B1, B2 and B3). Boundary works completed. Construction of road, car park and landscaping in the verge complete. No potential ACM or other visual or olfactory indicators of contamination observed.

4.2 Surrounding Land Uses

The surrounding land uses are as follows:

1. North: Lot A (police station) and existing off-site residential, Progress Drive then commercial with residential properties north-east.
2. East: Residential properties and a Coles Express service station then Dick Ward Drive.
3. South: Lot C public open space under development, existing childcare centre and tyre retailer and Caltex service station to the south-east.
4. West: vacant land then commercial.

4.3 Council Planning Scheme

The site was located within a medium density residential zone (SD – Single Dwelling) under the Northern Territory Planning Scheme. During development of the site the zoning was changed to Specific Use (SU) SD49; the purpose of this zone is to facilitate development of the land for a complementary mix of commercial, community and residential uses in mixed use multistorey buildings with high amenity public areas.

4.4 Topography and Surface Waters

The site surface elevation drops approximately 3 m from the north-east corner to the south-west corner towards Darwin Harbour.

There are no on-site surface water bodies. Significant surface water is not expected to enter the site from neighbouring properties or streets.

The site is located approximately 160 m from the edge of a mangrove community and the Outer Estuary of Darwin Harbour to the west of the site.

4.5 Geology and Hydrogeology

4.5.1 Regional Geology

A review of the 2.5 m Geological Map indicates the local geology at the site comprises Cretaceous Aged Sedimentary mudstone and shale deposits and is indicated to be underlain by pisolitic and nodular laterite gravel.

4.5.2 Site Geology

Intrusive investigations indicated the soil at the site consisted of a heterogeneous fill layer up to 0.8 m deep, comprising sandy clay, sandy gravelly silts and clayey silty sand. Natural lateritic soils consisted of red brown and yellow clayey sandy gravel overlying stiff to very stiff red brown sandy clay with trace gravels, underlain by highly weathered siltstone to a maximum of 3.8 mbgl with very low strength siltstone to the maximum depth of investigation (5.6 mbgl).

A review of the *Atlas of Australian Acid Sulfate Soils* (CSIRO) indicates the south-western corner of Lot A, closest to the marine environment, has a greater probability of encountering Acid Sulfate Soils (ASS) than the remainder of the site (high probability compared to extremely low probability). Test pitting did not encounter any soils typically associated with lowland coastal environments.

4.5.3 Regional Hydrogeology

No water quality data was available within proximity to the site. Regional groundwater flow is likely to be to the west to south-west, towards Darwin Harbour (Beagle Gulf).

4.5.4 Registered Bore Search and Current Extractive Uses

A 2 km radius bore search was undertaken by Agon using *Northern Territory Government Water Data Portal*, and this was cross-checked by AEA. The Agon search identified 46 registered bores, with seven bores within a 500 m radius. One bore was listed as being used for production and the remainder for investigation or unknown purposes.

The nearest production bore (RN000130) was located approximately 300 m east of the site, likely up-gradient to cross-gradient. None of the bores were inferred to be located down-gradient of the site.

Based on the available information, it is possible that groundwater is being used for domestic purposes, such as watering gardens, in the vicinity of the site, however the Auditor considers potential use to be limited, due to the availability of mains water and highly urbanised land use.

4.5.5 Site-specific Hydrogeology

The TDS concentration of groundwater recovered on the site ranged from 120 to 430 mg/L, classifying the groundwater as Segment A1.

Stabilised depths to groundwater were approximately 2.7 to 3.8 m below top of casing (mbtoc). Groundwater flow direction was not determined as the groundwater monitoring wells were not surveyed.

The regional flow direction is expected to be towards the nearest potential discharge point at Outer Estuary of Darwin Harbour (approximately 160 m from the site).

4.6 Conceptual Site Model

4.6.1 General

A written preliminary conceptual site model (CSM) was prepared by Agon (2020a), which provided an assessment of preliminary site conditions against the essential elements of a CSM, as stated in Section 4.3 of Schedule B2 to the ASC NEPM. A diagrammatic representation of the CSM was also provided by Agon (reproduced as Attachment 6). The following sections provide the Auditor's summary and interpretation of the CSM.

The CSM was updated throughout the investigation and remediation phases of work by SLR. The post remediation CSM is detailed in Section 4.6.8.

4.7 Known and Potential Sources of Contamination

The primary potential sources of contamination are the historical application of pesticides/herbicides, use of asbestos containing building materials and the presence of imported fill material. The primary off-site potential sources of contamination are from three local service stations in the area.

4.8 Contaminants of Potential Concern

Based on the former use of the site and surrounding areas, the contaminants of potential concern are heavy metals (arsenic, cadmium, chromium, copper, lead, nickel, zinc and mercury), TRHs, BTEX, PAHs, pesticides and asbestos.

4.9 Potential Mechanisms of Contamination

The most likely mechanism for contamination from imported fill and pesticides/termiticides is dry weight and leachable contaminants.

The most likely mechanism from off-site contamination to impact the site is from migration of contaminated groundwater to the site.

4.10 Potentially Affected Media

The potentially affected media are primarily soil and groundwater. If volatile contaminants are observed in soil or groundwater, then further consideration of soil vapour and air (ambient and indoor air once development has been completed) will be necessary.

4.11 Human and Ecological Receptors

The Auditor considers that the human receptors of most concern are future site residents, workers and visitors (following redevelopment), construction workers associated with the development, and intrusive maintenance workers on the site. Risk to off-site human receptors, such as maintenance workers in the road, will need consideration if the site is a source of contamination that could migrate off site.

The Auditor considers that the ecological receptor of most concern is the nearest surface water receptor which receives groundwater discharge. This is likely to be Outer Estuary of Darwin Harbour (160 m to the west). There are unlikely to be any significant ecological receptors on the site itself following redevelopment, as the proposed building footprint and associated car parks will cover the entirety of the site.

4.12 Potential and Complete Exposure Pathways

Table 5: presents a summary of the Auditor's assessment regarding the potential and complete exposure pathways which are of most concern. These are generally consistent with Agon's determinations for on-site receptors.

Table 5: Initial Source – Pathway – Receptor Assessment

Source	Pathway/s	Receptor/s	Complete Linkage
On-site soil	Dermal contact and incidental ingestion	Users of proposed development (maintenance workers); and Users of proposed development (residents, workers, visitors)	Limited Likely
	Inhalation of dust and potential asbestos fibres	Users of proposed development (maintenance workers); and Users of proposed development (residents, workers, visitors)	Limited Likely
	Inhalation of vapours	Users of proposed development (residents, maintenance workers)	Possible
Groundwater underlying the site	Discharge into surface water	Nearby surface water bodies	Possible, although unlikely given distance
	Inhalation of vapours	Users of proposed development (residents, visitors, maintenance workers); and Off-site intrusive maintenance workers, residents or workers	Possible Possible
	Dermal contact and ingestion by humans	Persons extracting groundwater for use in domestic supply (drinking and cooking water, washing etc.), irrigation or for filling swimming pools	Not proposed on site, unlikely down-gradient due to presence of high quality reticulated water supply
	Extraction for stock watering	Ingestion by stock in down-gradient locations (off site)	Unlikely due to urban location
	Extraction for irrigation	Plants (gardens and crops)	Unlikely due to presence of high quality reticulated water supply

Source	Pathway/s	Receptor/s	Complete Linkage
	Underground structures intersecting groundwater	Concrete or steel piles or deep basements following redevelopment	Unlikely given slab-on-ground is proposed although deep underground services (i.e. sewer) may interact with the top of the aquifer

4.13 Post Remediation Conceptual Site Model

The CSM was updated on the basis of environmental investigations and remediation activities documented by SLR. A final CSM was provided in SLR's Validation Report (2022b).

Table 6: Final Source – Pathway – Receptor Assessment

Source	Pathway/s	Receptor/s	Complete Linkage
On-site soil	Dermal contact and incidental ingestion	Users of proposed development (maintenance workers); and Users of proposed development (residents, workers, visitors)	Remediation and validation of site soils. No soil contamination remains on site. However, small quantities of ACM may remain within the soil and be uncovered during excavation works. These ACM fragments are not anticipated to represent a health risk to workers or occupiers of the completed development.
	Inhalation of dust and potential asbestos fibres	Users of proposed development (maintenance workers); and Users of proposed development (residents, workers, visitors)	
	Inhalation of vapours	Users of proposed development (residents, workers, maintenance workers)	No volatile contaminants were identified at the site.
Groundwater underlying the site	Discharge into surface water	Nearby surface water bodies	No site-derived impacts were identified in the groundwater. Elevated concentrations of metals identified in the water were attributed to background conditions associated with naturally occurring aquifer conditions. Refer to Section 9.
	Inhalation of vapours	Users of proposed development (residents, workers, visitors, maintenance workers); and Off-site intrusive maintenance workers, residents or workers	
	Dermal contact and ingestion by humans	Persons extracting groundwater for use in domestic supply (drinking and cooking water, washing etc.), irrigation or for filling swimming pools	
	Extraction for stock watering	Ingestion by stock in down-gradient locations (off site)	
	Extraction for irrigation	Plants (gardens and crops)	
	Underground structures intersecting groundwater	Concrete or steel piles or deep basements following redevelopment	

5 Assessment of Beneficial Uses

The Environment Protection Act 1970 (Vic) defines an environmental audit as:

"… a total assessment of the nature and extent of any harm or detriment caused to, or the risk of any possible harm or detriment which may be caused to, any beneficial use made of any segment of the environment by any industrial process or activity, waste, substance (including any chemical substance) or noise".

All potential beneficial uses of land, groundwater and surface water have been considered for the site, in accordance with the relevant SEPPs as follows:

- Land SEPP;
- Waters SEPP; and
- Air Management/Air Quality SEPP.

5.1 Beneficial Uses of Land

The Land SEPP states that the beneficial uses of land protected by the policy are:

'(a) maintenance of natural ecosystems, modified ecosystems and highly modified ecosystems;

(b) human health;

(c) buildings and structures;

(d) aesthetics; and

(e) production of food, flora and fibre.'

Table 1 from the Land SEPP, which is reproduced below as Table 7: , defines the beneficial uses which require protection for the different land use categories.

Appendix 4 of EPA Publication 759 provides further explanation of the definitions of sensitive use, wherein high-density residential is classified as a density greater than one dwelling per 200 m^2, typically multistorey apartments with limited common garden or open space areas. Sensitive use 'other' comprises medium density residential comprising one dwelling per 200-300 m^2 typically townhouse and unit developments with private courtyard or similar open space, low density residential comprising one dwelling per 300-4,000 m^2 typically detached dwelling with private yard, and rural residential comprising one dwelling per 4,000m – 20,000 m^2.

Based on the proposed high density residential development (Lots B1, B2 and B3 only), the land use is as follows:

- Sensitive Use – with regard to both direct contact and vapour intrusion pathway.

It is noted that EPA Publication 759 notes that *'… all beneficial uses of land are relevant for the purpose of determining whether to issue a Certificate, irrespective of whether they are protected for the current or proposed land use.'* As such, all beneficial uses defined in SEPP (Land) still require consideration in the audit.

Table 7: Beneficial Uses of Land to be Protected

Beneficial use	Land use						
	Parks and Reserves	Agriculture	*Sensitive use*		Recreation /Open Space	Commercial	Industrial
			High density	Other			
Maintenance of Ecosystems:							
Natural	✓	N/A	**N/A**	N/A	N/A	N/A	N/A
Modified	✓	✓	**N/A**	✓	✓	N/A	N/A
Highly Modified Ecosystems	N/A	✓	✓	✓	✓	✓	✓
Protection of Human Health	✓	✓	✓	✓	✓	✓	✓
Buildings and Structures	✓	✓	✓	✓	✓	✓	✓
Aesthetics	✓	N/A	✓	✓	✓	✓	✓
Production of Food Flora and Fibre	✓	✓	**N/A**	✓	N/A	N/A	N/A

Note: N/A = not applicable.

5.2 Adopted Soil Assessment Criteria

The following table provides the indicators and objectives which are to be used to determine whether the level of any contaminant poses an unacceptable risk to protected beneficial uses of land.

Table 8: Indicators and Objectives for Beneficial Uses of Land

Beneficial Land Use	Indicators	Objectives
Maintenance of Ecosystems	Chemical substances or waste identified through application of the ASC NEPM (Schedule B2, Appendix A) or any other chemical substance of waste.	Contamination must not adversely affect the maintenance of relevant ecosystems and the level of any indicator must not be greater than – (a) any regional Ecological Investigation Level developed in accordance with the ASC NEPM and published by the Authority for a region in which the site is located. Until such time that regional Ecological Investigation Levels applicable to the site are published, the Interim Urban Ecological Investigation Levels nominated in the ASC NEPM shall be used in its place; or (b) levels derived using the risk assessment methodology described in the ASC NEPM; or (c) levels approved by the Authority.
Protection of Human Health	Chemical substances or waste identified through application of the ASC NEPM (Schedule B2, Appendix A) or any other chemical substance or waste.	Contamination must not cause an adverse effect on human health and the level of any indicator must not be greater than – (a) the screening level specified for human health in the ASC NEPM; or (b) levels derived using a risk assessment methodology described in the ASC NEPM; or (c) levels approved by the Authority.
Buildings and Structures	pH, sulfate, redox potential, salinity or any chemical substance or waste that may have a detrimental impact on the structural integrity of buildings or other structures.	Contamination must not cause the land to be corrosive to, or adversely affect the integrity of, structures or building materials.

Beneficial Land Use	Indicators	Objectives
Aesthetics	Any chemical substance or waste that may be offensive to the senses.	Contamination is not to cause the land to be offensive to the senses of human beings.

5.2.1 Maintenance of Ecosystems

The ASC NEPM provides two types of soil criteria which are based upon protection of the environment, namely Ecological Investigation Levels (EILs) and Ecological Screening Levels (ESLs). Both the EILs and ESLs are to be applied to assess risks to terrestrial ecosystems and apply to the upper 2 m of the soil profile. The EILs and ESLs differ with respect to the contaminants considered and the methodologies used when applying the screening levels.

The EILs cover zinc, arsenic, naphthalene, DDT, chromium (III), copper, lead and nickel. The EILs allow for the consideration of a range of factors which are critical when assessing ecological risks, including:

- The period of time which the contaminant has been in the environment:
    - Fresh is <2 years; and
    - Aged is >2 years.
- Three soil characteristics:
    - Cation exchange capacity (CEC);
    - pH; and
    - Organic carbon content.
- Ambient background concentration (ABC);
- The iron content of the soil (fresh ABC only);
- The state and traffic volume (aged ABC only); and
- Three land use settings:
    - Area of ecological significance;
    - Urban residential/public open space;
    - Commercial and industrial.

An EIL calculator has been provided as part of the '*ASC NEPM Toolbox*' which allows for the derivation of EILs.

Depending on site conditions, such as different soil layers having significantly different properties, more than one set of EILs may need to be derived.

The ESLs are based upon two documents prepared by Dr Michael Warne[1,2], which in broad terms provide a review of guidance provided by the Canadian Council of the Ministers of the Environment (CCME). The ESLs cover the following chemicals:

- Four petroleum hydrocarbon groups:

[1] Warne, M (2010) Review of the appropriateness of the Canadian petroleum hydrocarbon country-wide standards in soil, for incorporation into the Australian National Environment Protection (Assessment of Site Contamination) Measure, National Environment Protection Council, Australia.

[2] Warne, M (2010) Review of the appropriateness of selected Canadian Soil Quality Guidelines (benzene, benzo(a)pyrene, ethylbenzene, toluene and xylenes), for incorporation into the Australian National Environment Protection (Assessment of Site Contamination) Measure, and recommended ecological investigation levels, National Environment Protection Council, Australia.

- F1: C_6-C_{10} minus BTEX;
- F2: >C_{10}-C_{16} minus naphthalene;
- F3: >C_{16}-C_{34}; and
- F4: >C_{34}-C_{40}.

- BTEX; and
- The PAH benzo(a)pyrene (BaP).

It is noted that the ASC NEPM refers to the above-mentioned criteria as ESLs, whereas the Warne (2010) documents refer to the criteria as low reliability EILs.

5.2.2 Protection of Human Health

The ASC NEPM provides Health Investigation Levels (HILs) for four different generic land use settings:

- *'HIL A – Residential with garden/accessible soil (home grown produce <10% fruit and vegetable intake (no poultry), also includes childcare centres, preschools and primary schools.*
- *HIL B – Residential with minimal opportunities for soil access; includes dwellings with fully and permanently paved yard space such as high-rise buildings and apartments.*
- *HIL C – Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths. This does not include undeveloped public open space where the potential for exposure is lower and where a site-specific assessment may be more appropriate.*
- *HIL D – Commercial/industrial, includes premises such as shops, offices, factories and industrial sites.'*

The ASC NEPM states the HILs generally apply to the top 3 m of soil for residential use and site-specific conditions should determine the depth to which other HILs apply.

Schedule B1 of the ASC NEPM states that when comparing results to Tier 1 screening levels, where it is appropriate for the exposure being evaluated, consideration should be given to:

- The maximum concentrations detected in relation to the screening levels;
- The 95% upper confidence limit (UCL) of the arithmetic mean concentrations in relation to the screening levels;
- The implications of localised hotspots;
- The standard deviation of the data (i.e. should be <50% of screening level); and
- The magnitude of any screening level exceedances (i.e. should be <250% of screening level).

The ASC NEPM makes reference to direct contact (i.e. dermal contact, incidental ingestion, dust inhalation exposure) HSLs provided for petroleum hydrocarbons in Friebel & Nadebaum (2011). It is understood that these criteria were not presented in the ASC NEPM as the vapour intrusion pathway drives risks for petroleum hydrocarbon exposure. Friebel & Nadebaum (2011) provides direct contact criteria which consider:

- The petroleum hydrocarbon compounds BTEX and naphthalene, as well as the petroleum hydrocarbon groups C_6-C_{10}, >C_{10}-C_{16}, >C_{16}-C_{34} and >C_{34}-C_{40}; and
- Four land use settings which are directly comparable to the ASC NEPM (i.e. HSL A, HSL B, HSL C and HSL D) as well as an additional land use setting (i.e. intrusive maintenance worker).

The ASC NEPM highlights that the direct contact HSLs are likely to represent unacceptable aesthetic characteristics and may also represent unacceptable short-term vapour inhalation risks.

The ASC NEPM also provides management limits which are to be applied after the HILs/HSLs/EILs/ESLs have been considered.

5.2.3 Asbestos

The ASC NEPM provides Health Screening Levels (HSLs) for asbestos in soil, including bonded asbestos containing material (ACM), friable asbestos (inclusive of asbestos fines and fibrous asbestos) and 'all forms of asbestos'. The criteria provided covers exposure scenarios which are comparable to the HILs (i.e. HSL A, HSL B, HSL C and HSL D). The criteria are both quantitative (i.e. % w/w) and qualitative (i.e. no visible asbestos). The ASC NEPM also refers to the WA Department of Health (DoH) Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia provides further details on the assessment and remediation of asbestos. In addition to the screening levels provided in the ASC NEPM for different land uses, the accessible ground surface (as designated by suite investigations or the 10 cm default) should be free from visible bonded ACM and fibrous asbestos at the end of the remedial site works.

The WA Asbestos Guidelines provide details for determining soil asbestos concentrations and interpreting results (Appendix Two) based on the weight of asbestos for a given weight of soil. The methodology looks at estimating asbestos concentrations for a given strata/material.

5.2.4 Soil Vapour

The ASC NEPM provides HSLs for vapour intrusion (i.e. migration of contaminants in subsurface indoor air in the vapour phase) based directly upon Friebel & Nadebaum (2011). HSLs are provided for:

- The following chemicals in soil, groundwater and soil vapour
    - Two petroleum hydrocarbon groups
        - F1: TRH C_6-C_{10} minus BTEX; and
        - F2: TRH >C_{10}-C_{16} minus naphthalene.
    - BTEX; and
    - Naphthalene.
- Four land use settings which are generally comparable to the ASC NEPM (i.e. HSL A, HSL B, HSL C and HSL D). It is noted that buildings with a basement or ground floor car park covering the entire footprint (and no residences within the lowest floor level) are assessed as HSL D for the vapour intrusion pathway.
- Three soil types
    - Sand;
    - Silt; and
    - Clay.
- Four different source to receptor distances
    - 0 m to <1 m;
    - 1 m to <2 m;
    - 2 m to <4 m; and
    - >4 m.

For some soil types and depths, the HSL is higher than the theoretical vapour phase saturation limit. In these instances, no HSL is provided and it is assumed to be not limiting (NL).

Before the HSLs for vapour intrusion can be used, they must be shown to be applicable using the applicability checklist provided in Friebel & Nadebaum (2011).

The vapour intrusion based HSLs do not take aerobic biodegradation of vapours into account, with this degradation process known to be significant under certain conditions. The vapour intrusion based HSLs may be modified by factors of 10 (2 m - <4 m source depths) or 100 (source depths 4 m and greater) if the following conditions are met:

- The scenario is based on a slab-on-ground or ventilated crawl space building;
- There is direct measurement of oxygen at a depth of 1 m or greater;
- The vapour source is no closer than 2 m from a current or proposed building foundation;
- The current or proposed building foundation has a width no greater than 15 m (oxygen penetration limited at greater widths); and
- The source concentration is less than 100 mg/m^3.

The ASC NEPM includes interim vapour intrusion HSLs for trichloroethene (TCE), 1,1,1 trichloroethane (1,1,1 TCA), tetrachloroethene (PCE), cis 1,2 dichloroethene (cis 1,2 DCE) and vinyl chloride (VC). In the absence of more applicable criteria these HSLs are considered to be applicable.

Where criteria are not provided in Friebel & Nadebaum (2011) or the ASC NEPM, reference is made to other reputable guidance sources on a case by case basis.

5.2.5 Buildings and Structures

Australian Standard AS2159 (2009) *Piling – Design and Installation* provides exposure classification values for concrete and steel piles in soil (non-aggressive to severely aggressive) based upon chlorides, sulfates and pH. In the absence of a directly applicable EPA endorsed criteria, these guidelines are considered to be appropriate in assessing the potential for detrimental impacts of site soils to buildings and structures. In addition, the presence of other aggressive chemical compounds (e.g. acids) may be potentially detrimental to buildings or structures.

The ASC NEPM states that the management limits are relevant for '*operating sites where significant sub-surface leakage of petroleum compounds has occurred and when decommissioning industrial and commercial sites'*. The ASC NEPM states that the intent of the management limits is to minimise the potential for petroleum hydrocarbons to cause the formation of light non-aqueous phase liquid (LNAPL), fire/explosive hazards and effects on buried infrastructure.

5.2.6 Aesthetics

The SEPP (Land) states that *Contamination must not cause the land to be offensive to the senses of human beings*.

The aesthetic condition of soil is assessed with respect to the guidance provided in Schedule B1 of the ASC NEPM (Section 3.6). In general terms, consideration is given to the presence of non-hazardous foreign materials, discoloration and odorous soils.

5.2.7 Production of Food, Flora and Fibre

SEPP (Land) states that *'Contamination of land must not ... (b) affect the level of any indicator in food, flora and fibre produced at the site (or that may be produced) such that the level of that indicator is greater than that specified by the Australia New Zealand Food Authority, Food Standards Code.'*

The Food Standards Code provides maximum levels (MLs) for various organic and inorganic chemicals in various foods, with the MLs for each chemical varying dependent on the food type. The Food Standards Code does not provide threshold criteria for contaminant levels in soils. The correlation between contaminant levels in soils and resulting contaminant levels in food, flora and fibre produced in soils is complex and related to the bioavailability of the contaminant, the rate at which the contaminant is taken up by the crop/stock and the ability of various crop/stock to regulate the contaminant.

As a conservative measure and in the absence of directly applicable criteria, it is assumed that the site has been polluted at potentially unacceptable levels with respect to the production of food, flora and fibre if the contaminants of concern are present at levels above that which can reasonably be considered to represent background levels. It is noted that a site may not be suitable to produce food, flora and fibre due to natural background levels of a range of contaminants (i.e. arsenic).

5.3 Beneficial Uses of Groundwater

SEPP (Waters) divides groundwater into seven segments based on total dissolved solids (TDS) concentration ranges. The following table, which is based on Table 1 of SEPP (Waters), defines the beneficial uses of groundwater which require protection for each segment. Based upon the available TDS data for the on-site bores (range 120 to 430 mg/L), the water table aquifer at the site is classified as Segment A1.

The Auditor considered Segment A1 to be appropriate to the audit site.

Table 9: Beneficial Uses of Groundwater to be Protected

Beneficial use	Segments (mg/L TDS)						
	A1 (0–600)	A2 (601–1200)	B (1201–3100)	C (3101–5400)	D (5401–7100)	E (7101–10,000)	F (>10,001)
Water dependent ecosystems and species	✓	✓	✓	✓	✓	✓	✓
Potable Water Supply (desirable)	✓	N/A	N/A	N/A	N/A	N/A	N/A
Potable Water Supply (acceptable)	**N/A**	✓	N/A	N/A	N/A	N/A	N/A
Potable Mineral Water supply #	✓	✓	✓	✓	N/A	N/A	N/A
Agriculture and irrigation (irrigation)	✓	✓	✓	N/A	N/A	N/A	N/A
Agriculture and irrigation (Stock Watering)	✓	✓	✓	✓	✓	✓	N/A
Industrial and commercial	✓	✓	✓	✓	✓	N/A	N/A
Water-based recreation (Primary Contact Recreation)	✓	✓	✓	✓	✓	✓	✓
Traditional Owner cultural values	✓	✓	✓	✓	✓	✓	✓
Cultural and spiritual values	✓	✓	✓	✓	✓	✓	✓
Building and Structures^	✓	✓	✓	✓	✓	✓	✓
Geothermal properties *	✓	✓	✓	✓	✓	✓	✓

The site is not within a declared mineral water resource area and this beneficial use is not considered relevant.

^ The proposed development of the site is understood to have no proposed basements, but has been included in the case of deep underground services.
* Groundwater at the site was not found to have geothermal properties (described in the Waters SEPP as a natural thermal capacity which corresponds to a temperature between 30 and 70 degrees Celsius), and therefore this beneficial use was not considered relevant at this site.

5.4 Adopted Groundwater Assessment Criteria

5.4.1 Water Dependent Ecosystems and Species (WDES), Traditional Owner Cultural Values (TOCV) and Cultural and Spiritual Values (CSV)

In accordance with the Waters SEPP, groundwater must not cause receiving waters to be affected to the extent that the level of any environmental quality indicator is greater than the level of that indicator specified for surface waters in the SEPP. This means that the likely receiving water body should be identified and that the WDES criteria for the receiving water body be applied at the point of groundwater discharge.

For screening purposes, the relevant WDES criteria are initially applied to assess the condition of groundwater underlying the site. If there are analyte concentrations in groundwater which exceed the adopted WDES criteria, then further consideration should be given as to whether elevated concentrations are likely to reach the point of discharge, and impact on the receiving water body.

The likely receiving water body for groundwater underlying the site is Outer Estuary of Darwin Harbour. The water body is considered to be a slightly-moderately modified aquatic ecosystem, with environmental quality objectives for protection generally corresponding to 95% species protection as defined in ANZG (2018).

Unless specific objectives are described in the SEPP, the environmental quality objectives for the WDES are those values specified in:

1. ANZG (2018), *Guidelines for Fresh and Marine Water Quality*, 2018 – 95% level of protection.

For beneficial uses that do not have specific environmental quality indicators or objectives provided in the Waters SEPP, the objectives for WDES can be adopted. This is based on the assumption that water-based ecosystems and species are typically the most sensitive beneficial use to pollution. Consistent with the Waters SEPP and in the absence of contrary regulatory advice, the Auditor has also adopted the WDES objectives for TOCV and for CSV.

5.4.2 Potable Water Supply

Reference is made to the current version of the *Australian Drinking Water Guidelines* when assessing drinking water use, which is currently National Health and Medical Research Council (NHMRC) version 3.7 (2022).

The NHMRC drinking water criteria are largely based upon the World Health Organisation (WHO) drinking water criteria. However, there are some compounds where NHMRC has drawn a different conclusion to WHO and a number of other compounds where WHO provides some criteria but NHMRC has not adopted any criteria. Consideration to WHO criteria is given on a case by case basis, as deemed appropriate by the Auditor. In the absence of more applicable criteria, WHO (2008)[3] criteria have been adopted to assess TRH.

5.4.3 Agriculture and Irrigation (Irrigation)

To assess risks from use of groundwater for irrigation of agriculture, parks and gardens, reference has been made to the water quality objectives for irrigation waters in Section 4.2 of the ANZECC (2000), as these are retained under ANZG (2018).

[3] WHO (2008) *Petroleum Products in Drinking Water*, Background Document for Development of WHO Guidelines for Drinking-Water Quality.

5.4.4 Agriculture and Irrigation (Stock Watering)

To assess risks to livestock consuming groundwater, reference has been made to Sections 4.3 and 9.3 of ANZECC (2000), as ANZG (2018) has not yet been updated for stock watering. It is assumed that livestock could consume metals which are dissolved, complexed within an organic compound or bound to sediments (i.e. non-filtered total concentrations).

ANZECC (2000) does not provide livestock drinking water guidance for organic contaminants. ANZECC (2000) recommends that human drinking water criteria are adopted for pesticides. In the absence of more applicable data, the Auditor adopts the same approach for other organics.

5.4.5 Industrial and Commercial

The earlier version of the ANZECC (2000) Guideline (i.e. 1992) provided criteria for a range of contaminants and industrial processes, however, ANZECC (2000) states that:

> *'After extensive consultation with representative industrial groups, the current guidelines provide no specific guidance for industrial water use, because industrial water requirements are so varied (both within and between industries) and sources of water for industry have other coincidental environmental values that tend to drive management of the resource. Industrial water use continues to be a recognised environmental value that has high economic benefit to the community. It must be given adequate consideration during the planning and management of water resources.'*

It is understood that the current informal EPA Victoria policy is to also consider the appropriateness of industrial water use based upon a qualitative approach (i.e. related elevated concentrations of a contaminant). For the purpose of the audit, groundwater objectives for other uses are expected to be protective of this beneficial use.

5.4.6 Water-Based Recreation (Primary Contact Recreation)

The Waters SEPP specifies that E. coli count must be less than 10 per 100 mL, or zero per 100 mL if human faecal sources of contamination have been identified (such as septic tanks or sewerage infrastructure).

Environmental quality objectives and indicators for long-term chemical hazards are based on National Health and Medical Research Council (NHMRC 2008) *Guidelines for Managing Risks in Recreational Water*, which in turn references the *Australian Drinking Water Guidelines* (NHMRC, latest version 3.7 dated January 2022).

Where inhalation of vapours and dermal contact are not a concern, the relevant health based drinking water criteria is multiplied by 10 to represent incidental ingestion. Where inhalation of vapours and/or dermal contact are a concern, the relevant health-based drinking water criteria are adopted without modification. In some instances, it is important to consider the foundation of the drinking water criteria value and determine whether it is logical to multiply the criteria by 10 (e.g. nitrate drinking water criteria is based upon protecting bottle fed infants, which is not relevant for primary contact recreation exposure).

5.4.7 Buildings and Structures

For the protection of buildings and structures, SEPP (Waters) specifies that the following indicators should be considered: pH, sulfate chloride, redox potential, salinity and any chemical substance or waste that may have a detrimental impact on the structural integrity of buildings or other structures. Australian Standard AS2159-2009 *Piling – Design and Installation* provides values for pH, sulfate and chloride for building and structures, and reference should also be made to the ASC NEPM (2013).

It is noted that the AS2159 criteria for sulfate in water is provided as sulfate-SO_3. A conversion to sulfate-SO_4 (i.e. 100 ppm S-SO_4 = 80 ppm S-SO_3) results in a sulfate-SO_4 criteria for non-aggressive conditions of 375 mg/L.

5.5 Beneficial Uses of Surface Water

Surface water has been considered as part of this audit in accordance with the SEPP (Waters). Table 10, which is based on Table 3 of SEPP (Waters), defines the beneficial uses of surface waters which require protection based upon geographical location[4].

No surface water bodies exist on site. The nearest surface water body is the mangrove of the Outer Estuary of Darwin Harbour, located 160 m to the west, therefore the Urban segment is applicable for this site. Given the proposed commercial development, and subsequent management of surface water through stormwater drains, the site is not deemed likely to have any potential impact on surrounding surface water bodies.

Table 10: Beneficial Uses to be Protected (Inland Waters)

	Water	Aquatic Reserves	Rivers & Streams						Wetlands
Beneficial Uses	**Segment**	**Aquatic Reserves**	**Highlands**	**Uplands A**	**Uplands B**	**Coastal Foothills and Coastal**	**Urban**	**Murray and Western Plains**	**Lakes & Swamps**
Water dependent ecosystems and species that are:	Largely unmodified	✓	✓	✓	✓	N/A	N/A	N/A	N/A
	Slightly to moderately modified	N/A	N/A	N/A	N/A	✓	N/A	✓	✓
	Highly modified	N/A	N/A	N/A	N/A	N/A	✓	N/A	N/A
Human consumption after appropriate treatment		✓ where water is sourced for supply in accordance with the special water supply catchments area set out in Schedule 5 of the Catchment and Land Protection Act 1994 or the Safe Drinking Water Act 2003.							
Agriculture and Irrigation		N/A	✓	✓	✓	✓	✓	✓	✓
Human consumption of aquatic foods		✓	✓	✓	✓	✓	✓	✓	✓
Aquaculture		✓ where the environmental quality is suitable and an aquaculture licence has issued under the *Fisheries Act 1995*							
Industrial and commercial		N/A	N/A	✓	✓	✓	✓	✓	N/A
Water-based recreation (primary contact)		✓*	✓	✓	✓	✓	✓	✓	✓
Water-based recreation (secondary contact)		✓*	✓	✓	✓	✓	✓	✓	✓
Water-based recreation (aesthetic enjoyment)		✓*	✓	✓	✓	✓	✓	✓	✓
Traditional Owner cultural values		✓	✓	✓	✓	✓	✓	✓	✓
Cultural and spiritual values		✓	✓	✓	✓	✓	✓	✓	✓
Navigation and shipping		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: If a segment is marked with a tick that is asterisked, there is an exclusion identified in Table 5 (see clause 1(4) of Schedule 2 SEPP (Waters)).

SEPP (Waters) recommends that ANZECC (2000) is used as the source of assessment criteria, unless SEPP (Waters) provides alternative criteria.

[4] Figure 1 of SEPP (Waters) defines the policy area and segments.

5.6 Beneficial Uses of Ambient Air

The 1999 Ambient Air Quality SEPP and the 2001 Air Quality Management SEPP, are the relevant SEPPs that provide the framework for ambient air management in Victoria (air being defined as "*the external air environment, it does not include the air environment inside buildings or structures"*). The SEPP (Ambient Air Quality) was prepared to adopt the requirements of the National Environmental Protection Council (Ambient Air Quality). SEPP (Air Quality Management) was prepared in part to ensure that the objectives of SEPP (Ambient Air Quality) are met.

Section 9 of SEPP (Air Quality Management) states that the following beneficial uses of ambient air are protected throughout Victoria:

'(a) life, health and well-being of humans;

(b) life, health and well-being of other forms of life, including the protection of ecosystems and biodiversity;

(c) local amenity and aesthetic enjoyment;

(d) visibility;

(e) the useful life and aesthetic appearance of buildings, structures, property and materials; and

(f) climate systems that are consistent with human development, the life, health and well-being of humans, and the protection of ecosystems and biodiversity.'

The Auditor has assessed whether or not ambient air is likely to be polluted on the basis of:

- Land pollution (including soil, soil gas and soil vapour);
- Groundwater pollution; and
- Surface water pollution.

Where ambient air pollution is considered to be likely, ambient air sampling/analysis is conducted and quantitative criteria are considered.

SEPP (Air Quality Management) does not provide indicators and objectives for the majority of contaminants which can be of concern at a typical contaminated site.

Section 10 of SEPP (Air Quality Management) defines four classes of ambient air quality indicators, namely:

a) 'Class 1 indicators: common or widely distributed air pollutants which are established as environmental indicators in the State Environment Protection Policy (Ambient Air Quality) and may threaten the beneficial uses of both local and regional air environments;

b) Class 2 indicators: hazardous substances that may threaten the beneficial uses of the air environment by virtue of their toxicity, bio-accumulation or odorous characteristics;

c) Class 3 indicators: extremely hazardous substances that are carcinogenic, mutagenic, teratogenic, highly toxic or highly persistent, and which may threaten the beneficial uses of the air environment; and

d) Unclassified indicators: indicators of the beneficial uses of local amenity and aesthetic enjoyment, namely odour and total suspended particles (nuisance dust).'

SEPP (Ambient Air Quality) provides environmental quality objectives and goals for carbon monoxide, nitrogen dioxide, photochemical oxidants, sulfur dioxide, lead, particles as PM10 and visibility reducing particles.

SEPP (Air Quality Management) provides:

- design criteria for new or expanded emission sources (Schedule A);
- intervention levels for the substances noted in Schedule A (Schedule B);
- emission limits for existing stationary sources (Schedule D); and
- emission limits for new stationary sources (Schedule E).

For scenarios where the above-mentioned indicators/objectives are not relevant, impacts to air quality are assessed on a case by case basis.

6 Summary of Investigation Process and Findings

The following section provides a summary of the detailed site investigations undertaken at the site, split into the separate segments of the environment.

6.1 Soil Investigations

A summary of the soil investigations and soil sampling undertaken for the entire site (including Lot B1, B2 and B3) is provided in the following table.

Table 11: Summary of Soil Investigations at the Site

Date (Consultant)	Sample Locations	Lot B Locations	Sampling Methodology and Depth (Site Wide)
June and August 2019 (Greencap)	Boreholes SS01-1 to SS01-4, SS02-1 to SS02-4, SS01 to SS44 Test pits: TP01 to TP29	TP01 – TP05, SS17 – SS44	Surface soil locations (n=52). Soil samples collected from the surface around the perimeter of buildings Analysis for contaminants of concern (CoC) heavy metals, organochlorine pesticides (OCP) Grid test pits (n=29) sampling up to 0.9 mbgl. Soil samples recovered directly from the centre of the excavator bucket. Analysis for asbestos.
September 2019 (Greencap)	Boreholes SS45 to SS64, SS65_N, SS65-E, SS65-S, SS65-W, SS66-N, SS66-E, SS66-S, SS67-N, SS67-E, SS67-S, SS68-N, SS68-E, SS68-S, SS68-W, SS69-N, SS69-E, SS69-S, SS69-W Test pits: TP01 to TP57	SS55 – SS63, SS68, SS69, TP10, TP11, TP13, TP14, TP16 – TP19, TP21, TP22, TP24, TP25, TP27, TP28, TP36 – TP49, TP51, TP55 - TP57	Surface soil locations (n=64). Soil samples collected from the building footprints and delineation of previously identified OCP impacts Analysis for OCP Test pits (n=57) delineation of previously identified ACM impacts. Analysis for asbestos.
November 2019 (Agon)	Test pits: TP01 to TP20	TP9, TP11, TP13, TP14, TP16 – TP20	In-fill grid sampling (n=20) to between 0.7-1.2 mbgl, collected from the centre of excavator bucket. Analysis for CoC and selected samples for a broader analytical suite.
December 2019 (Agon)	Boreholes MW01 to MW04	MW02 and MW03	Soil samples recovered during drilling for groundwater wells (n=10), sample collection methodology was not documented by Agon. Analysis for TRH, BTEXN, lead, select samples for PAH
July - September 2020 (SLR)	Validation samples: V1 to V215 VS01 – VS08 VP01 – VP08 Val-t-01 – Val-t-55 Sewer-val-1 – sewer-va;-4 Sewer-wall-1 – sewer-wall-4 Char-VAL Val-p-100 Val-56 – Val-185 Stockpiles: STP-ORG-1-1 - STP-ORG-1-3 STP-ORG-2-1 - STP-ORG-1-10 STP1-1 – STP1-3 STP2-1 – STP2-8 STP3-1 – STP3-3 STP4-1 – STP4-3 STP5-1 – STP5-3	All locations specific to Lot B1, B2 & B3	Validation samples were collected from the base of the excavation. Analysis for TRH, BTEXN, pesticides, metals and AF/FA. Stockpile samples were collected for the purpose of onsite re-use. Analysis for TRH, BTEXN, pesticides, metals and asbestos.

Date (Consultant)	Sample Locations	Lot B Locations	Sampling Methodology and Depth (Site Wide)
	STP6-1 – STP6-6 STP7-1 – STP7-11 STP8-1 – STP8-4 STP9-1 – STP9-5 STP10-1 – STP10-12 STP10A-1 – STP10A-6 STP11-1 – STP11-6 STP12-1 – STP12-4 STP13-1 – STP13-6 STP14-1 – STP14-3 STP15-1 – STP15-6 STP15-1a – STP15-6a STP16-1 – STP16-3 STP16a-1 – STP16a-3 STP16B-1b – STP16B-6b STP17-1 – STP17-5 STP18-1 – STP18-6 STP19-1 – STP19-3 STP20-1 – STP20-8 STP21-1 – STP21-3 STP21A-1a – STP21A-3a STP21B-1b – STP21B-6b STP22-1 – STP22-7 STP24-1 – STP24-6 STP25-1 – STP25-4 STP26-1 – STP26-7 STP27-1 – STP27-5 STP28-1 – STP28-6 STP29-1 – STP29-3 STP30-1 – STP30-6 STP31-1 – STP31-3 STP32-1 – STP32-3 STP33-1 – STP33-3 CHAR-STP		
September 2021 (SLR)	North South Easement Validation samples: B01_0.7, B02_0.7, B03_0.8, B04_1.4, B05_1.0, B06_1.2 B07_1.2, B08_07, E01_0.1, E02_0.1, E03_0.1, E04_0.1, E05_0.1, E06_0.1, E07_0.1, E08_0.1, W01_0.1, W02_0.1, W03_0.1, W04_0.1, W05_0.1, W06_0.1, W07_0.1	All locations specific to Lot B2 & B3 sewer easement	Validation samples were collected from the base and walls of the excavation. Analysis for asbestos in soils – presence/absence and/or FA/AF.
September 2021 (SLR)	East West Easement Validation samples: B01_0.8, B02_0.8, B03_1.1, B04_0.8, B05_0.7, E021_0.4, E02_0.6, E03_0.3, N01_0.1, N02_0.2, N03_0.2, N04_0.1, N05_0.2, S01_0.2, S02_0.2, S03_0.1, S04_0.2, S05_0.2	All locations specific to Lot B2 sewer easement	Validation samples were collected from the base and walls of the excavation. Analysis for asbestos in soils – presence / absence and / or FA/AF.
September 2021 (SLR and Greencap)	Stockpile (imported soil) samples: STP-A.1 to A.3, STP-B.1 to B.3, STP-C.1 to C.7	Specific to backfill of the sewer trench in Lots B and C.	Analysis for TRH, BTEXN, pesticides, herbicides, PCBs, PAHs, metals and AF/FA.

The soil and groundwater investigation sampling locations are shown on Attachments 4 and 5 respectively.

The results of the soil investigations are summarised below.

Fill materials were encountered across the site consisting of sandy silt and sandy gravelly silt varying in depth from 0.4 mbgl to a maximum depth of 1.8 mbgl. The assessor reported no visual or olfactory indication of contamination in the general fill material, other than fragments of ACM.

Natural soils consisted of red brown silty clay soil. Natural soil conditions comprise weathered rock or rock across the site.

ACM was observed in fill at the site and on the site surface during sampling and site inspections by Greencap, Agon and SLR.

The fill materials across the site also contained concentrations of aldrin+dieldrin exceeding HIL A and HIL D criteria (up to 369 mg/kg, SS30 within Lot B3). The highest aldrin+dieldrin concentration reported was considered to be an anomaly as this concentration could not be replicated in any additional sampling undertaken and was collected prior to commencement of the audit. The next highest concentration was 23.4 mg/kg (surface sample SS69_S(5)_0.0) exceeding HIL A, but below HIL D criteria. This location (and other OCP hotspots) were removed and validated as part of remediation works detailed in Section 7.

All other analytes were below laboratory detection limits or assessment criteria.

The natural soils across the site contained elevated concentrations of nickel with respect to the ecosystem criteria adopted by Agon for these analytes, these analytes were considered to be naturally occurring. All other natural soil concentrations were below either laboratory detection limits or adopted assessment criteria.

No volatile contaminants were detected in soil at levels above the vapour intrusion screening levels.

6.1.1 Area-Specific Data (Lots B1, B2 & B3)

In total 67 samples were analysed for pesticides; some of these samples exceeded residential criteria for heptachlor and aldrin+dieldrin but all results were below the relevant criteria for commercial use. The areas of the site where samples reported impact above the nominated residential criteria, have since been excavated and validated as part of subsequent remediation works, detailed in Section 7.

Numerous samples were also analysed for ACM (bonded and AF/FA). During soil investigations ACM (and/or AF/FA which was co-located with bonded ACM at some locations) was reported by the laboratory above criteria at nine locations on site. Fill was excavated to apparent natural soils, and visually and chemically validated for ACM and AF/FA.

Soil and crushed concrete from other areas on site were placed temporarily in a stockpile on site (STP5), which was validated after removal.

6.2 Groundwater Investigations

A summary of the groundwater investigations undertaken for the greater site (encompassing Lots A, B and C) is provided in the following table.

Table 12: Summary of Groundwater Investigations at the Site

Date (Field Work)	Sample Locations	Sampling Methodology and Depth
GME1 December 2019 and January 2020 (Agon)	MW01 to MW04 (install and sample)	Installation and gauging of MW01 to MW04. Low flow purging and sampling. Analysis of samples for TRHs, BTEX, PAHs, chlorinated hydrocarbons, pesticides, herbicides, 14 metals, phenolics, halogenated benzenes, halogenated hydrocarbons, solvents, chloride and sulfate.

The groundwater well locations are shown in Attachment 5.

The findings of the groundwater investigations are summarised as follows:

- Although the groundwater monitoring wells were not surveyed, it is expected that the groundwater flow direction underlying the site would be to the west, consistent with expected regional flow toward the Darwin Harbour. Standing water levels ranged from 2.7 to 3.8 mbtoc;
- Field readings recorded redox potential in the range 123 to 318 mV, electric conductivity ranged between 166 and 880 µS/cm and dissolved oxygen levels ranging from 2.68 to 5.77 mg/L). Groundwater was acidic (4.4 to 5.6 pH units);
- No measurable separate phase hydrocarbons (NAPL) or sheen was reported in groundwater from on-site or off-site wells, and no odours were reported;
- Low levels of TRHs (maximum of 0.28 mg/L) were detected in on-site wells MW01 and MW02, at concentrations well below the Dutch intervention criteria. Agon conducted silica gel clean-up on the MW01 groundwater sample to determine if the low-level hydrocarbons were petroleum based or naturally occurring. The results of the silica gel clean-up were all below the laboratory limit of reporting indicating they were naturally occurring hydrocarbons or highly degraded fuel;
- Low levels of the chlorinated hydrocarbon chloroform was detected in two on-site wells, at concentrations well below adopted criteria for human health and ecosystem protection;
- Cobalt exceeded WDES criteria in all wells;
- Concentrations of copper and nickel exceeded the WDES criteria in one or more wells but were considered naturally occurring. The maximum nickel concentration also exceeded the recreational and irrigation water criteria;
- Lead exceeded the WDES criteria in three wells and the drinking water criteria in one well;
- Manganese exceeded the recreational water criteria in three wells, with the maximum also exceeding the irrigation criteria; and
- Concentrations of other metals (arsenic, beryllium, boron, cadmium, mercury, and selenium), PAHs, BTEX, halogenated benzenes, halogenated hydrocarbons, solvents, pesticides, herbicides, chloride, sulfate and phenols were not detected above the adopted assessment criteria for any beneficial uses.

6.3 Potential for Vapour Intrusion

The groundwater and soil results did not identify that a vapour intrusion risk required assessment. Refer to details regarding low level concentrations of TRH (in groundwater) and chloroform (in groundwater), detailed in Sections 8 and 9.

6.4 Auditor's Opinion on Investigations – Lot B

When preparing this section of the EAR, the Auditor has given particular attention to Appendix 3 of EPA Publication 759 which states that an EAR should provide *'… an opinion on the quality and completeness of prior assessment(s) of the site, including details of investigator, laboratory, sampling and analytical methods and type of assessment undertaken …'*

The Auditor considers as a whole, the data collected is within acceptable error margins as determined through the assessor's Data Quality Objectives (DQO) (refer to Section 4.5 of SLR's (2021) Validation Report). As such, the Auditor considers that the data collected is sufficient to adequately characterise the site for the audit purposes, given:

- The lack of significant systematic errors with the data collection process;

- Absence of major gaps in understanding of the site use over time;
- All identified point sources of contamination were investigated with the soil investigation undertaken including 482 grid and targeted (including validation) locations, which exceeds the AS4482.1 recommended number of sampling locations for an approximately 0.9 hectare site (20 locations);
- The groundwater investigations undertaken across the site included a total of four on-site groundwater wells which were monitored. The groundwater investigations did not identify site-derived groundwater contamination, which supports the adequacy of the soil investigations across the site;
- The large number of samples collected across the site and the comprehensive suite of analysis undertaken, which addresses inherent data gaps in site histories;
- The laboratory analysis was undertaken by NATA accredited laboratories;
- The site-specific geology and hydrogeology is consistent with anticipated regional conditions;
- The analytical results are consistent with expectations based on the site history and field observations; and
- The excavation of the site to natural soils.

The Auditor considers the quantity and quality of the site investigations undertaken are adequate to characterise the nature and extent of contamination at the site. The Auditor considers the data collected is sufficient for the purposes of this environmental audit. The Auditor is of the view that the site has been assessed and characterised adequately within the means and information available to the Auditor at the time of preparing this EAR.

7 Remediation

The following section provides a summary of the remediation works undertaken at the site.

7.1 Remediation and Validation of OCP Impacts – Agon 2019

Remediation works in the form of hotspot removal, was undertaken by Agon between 9 October and 5 November 2019, prior to commencement of this audit.

Soil investigations completed by Greencap had identified the presence of OCPs (heptachlor and aldrin+dieldrin) above HIL A in multiple locations across the site. Agon undertook hotspot removal works at some of these locations in 2019; this involved the excavation of soils, extending 5 m laterally from each hotspot to a depth of 0.5 m. The soils from these locations was transported to Lot A as the soil met HIL D commercial land use – police station.

The exact locations are unclear, however as all the exceedances were located in surface samples, any locations which were not remediated by Agon would have been removed as part of the later bulk fill excavation works which extended to natural (details provided in Section 7.3).

As part of the validation works, numerous soil validation samples were collected from the base of the excavation. All results reported concentrations of OCPs below HIL A criteria.

7.2 Remediation and Validation of Asbestos Impacts – Agon 2019

Remediation works in the form of hotspot removal, was undertaken by Agon between 9 October and 5 November 2019, prior to commencement of this audit.

Soil investigations were previously undertaken by Greencap, and in 2019 Agon identified the presence of asbestos at multiple locations across the site. Agon undertook hotspot removal works at two locations, which reported the presence of friable asbestos (TP38 and TP39). The fill at these locations was excavated to natural at a radius of 2.5 m from the location. The soil was disposed of as asbestos contaminated waste. Validation of these locations (via observation or laboratory data) was not documented. However, as the fill at these locations was later removed as part of the bulk excavation works (detailed in Section 7.3) which extended to natural, the absence of this information is not significant.

7.3 Remediation and Validation of Asbestos Impacts – SLR 2020

Further environmental investigations required by the Auditor identified that the asbestos contamination in soil was more widespread than the isolated hotspots identified in the initial site investigations. Additional remediation and validation works were undertaken by SLR between 20 July and 28 September 2020.

Bulk excavation of fill was undertaken by the Contractor, the maximum depth of excavation extended to 2 mbgl. Surface soils were excavated to apparent natural soil conditions (either weathered rock or rock). All known and encountered abandoned underground services (including fill material surrounding them) were removed during bulk excavation. Based on visual observations potentially impacted soil was stockpiled separately top non-impacted spoil.

Validation samples were collected from the floor and walls of the excavation, and along remediated surface trenches. Out of 286 validation samples tested from the base and walls of the excavation and trenches, the presence of asbestos was detected in seven samples. Further excavation was undertaken at these location, extending a further 0.3 m into the natural reworked soils and extending laterally within an approximate area of 25 to 90 m^2 around each location. Additional validation samples were collected from the resulting excavation; the results did not detect further asbestos. The validation samples are shown in Attachment 8.

Spoil from the excavated area was inspected for asbestos contamination and segregated where required. Spoil was either loaded directly into trucks or temporality stockpiled in designated areas within Lot B3 and

the road reserve. The stockpiles were screened to remove geotechnically unsuitable waste materials and ACM. Validation samples were collected from the stockpile footprint once removed from site, these the results did not detect asbestos. The ACM fragments and soils impacted with ACM were placed in STP5 located on a sealed surface within the road reserve, for offsite disposal as asbestos waste. STP5 was disposed of off site as "special waste – asbestos" to Shoal Bay Waste Management Facility (SBWMF).

No visual indications of contamination (staining or odours) were observed during remediation works, apart from bonded ACM. ACM fragments were found during the stripping of the fill, as well as at the former buildings' footings, stormwater risers and former service pipes. Several abandoned services including stormwater, sewer pipes, water distribution pipes, and electrical and communication cables were removed during earthworks.

The excavated areas were re-instated with screened spoil which had been characterised as suitable for site re-use. The surface of each 200 mm lift of reinstated material was visually inspected by SLR for the presence of ACM. No visual evidence of asbestos was identified on the surface of any lifts.

Asbestos clearance certificates were provided within the validation report (Appendix C).

Remediation works extended to within 3 m of the eastern boundary of Lots B2 and B3 due to the presence of a "live" sewer main which runs along the boundary. Details of these works is provided in Section 7.5.

SLR also conducted airborne asbestos fibre monitoring on each day of remediation works and there were no exceedances of the 0.01 f/mL criteria. It is understood that monitoring was conducted during reinstatement of soils.

7.4 Off-site Soil Disposal and Re-use of Soil Stockpiles within Lot B

SLR characterised the stockpiles of spoil generated during excavation of the site. These stockpiles were tested for TRH, BTEXN, OCP/OPP, asbestos (laboratory and bulk samples) and eight metals.

Asbestos in the form of ACM and AF/FA was detected above investigation levels in stockpiles:

- STP4 (which was consolidated into STP13);
- STP5 (comprising the asbestos impacted soils and ACM waste from Lots B1 and B2 disposed of to SBWMF as "special waste – asbestos");
- STP7 (was retested and considered suitable);
- STP10 (segregated and impacted section removed to STP5);
- STP15 (segregated and impacted section removed to STP5);
- STP16 and STP16A (segregated and impacted section removed to STP5);
- STP16B (disposed of to SBWMF as "special waste – asbestos");
- STP21 and STP21A (segregated and impacted sections removed to STP5);
- STP21B (disposed of to SBWMF as "special waste – asbestos");
- STP23 (comprising the asbestos impacted soils and ACM waste from Lots B2 and B3 disposed of to SBWMF as "special waste – asbestos");
- STP33 (comprising the waste material generated when screening spoil from Lot B3 disposed of to SBWMF as "special waste – asbestos"); and
- STP34, 35, 36 and 37 (comprising ACM waste from Lot B3 disposed of to SBWMF as "special waste – asbestos").

The designated asbestos waste stockpiles (STP5, STP23, STP33, STP34, STP35, STP36 and STP37) and segregated asbestos stockpiles STP16B and STP21B were disposed of to SBWMF as "special waste – asbestos". The disposal dockets are provided in Appendix J of SLRs Validation Report (2022).

Soils (and crushed concrete) which met the re-use criteria were reused on site (within Lots B1, B2 and B3). The sampling density achieved (1 sample per 55 m^3), is below the *WA Guidelines for Assessment, remediation and Management of Asbestos-Contaminated Sites in Western Australia*, however this is not

considered an issue given the stockpiles have been segregated and are not the result of asbestos abatement works. Further, the reuse of soils was placed down in layers for compaction purposes, and each lift was visually inspected by SLR for asbestos. No visible asbestos was encountered by SLR during the visual inspections for Lots B1, B2 or B3. The inspection clearance certificates are provided in Appendix C of SLRs Validation Report (2022b).

7.5 Sewer Easement

The site area includes a sewer easement which is located along the eastern boundary of Lots B2 and B3, and along the southern boundary of Lot B2 (refer to Attachment 7). During the main remediation works, this sewer was "live" and works within 3 m of the sewer were limited to some topsoil stripping (maximum depth of 0.3 mbgl) and targeted removal of soil where asbestos impact was visually determined.

As part of development the sewer was upgraded, at which time the following remediation works were able to be completed within the sewer easement:

- Removal of surface fill. This fill material and any associated ACM debris was placed directly into skip bins and removed off site under asbestos conditions.
- The final extent was visually assessed and validation samples collected from the base and walls of the excavation. Further excavation, reinspection and validation was undertaken at locations where ACM debris was identified.
- Following removal of the surface fill, the deeper reworked natural soil and bedding sands used to backfill the sewer were removed, along with the removal of the sewer and related infrastructure. This spoil was placed to the side of the trench inspected for asbestos, ACM debris and surrounding soil was placed directly into skip bins and removed offsite under asbestos conditions. The remaining spoil once cleared as not being impacted with ACM debris, was used to backfill the trench.
- The resultant excavation was visually inspected for the presence of asbestos debris. No validation samples were collected as the excavation trench extended into natural.
- Imported soil was used to backfill the resultant trench (details in Section 7.5).

The final clearance certificates for the surface clearance and backfill works are provided in Appendix B of the Sewer Easement Validation Report (SLR, 2022). No ACM debris was found during the clearance inspections.

Where asbestos was detected at the boundary of the site (i.e. over excavation was not possible), geofabric was placed over the area to prevent asbestos fibres/ACM debris from falling onto the site, and to act as a warning layer for future excavation. Asbestos was detected in one sample collected from the eastern property boundary (E01-04). Geofabric was placed over the eastern wall of the excavation, to a depth of approximately 1.2 mbgl. The location of the geofabric is shown in Attachment 9.

7.6 Importation of Fill Material

Two sources of soil were assessed for importation to site:

- Virgin excavated natural material (VENM) from the extractive mining pits operating under licences MA24585 and MA24642 (approximately 39 m^3); and
- Screened stockpiled soil that had been excavated from other construction worksites in Darwin (approximately 56 m^3). Based on information the soil was not sourced from sites operated by the Department of Defence, Airports and/or other sites where current and historical use of fire-fighting foam had occurred.

SLR classified the soils prior to importation. A visual inspection of the stockpiles did not find any evidence of visible ACM, odours or stains. A third party (Greencap) collected samples for the purpose of investigation asbestos impacts, no asbestos was detected at or above the limit of reporting. Based on the analytical results, SLR was of the opinion that the contamination status of the stockpiles sampled would not present them being used as backfill for the sewer headworks project and the site.

7.7 Auditor's Opinion on Remediation Data

The remediation works are likely to have resulted in the removal of the known contaminated soils at the site.

The Auditor considers that as a whole, the remediation data collected are within acceptable error margins as determined through the assessor's quality assurance program (refer to Section 4.5 of SLR Validation Report). As such, the Auditor considers that the data collected is sufficient to adequately characterise the site for the audit purposes, given:

- The lack of significant systematic errors with the validation data collection process;
- Soil contamination was visually identified by SLR during excavation works;
- Removal of all fill material down to natural soil, screening and inspection of stockpiled material prior to re-use;
- Collection of validation samples from the final excavation extent and laboratory analysis was undertaken by NATA accredited laboratories;
- The analytical results are consistent with expectations based on the site history and field observations; and
- Removal of ACM off site as "asbestos waste".

The Auditor considers the quantity and quality of the remediation validation undertaken is adequate to characterise the nature and extent of contamination at the site. The Auditor considers the data collected are sufficient for the purposes of this environmental audit.

8 Beneficial Use Assessment – Land

8.1 Final Soil Condition

The final soil condition at the site is characterised by the soil samples collected that remain on site, which includes both the residual soils within Lot B, the spoil which was reused on site and imported fill. The data has been separated into:

- Table 13: in situ results representative of natural conditions. The hotspot location TP09 removed by Agon and asbestos results have not been included here as it is considered that the asbestos has been removed and validated in stockpile and during backfill;
    - Greencap (June and August 2019) n=28
    - Greencap (September 2019) n=28
    - Agon (November and December 2019) n=13
- Table 14: validation results from the surface and walls of the excavation and trenches (resulting from the removal of underground services). This table includes boundary samples where some asbestos remains, any asbestos identified during validation was removed and revalidated. Only validation samples are included in this table (i.e. no historical results) as the surface soils on site have been excavated, and therefore the validation results are considered representative of final site conditions. Note that OPPs, PAHs and TRH/BTEXN were analysed but reported below LORs, and therefore not included in the table below.
    - B1 – Validation sampling by SLR (September 2021) (93 samples collected of which 46 were analysed)
    - B2 – Validation sampling by SLR (September 2021) (197 samples collected of which 126 were analysed)
    - B3 – Validation sampling by SLR (September 2021) (180 samples collected of which 115 were analysed)
- Table 15: Stockpile results for soils reused on site STP1 to 32 (6,292 m^3) and soils imported to site STP-A to C (95 m^3). Note that OPPs, PAHs, PCBs and TRH/BTEXN were analysed but reported below LORs, and therefore not included in the table below:
    - STP1 (n=3, 60 m^3)
    - STP2 (n=8, 360 m^3)
    - STP6 (n=6, 375 m^3)
    - STP7 (n=8, 450 m^3)
    - STP10A (n=6, 365 m^3) – the chemical results from parent stockpile STP10 (excluding asbestos) have been included in the table below as only asbestos was analysed was part of verification works
    - STP11 (n=6, 390 m^3)
    - STP13 (n=6, 120 m^3)
    - STP15A (n=6, 367 m^3)
    - STP17 (n=5, 350 m^3)
    - STP18 (n=6, 375 m^3)
    - STP19 (n=3, 50 m^3)
    - STP20 (n=8, 560 m^3)
    - STP22 (n=7, 80 m^3) – data is for absence/presence of asbestos only as spoil was generated when removing utility service lines
    - STP24 (n=5, 400 m^3)
    - STP25 (n=4, 270 m^3)
    - STP26 (n=7, 450 m^3)
    - STP27 (n=5, 335 m^3)
    - STP28 (n=6, 390 m^3)
    - STP29 (n=3, 60 m^3)

- STP30 (n=6, 420 m^3)
- STP31 (n=3, 65 m^3)
- STP32 (n=3)
- STP-A (n=3, 14 m^3)
- STP-B (n=3, 25 m^3)
- STP-C (n=5, 56 m^3)

Reported exceedances of the adopted soil quality objectives are summarised in the following tables.

Table 13: Residual Soil Analytes Comparison with Ecological/Human Health Direct Contact Criteria (mg/kg)

Analyte	n	n > PQL	Max.	Number of Samples > Criteria					
				EIL/ESL Urban Res.	EIL/ESL Com/Ind	HIL/ *HSL A*	HIL/ *HSL B*	HIL/ *HSL C*	HIL/ *HSL D*
Arsenic	41	41	29	0 >100	0>160	0 >100	0 >500	0 >300	0 >3,000
Cadmium	41	1	0.8	0 >10#	0 >21#	0 >20	0 >150	0 >90	0 >900
Chromium (total)	41	41	240	0>390**	0>630**	0>120,000*	0>120,000*	0>120,000*	n/a
Copper	41	41	44	0 >80	0 >110	0 >6,000	0 >30,000	0 >17,000	0 >240,000
Lead	41	41	27	0 >1,100	0 >1,800	0 >300	0 >1,200	0 >600	0 >1,500
Mercury	41	1	0.2	0 >6.6#	0 >24#	0 >40	0 >120	0 >80	0 >730
Nickel	41	41	18	0 >180	0 >310	0 >400	0 >1,200	0 >1,200	0 >6,000
Zinc	41	41	340	0 >400	0 >590	0 >7,400	0 >60,000	0 >30,000	0 >400,000
pH (pH units)	7	7	Range 5.0 -7.4		-	-	-	-	-
Carcinogenic PAHs (as B(a)P TEQ)	13	0	-	-	-	0>3	0 >4	0>3	0 >40
BTEX	13	0	-	-	-	-	-	-	-
TRH	13	0	-	-	-	-	-	-	-
DDT+DDE+DDD	30	0	-	0 >180 (DDT only)	0 >640 (DDT only)	0 >240	0 >600	0 >400	0 >3,600
Chlordane	35	4	9.2	-	-	0>50	0>90	0>70	0>530
Aldrin + Dieldrin	38	7	3.68 (368.8*)	-	-	0>6	0>10	0>10	0>45
OPPs	2	0	-	-	-	-	-	-	-
Phenols	9	0	-	-	-	-	-	-	-
PCBs	5	0	-	-	-	-	-	-	-
Cyanide	5	0	-	-	-	-	-	-	-
Herbicides	2	0	-	-	-	-	-	-	-
Chlorinated hydrocarbons	2	0	-	-	-	-	-	-	-

Notes:
EILs were calculated on the basis of site-specific soil parameters.
* Criteria from USEPA Regional Screening Level table (April 2019 version);
** Criteria based on CrIII; # Criteria from CCME (1999 & 1991).

Table 14: Validation Soil Analytes Comparison with Ecological/Human Health Direct Contact Criteria (mg/kg)

Analyte	n	n > PQL	Max.	Number of Samples > Criteria					
				EIL/ESL Urban Res.	EIL/ESL Com/Ind	HIL/ *HSL A*	HIL/ *HSL B*	HIL/ *HSL C*	HIL/ *HSL D*
Arsenic	214	142	29	0 >100	0>160	0 >100	0 >500	0 >300	0 >3,000
Cadmium	214	0	-	0 >10#	0 >21#	0 >20	0 >150	0 >90	0 >900
Chromium (total)	214	203	252	0>390**	0>630**	0>120,000*	0>120,000*	0>120,000*	n/a
Copper	214	155	113	*1 >80*	*1 >110*	0 >6,000	0 >30,000	0 >17,000	0 >240,000
Lead	214	209	36	0 >1,100	0 >1,800	0 >300	0 >1,200	0 >600	0 >1,500
Mercury	214	0	-	0 >6.6#	0 >24#	0 >40	0 >120	0 >80	0 >730
Nickel	214	199	11	0 >180	0 >310	0 >400	0 >1,200	0 >1,200	0 >6,000
Zinc	214	128	262	0 >400	0 >590	0 >7,400	0 >60,000	0 >30,000	0 >400,000
DDT+DDE+DDD	216	0	-	0 >180 (DDT only)	0 >640 (DDT only)	0 >240	0 >600	0 >400	0 >3,600
Chlordane	216	21	0.59	-	-	0>50	0>90	0>70	0>530
Aldrin + Dieldrin	216	38	1.56	-	-	0>6	0>10	0>10	0>45
Asbestos (presence /absence)	298	1	-	-	-	1 (visual presence)	0	0	0

Notes:
EILs were calculated on the basis of site-specific soil parameters.
* Criteria from USEPA Regional Screening Level table (April 2019 version);
** Criteria based on CrIII; # Criteria from CCME (1999 & 1991).

Table 15: Stockpile Soil Analytes Comparison with Ecological/Human Health Direct Contact Criteria (mg/kg)

Analyte	n	n > PQL	Max.	Number of Samples > Criteria					
				EIL/ESL Urban Res.	EIL/ESL Com/Ind	HIL/ *HSL A*	HIL/ *HSL B*	HIL/ *HSL C*	HIL/ *HSL D*
Arsenic	121	102	22	0 >100	0>160	0 >100	0 >500	0 >300	0 >3,000
Cadmium	121	0	-	0 >10#	0 >21#	0 >20	0 >150	0 >90	0 >900
Chromium (total)	121	110	210	0>390**	0>630**	0>120,000*	0>120,000*	0>120,000*	n/a
Copper	121	107	21	0 >80	0 >110	0 >6,000	0 >30,000	0 >17,000	0 >240,000
Lead	121	110	78	0 >1,100	0 >1,800	0 >300	0 >1,200	0 >600	0 >1,500
Mercury	121	0	-	0 >6.6#	0 >24#	0 >40	0 >120	0 >80	0 >730
Nickel	121	110	9	0 >180	0 >310	0 >400	0 >1,200	0 >1,200	0 >6,000
Zinc	121	110	127	0 >400	0 >590	0 >7,400	0 >60,000	0 >30,000	0 >400,000
DDT+DDE+DDD	121	0	-	0 >180 (DDT only)	0 >640 (DDT only)	0 >240	0 >600	0 >400	0 >3,600
Chlordane	121	54	0.85	-	-	0>50	0>90	0>70	0>530
Aldrin + Dieldrin	121	79	0.91	-	-	0>6	0>10	0>10	0>45

Analyte	n	n > PQL	Max.	Number of Samples > Criteria					
				EIL/ESL Urban Res.	EIL/ESL Com/Ind	HIL/ *HSL A*	HIL/ *HSL B*	HIL/ *HSL C*	HIL/ *HSL D*
Chlorpyrifos	121	3	0.06	-	-	0>160	0>340	0>250	0>2,000
Asbestos (presence / absence)	131	0	-	-	-	0	0	0	0
Asbestos AF/FA	131	0	-	-	-	0>0.001%	0>0.001%	0>0.001%	0>0.001%

Notes:
EILs were calculated on the basis of site-specific soil parameters.
* Criteria from USEPA Regional Screening Level table (April 2019 version);
** Criteria based on CrIII; # Criteria from CCME (1999 & 1991).

The asbestos assessment works was described in Sections 6.1 and 7.3 of this EAR. In summary, bonded ACM and friable asbestos was identified in fill soils on site with fill up to approximately 0.4 mbgl to a maximum depth of 1.8 mbgl. As part of the earthworks within Lots B1, B2 and B3 the fill was excavated and either temporarily stockpiled, loaded directly into skips or side cast on site. All surface fill was removed from site during the bulk excavation works, the spoil generated during removal of the sewer (i.e. bedding sands and (reworked) natural) was side cast and once cleared of asbestos was used to backfill the trench. The excavation generally extended to natural or inferred (reworked) natural (maximum depth of 0.3 m). Asbestos was not observed at the excavation surfaces, or where it was observed it was removed and validated.

The presence of asbestos was detected at one residual location in the south-eastern corner of B2 which was identified during trenching works for the removal of the sewer which runs along the southern boundary. The asbestos was observed in the soil remaining at the property boundary. The soil could not be excavated further at this location as it was geotechnically unsafe, and could undermine the adjacent property. The wall was excavated to the extent practicable, and geofabric was placed over the eastern wall, to a depth of approximately 1.2 mbgl, to prevent asbestos fibres/ACM debris was falling into the site and as a marker layer. Figure 9 shows the location of the geofabric.

ACM was also observed beyond the site boundary to the north, which was removed during trenching works. As the asbestos was located beyond the site boundary it was considered that placement of geofabric was not necessary. However, there is potential for future excavation to result on drag back of asbestos onto site.

8.1.1 Maintenance of Ecosystems (MoE)

Concentrations of copper were reported in one soil sample above the adopted ecosystem criteria for urban residential and commercial/industrial use. The exceedance (Val-T-50) is located in the wall of the former sewer trench in Lot B3. Statistically this result is not considered significant, as the result is marginally above the criteria (113 mg/kg compared to 70 mg/kg), is surrounded by samples which did not the presence of elevated copper concentrations, and it is one sample out of 214 (0.5%) validation samples tested for copper from across the site. Based on the isolated exceedance, absence of visual indications of contamination observed, low concentration reported the exceedance is considered trivial.

The current soil condition is not considered detrimental to the MoE beneficial use, under an unrestricted land use.

8.1.2 Human Health

Following the remediation works, all visible asbestos was removed. The surface of the site, hotspots and stockpiles were chemically validated for asbestos, all asbestos results were reported below criteria.

However the presence of asbestos on the site boundary (south-eastern corner of B2) and beyond the site boundary (north of the site) indicate the potential for small quantities of ACM to remain within the soil and be uncovered during excavation works. These ACM fragments are not anticipated to represent a health risk to workers or occupiers of the completed development.

All other chemicals reported concentrations below the adopted human health criteria for residential land use.

On the basis of the Tier 1 screening results, the Auditor considers that the condition of the site is detrimental to some of the relevant beneficial uses defined in SEPP (Land), i.e. *Protection of Human Health*, due to asbestos risks in fill materials present on and in the near vicinity of the site boundary. However, the condition of the site is acceptable for the beneficial uses of '*Sensitive use – High Density*, '*Public Open Space*', *'Commercial' and 'Industrial*'.

8.1.3 Aesthetics

Near surface soils comprised inclusions of building rubble (concrete, plastics, scrap metal, ceramic tiles). These soils were excavated to approximately 0.3 m (and up to 2 m in places), and the geotechnically unsuitable construction and demolition rubble was screened from the stockpiled soil. Stockpiles were visually inspected for evidence of ACM.

Asbestos containing materials (ACM) have been identified within fill materials on the external eastern site boundary for a portion of Lot B2. A geofabric marker layer has been installed along this portion of the site as shown in Figure 9 and extends from the surface to a depth of approximately 1.2 mbgl.

No hydrocarbon odours or staining was identified in the sample locations, with field screening of soil samples for volatile organic compounds recording low concentrations.

Given the removal of the fill, and screening of geotechnically unsuitable materials, the current condition of the site is not considered detrimental to the objectives of this beneficial use, subject to implementation of the Audit Conditions in Section 13.3.

8.1.4 Production of Food, Flora and Fibre

The residual fill material contains one copper exceedance for protection of urban ecosystems. The exceedance was located in the wall of the former sewer trench. Based on the isolated exceedance, absence of visual indications of contamination observed, low concentration reported the exceedance is considered trivial.

The current soil condition is not considered detrimental to the MoE beneficial use, under an unrestricted land use.

8.1.5 Buildings and Structures

Overall, the soil condition for the beneficial use of buildings and structures was considered to be 'non-aggressive to mild' in accordance with AS2159-2009, based on the following soil results:

1. pH results ranging from 6.3 – 7.8 pH units; and
2. the site is located in an area of potential acid sulfate soil.

TRHs were all reported below the management limits, indicating that buried infrastructure is unlikely to be adversely impacted by the hydrocarbon concentrations.

There is potential that Acid Sulfate Soils (ASS) may impact on deep building footings due to its natural salinity, acidity, sulfate content, corrosiveness and/or encrustation potential, but is not considered a risk to the development.

The Auditor therefore considers that the condition of the site is potentially detrimental to the objectives of this beneficial use for deep structure.

8.2 Consideration of Whether a Certificate or Statement Should be Issued

Groundwater pollution has not been identified at the site and therefore groundwater does not prevent the issuing of a Certificate of Environmental Audit. However, the final soil condition is considered to be detrimental to some beneficial uses of land. Therefore a Certificate of Environmental Audit cannot be issued.

8.3 Determination of Whether the Condition of the Site is Detrimental to the Proposed Development

The Auditor considers that the condition of the site soil is not detrimental to the proposed residential development, provided excavation works on the site boundary in the vicinity of the marker liner and cross boundary excavation works along the external site boundary do not bring ACM contaminated fill onto the audit site. This is considered an unavoidable situation as the contamination is off site and does not unreasonably constrain the site use. This can be reasonably managed post-development via compliance with Statement conditions.

The condition of groundwater is not considered detrimental to the proposed development.

9 Beneficial Use Assessment – Groundwater

9.1 Groundwater Pollution Assessment Process

The Auditor has followed the process for assessing groundwater pollution provided in Section 13 of EPA Publication 759, whereby the Auditor must answer the following questions:

1. Is groundwater likely to be polluted?
2. Is groundwater polluted?
3. Are the beneficial uses of the groundwater precluded by the pollution relevant, or, is the site the source of pollution?

9.1.1 Is Groundwater Likely to be Polluted?

The site was formerly used for residential purposes. Imported fill was a potential source of groundwater pollution. In addition, a number of nearby properties were potential or known sources of groundwater pollution, including multiple service stations, as detailed in Section 3.2. Based on these considerations, pollution of groundwater was considered a possibility and intrusive groundwater investigation was warranted.

9.1.2 Is Groundwater Polluted?

The discussion in the following section presents the Auditor's assessment of whether the groundwater is polluted or not. That is, do elevated concentrations in groundwater (above naturally occurring levels) exceed allowable levels for the protected beneficial uses of groundwater?

The aquifer is classified as Segment A1, with the following beneficial uses of groundwater to be protected:

- Water Dependent Ecosystems and Species;
- Potable Water Supply (Desirable);
- Potable Mineral Water Supply (considered not relevant as the site is not within a designated mineral water area);
- Agriculture and Irrigation (Irrigation);
- Agriculture and Irrigation (Stock Watering);
- Water-based Recreation (Primary Contact Recreation);
- Industrial and Commercial;
- Traditional Owner Cultural Values;
- Cultural and Spiritual Values;
- Geothermal Properties (considered not relevant as the groundwater in this area was not found to have geothermal properties); and
- Buildings and Structures.

Based on the groundwater investigations undertaken, concentrations exceed screening criteria for some of these beneficial uses. Although some of the analytes are considered naturally occurring (cobalt, copper, nickel, lead, manganese and zinc). This is further discussed in Section 9.2.3.1

9.1.3 Are Precluded Beneficial Uses Relevant or is the Site the Source?

The site is not considered a source of groundwater pollution, as discussed in Section 9.33.1.

The risk the groundwater pollution presents to the beneficial uses and the relevancy of those beneficial uses are discussed in Section 9.4.

A summary of the precluded beneficial uses of groundwater due to the groundwater pollution is discussed in Section 9.55.

9.2 Final Groundwater Condition

The most recent groundwater monitoring event (GME) was undertaken in January 2020. Given the soil contamination was not related to the elevated groundwater concentrations (i.e. different contaminants) and active groundwater remediation was not undertaken (off-site source), rebound or long term monitoring of groundwater was not necessary.

Concentrations present in groundwater exceeding the adopted assessment criteria for the protected beneficial uses are summarised in the following table and based on the latest sampling event, where data was available.

It is noted that some low level concentrations of TRH and chloroform were reported in MW01 and MW02 (closest to the off-site service station). MW01 was re-tested using silica gel clean up methodologies. The silica gel clean up results were reported to be below limit of reporting (LOR). The chloroform results were compared to WHO drinking water guidelines, and found to be below this criteria (6 and 10 µg/L for MW01 and MW02 respectively, compared to a criteria of 300 µg/L); the chloroforms are likely a result of leaking mains water.

Table 16: Groundwater Results Exceeding Adopted Tier 1 Criteria

Location	Contaminant (mg/L)	Tier 1 Criteria exceeded* (mg/L)
MW1	Cobalt (0.006)	MWG (0.001)
	Copper (0.017)	MWG (0.0013)
	Lead (0.035)	DWG (0.01) MWG (0.0044) FWG (0.0034)
	Manganese (0.21)	RWG (0.1) LIWG (0.2)
	Nickel (0.12)	DWG (0.02) MWG (0.07) FWG (0.011) RWG (0.1)
	Zinc (0.26)	MWG (0.015) FWG (0.008)
	pH (6.1)	RWG (6.5-8.5)
MW2	Cobalt (0.002)	MWG (0.001)
	Lead (0.009)	MWG (0.0044) FWG (0.0034)
	Manganese (0.19)	RWG (0.1)
	Nickel (0.009)	FWG (0.011)
	Zinc (0.044)	MWG (0.015) FWG (0.008)
	pH (6.2)	RWG (6.5-8.5)

Location	Contaminant (mg/L)	Tier 1 Criteria exceeded* (mg/L)
MW3	Cobalt (0.005)	MWG (0.001)
	Copper (0.006)	MWG (0.0013)
	Lead (0.005)	MWG (0.0044) FWG (0.0034)
	Manganese (0.14)	RWG (0.1)
	Nickel (0.025)	DWG (0.02) FWG (0.011)
	Zinc (0.093)	MWG (0.015) FWG (0.008)
	pH (4.5)	RWG (6.5-8.5)
MW4	Cobalt (0.002)	MWG (0.001)
	Copper (0.004)	MWG (0.0013)
	Lead (0.002)	FWG (0.0034)
	Nickel (0.016)	FWG (0.011)
	Zinc (0.034)	MWG (0.015) FWG (0.008)
	pH (4.9)	RWG (6.5-8.5)

*Adopted Criteria detailed in Section 5.4:
MWG – marine water guidelines – 95% protection
FWG – freshwater guidelines – 95% protection
DWG – drinking water guidelines
RWG – recreational water guidelines
LIWG – Livestock/Irrigation water guidelines

9.3 Source and Extent of Groundwater Pollution

The assessor did not present a quantitative comparison of elevated groundwater analytes on site with regional data, and therefore this comparison was undertaken by the Auditor.

9.3.1 Background/Regional Pollution

The concentrations of pH, cobalt, copper, nickel, zinc, lead and manganese were above one or more assessment criteria during the GME. A comparison of the up-gradient and down-gradient groundwater exceedances are summarised in the table below. These analytes are not considered site-derived pollution for the following reasons:

- The concentrations of metals and pH were present at levels which may be attributed to naturally occurring aquifer conditions;
- These analytes were not identified as key site-sourced contaminants of concern within the site history; and
- Concentrations of these analytes in soil during site investigation, excavation and remediation/validation works were not indicative of an obvious on-site source.

Therefore, the Auditor considers that the site is not a source or co-source of pH, cobalt, copper, nickel, zinc, lead and manganese pollution in groundwater but indicative of the natural groundwater conditions surrounding the site.

The groundwater investigation was undertaken to understand if there was contamination present beneath the site from up-gradient off-site sources. Concentrations of petroleum hydrocarbon and volatile were not identified at concentrations indicative of a risk to site users.

Table 17: Summary of groundwater contaminant exceedances

Analyte	On-site concentration range (µg/L)		Guidelines values for protected beneficial uses* (µg/L)					Bore/s Exceeding Criteria
	Up-gradient (MW01 to MW03)	Down-gradient (MW04)	MWG	FWG	DWG	RWG	IWRG	
Analytes considered by the Auditor to be natural and hence not pollution								
Cobalt	**6**	**2**	**1**	**-**	-	-	**10**	MW01, MW02, MW03, MW04
Copper	**17**	**4**	**1.3**	**1.4**	2,000	1,000	200	MW01, MW03, MW04
Lead	**35**	2	**4.4**	**3.4**	**10**	50	2,000	MW01, MW02, MW03
Manganese	**210**	32	-	1,900	500	**100**	**200**	MW01, MW02, MW03
Nickel	**120**	**16**	**70**	**11**	**20**	**100**	200	MW01, MW02, MW03, MW04
Zinc	**260**	**34**	**15**	**8**	3,000	5,000	2,000	MW01, MW02, MW03, MW04
pH	**4.5**	**4.9**	-	**-**	**6.5 – 8.5**	**6.5 – 8.5**	**6 – 8.5**	MW01, MW02, MW03, MW04

*Adopted Criteria detailed in Section 5.4:
MWG – marine water guidelines – 95% protection
FWG – freshwater guidelines – 95% protection
DWG – drinking water guidelines
RWG – recreational water guidelines
LIWG – Livestock/Irrigation water guidelines

9.4 Significance (Risk) of Groundwater Pollution

9.4.1 Extractive Groundwater Uses

Based on Segment A1, protected extractive uses of groundwater include potable water supply, primary contact recreation, irrigation, stock watering and commercial and industrial use. As per Section 13.7 of EPA Publication 759, the relevancy of beneficial uses only needs to be considered at the site, for non-source sites.

The proposed development will not include any extractive use of groundwater. It is also noted that extractive use on site in the future is unlikely, based on the natural aquifer characteristics (relatively low yield and concentrations of inorganics and metals), availability of mains water, highly urbanised site location and the building footprint (covering the majority of the site).

9.4.2 Water Dependent Ecosystems and Species, Traditional Owner Cultural Values, Cultural and Spiritual Values

Concentrations of cobalt, copper, nickel, zinc and lead exceeded the WDES criteria on site. Concentrations were considered naturally occurring and do not represent pollution.

The groundwater quality objectives for WDES apply at the point of discharge to surface water and no surface water bodies exist on site. The Auditor considers that in the case where groundwater is not proposed to be extracted, TOCV and CSV should also be applied at the point of discharge. Furthermore for non-source sites, as per Section 13.7 of EPA Bulletin 759, off-site beneficial uses do not need to be

considered when evaluating potential impacts of groundwater pollution, and therefore these beneficial uses are not relevant at this site.

9.4.3 Other Non-Extractive Groundwater Uses

Based on the depth to groundwater, the only relevant on-site non-extractive groundwater use relates to building foundations that may extend into groundwater, that is Buildings and Structures. As per Section 13.7 of EPA Bulletin 759, for non-source sites the relevancy of beneficial uses only needs to be considered at the site.

Groundwater is classified as 'non-aggressive to mild' based on AS2159-2009 and therefore Buildings and Structures is not a precluded beneficial use, based on the following:

- pH in groundwater ranged from 4.5 to 6.1 pH units and is considered slightly acidic;
- Chloride in groundwater ranged from 16 to 190 mg/L and was considered to be naturally occurring; and
- Sulfate (as SO_4) concentrations in groundwater ranged from 17 to 56 mg/L and were considered to be naturally occurring.

9.4.4 Consideration of Potential NAPL

No measurable NAPL or sheen has been reported for groundwater from on-site or off-site wells.

9.4.5 Consideration of Potential Vapour Risks

There were no detectable concentrations of volatile contaminants.

9.5 Summary of Precluded Beneficial Uses of Groundwater

A summary table of the currently precluded beneficial uses is provided in Table 18: below and is consistent with Attachment 3 of EPA Publication 840. As the concentrations of potential contaminants in groundwater are considered to be natural, uses of groundwater can not be precluded, but should still be proven to be safe for that proposed use as concentrations exceed some adopted criterion.

Table 18: Precluded Beneficial Use Summary Table

Precluded Beneficial Use	Contaminants
Water Dependent Ecosystems and Species[1]	Cobalt (n), copper (n), lead (n), nickel (n), zinc (n)
Potable Water Supply	Lead (n) and nickel (n)
Potable Mineral Water Supply	Not Applicable at this site
Agriculture and Irrigation (Irrigation)	Manganese (n)
Agriculture and Irrigation (Stock Watering)	None
Water-based Recreation (Primary Contact Recreation)	Manganese (n) and pH (n)
Industrial and Commercial[2]	None
Traditional Owner cultural values[1]	Refer to WDES – not applicable on site
Cultural and spiritual values[1]	Refer to WDES – not applicable on site
Geothermal Properties	Not applicable at this site
Buildings and Structures	Not precluded

(n) naturally occurring
1 Based on concentrations in the vicinity of the site, whilst criteria apply at the point of exposure/receptor.
2 No chromium criteria are available for commercial or industrial use, as suitability for these uses are highly dependent on the specific use proposed. It is recommended that suitability for a specific commercial or industrial use is evaluated on an individual basis.

9.6 Determination of Whether a Certificate or Statement Should be Issued

Groundwater pollution has not been identified at the site and therefore groundwater does not prevent the issuing of a Certificate of Environmental Audit. Soil contamination is detrimental to the beneficial uses of land and therefore a Certificate of Environmental Audit cannot be issued.

9.7 Determination of Whether the Condition of the Site is Detrimental to the Proposed Development (Statement of Environmental Audit)

The proposed development does not propose extractive use of groundwater, and groundwater pollution has not been identified therefore, the condition of groundwater is not considered detrimental to the proposed development.

10 Beneficial Use Assessment – Surface Water

The Auditor considers that the current condition of the site is not detrimental to the relevant beneficial uses of surface water on the basis that:

1. There are no surface water bodies located within the boundaries of the site;
2. Erosion of surface soils is unlikely due to the effective capping of the site once the proposed development is constructed; and
3. The potential receiving waters (mangrove community of the Outer Estuary of Darwin Harbour) are located approximately 160 m away, and the processes of dispersion and sorption would act to reduce the contaminant levels.

Based on the above, the Auditor considers that the condition of the site is not detrimental to the beneficial uses of surface water defined in SEPP (Waters).

11 Beneficial Use Assessment – Ambient Air

The Auditor has assessed whether or not the site is detrimental to ambient air (defined as air outside a building) on the basis of:

1. Land pollution, specifically vapour emissions from polluted soils (i.e. volatile hydrocarbons in soil and soil vapours) and landfills;
2. Groundwater pollution, specifically vapour emissions from polluted groundwater (i.e. volatile hydrocarbons dissolved in groundwater and NAPL); and
3. Surface water pollution, specifically vapour emissions from polluted surface waters.

The risks to on-site receptors from vapour emissions into ambient and indoor air is within acceptable levels for the proposed development based on the results of soil and groundwater investigations.

In accordance with EPA Publication 788, the Auditor is required to consider the presence of open and closed landfills within 500 m of the site and assess the risk of any resultant landfill gas impacts. No landfills were identified within 500 m of the site.

Based on the above, the Auditor considers that the condition of the site is not detrimental to the beneficial uses of air defined in SEPP (Air Quality Management) and SEPP (Ambient Air Quality).

12 Other Factors Affecting Use of the Site

EPA Publication 759 notes that a range of other factors (other than land, groundwater, surface water and air) may be identified that do not affect a beneficial use of the site, but may be relevant to the development of, or activities at, the site. Such factors are noted below and repeated in the Statement of Environment Audit in the section titled "Other Related Information":

1. ACMs were found on the audit site and have been removed as far as reasonably practicable. No known ACM remains on the audit site. However, small quantities of ACM may remain within the soil and be uncovered during excavation works. These ACM fragments are not anticipated to represent a health risk to workers or occupiers of the completed development. If encountered during future development or use of the audit site, any fragments must be handled and disposed in accordance with the *Code of Practice How to Safely Remove Asbestos 2011* (or its relevant future revisions).
2. Groundwater at the site contains naturally elevated concentrations of pH, cobalt, copper, nickel, lead, manganese and zinc. The levels are considered typical of the natural groundwater quality surrounding the site and do not constitute pollution in accordance with clause 10(2)(c) of State Environment Protection Policy (Waters) 2018.
3. If groundwater is to be extracted from the site advice, including testing, should be sought from a suitably qualified professional to ensure the groundwater is suitable for the intended use.
4. Any material excavated from the site and disposed of off site should be classified and managed in accordance with IWRG 621 (or its relevant future revisions) or NT EPA equivalent. Analysis of fill materials should include asbestos and PFAS due to the previous on-site asbestos contamination and importation of fill materials from a Defence site;
5. Not all land uses for which the land is considered suitable by this audit may be allowed under the existing zoning;
6. A separate Environmental Audit Report and Statement of Environmental Audit has been issued for Lot A (dated 31 March 2022) and another report will be issued for the Road Reserve and Lot C; and
7. In accordance with Section 53ZE of the Act, the owner/occupier of the site must provide a copy of this Statement to any person who becomes or proposes to become an occupier of the site.

13 Conclusions

13.1 Audit Requirement

This audit was requested by the NT EPA to assess the suitability of the site for the proposed use. The proposed development is for high density residential land use; refer to Attachment 2 for the development plan.

13.2 Verification of Assessor's Conclusions

Appendix 3 of EPA Publication 759 states that, '*Where another person has undertaken the site assessment, the audit report should include the auditor's verification of the assessor's conclusions in relation to these issues.*' Among SLR and Agon's conclusions are the following:

- *DIPL commenced demolition of former public housing buildings in mid-2019.*
- *Fill was observed to approximately 0.4 mbgl, with deeper pockets up to 1.8 mbgl, overlying natural weathered rock or rock. At the completion of works all fill was removed, with natural or reworked natural soils remaining.*
- *Investigations of the site identified contamination in the form of asbestos (bonded fragments and fibres) and pesticides (aldrin and dieldrin) in soils.*
- *SLR developed a remediation strategy for the site. Removal of surface fill (excavation to inferred natural) and placement directly into skips for off-site disposal. Following removal of the surface fill the deeper reworked natural soil and bedding sands (around trenches) was removed along with the underground utilities, visually expected for asbestos before placed back in the trench once the surface and soils were visually inspected to be free of asbestos. ACM debris was removed for off-site disposal.*
- *A combination of imported soil and re-use of site-sourced soils were reused to backfill the excavation on site. SLR tested the soil prior to importation, and it was found to be suitable for use on site.*
- *SLR supervised the removal of fill across the site; the presence of asbestos was only detected at one residual location in the south-eastern corner of B2, where the asbestos could not be removed as it was a boundary location and it was unsafe to excavate further. The wall has been excavated to the extent practicable, and geofabric has been placed over the eastern wall to prevent asbestos fibres/ACM debris falling into the site and as a marker layer. The location is shown in Figure 9.*
- *SLR consider that the site has been suitably remediated and validated for the proposed residential use.*
- *Agon found that the soil investigations identified fill up to 2 m, consistent with reworked natural soils. Bonded ACM fragments and fibres were identified in the soil, with concentrations of OCPs exceeding residential criteria (below commercial criteria). The surface fill was excavated from Lots B1, B2 and B3 and removed from site; deeper bedding sands and reworked natural excavated during trenching works were inspected, visible asbestos removed, and validated to be free of asbestos before re-using to backfill the excavation.*
- *Agon reported concentrations of TRH, ether oxygenates, BTEX and halogenated volatile organics within groundwater were below the adopted assessment criteria; minor concentrations of chloroform were detected in groundwater. Some metals were reported to exceed site-specific criteria.*

The Auditor generally concurs with the above findings.

13.3 Auditor's Conclusions

The Auditor considers that the final condition of the site is detrimental to some of the relevant beneficial uses defined in SEPP (Land), i.e. *Protection of Human Health*, due to asbestos risks in fill materials present

on and in the near vicinity of the site boundary. However, an SEA which states that the condition of the site is acceptable for the beneficial uses of '*Sensitive use – High Density*, '*Public Open Space*', *'Commercial' and 'Industrial*' can be issued, subject to the SEA conditions.

The Auditor considers that the condition of the site is not detrimental to the relevant beneficial uses defined in SEPP (Waters) for groundwater and surface water, SEPP (Air Quality Management) and SEPP (Ambient Air Quality).

14 References

Legislation and Regulations

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NHMRC (2022). *Australian Drinking Water Guidelines 6 2011*, Version 3.7 updated January 2022, National Health and Medical Research Council.

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EPA Victoria Publication 759.3. *Environmental Auditor (Contaminated Land): Guidelines for Issue of Certificates and Statements of Environmental Audit*. December 2015.

EPA Victoria Publication 840.2. *The Cleanup and Management of Polluted Groundwater*, April 2016.

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EPA Victoria Publication 953.2. *Environmental Auditor Guidelines for Conducting Environmental Audits*. August 2007.

EPA Victoria Publication 1147.2. *Environmental Auditor Guidelines – Provision of Environmental Audit Reports, Certificates and Statements*. December 2015.

EPA Victoria IWRG 621. *Soil Hazard Categorisation and Management*. June 2009.

Victorian Environment Protection (Industrial Waste Resource) Regulations 2009

Attachments

Attachment 1: Site Location Plan
Attachment 2: Development Plan
Attachment 3: Historical Site Layout
Attachment 4: Soil Investigation Locations
Attachment 5: Groundwater Investigation Locations
Attachment 6: Conceptual Site Model
Attachment 7: Sewer Easement
Attachment 8: Validation Locations
Attachment 9: Location of Geofrabric

Attachment 1: Site Location Plan

0 50 100 m

Proposed Residential Allotments

Project Area

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:3,000 at A4
Project Number:	680.10679
Date:	28-Jan-2021
Drawn by:	JG

SLR

JOHN STOKES SQUARE

Location of Project Area

FIGURE 1

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680010679 F01 Location of Project Area.mxd

Attachment 2: Development Plan

H:\Projects-SLR\680-DRW\680-DRW680.10679 DIPL John Stokes Square ERA\06 SLR Data\01 CAD\GIS\GIS\D SI-RR and Lot C.mxd

SLR
5/21 Parap Road
PARAP NT 0820
AUSTRALIA
T: 61 8 8998 0116
www.slrconsulting.com

The content contained within this document may be based on third party data.
SLR Consulting Australia Pty Ltd does not guarantee the accuracy of such information.

Project No.:	680.10679
Date:	25-Jun-2020
Drawn by:	Sarah Doherty
Scale:	1:1,000
Sheet Size:	A4
Projection:	GDA 1994 MGA Zone 52

N
W
E
S

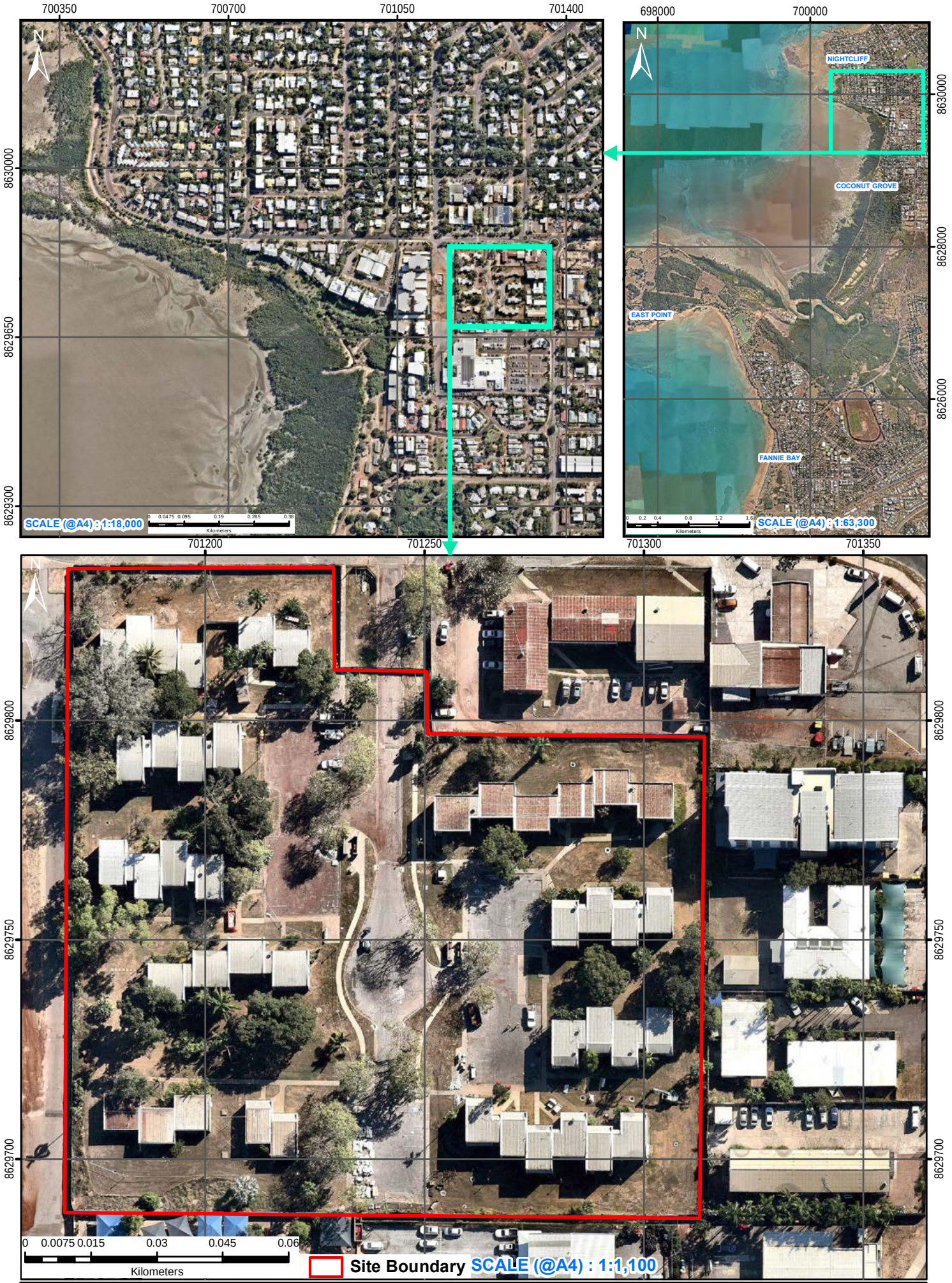
Imagery sourced from Nearmaps June 2020

Figure 2

0 5 10 20
Metres

Future Land Use Classifications

Attachment 3: Historical Site Layout



Project: Soil Contamination Investigation – John Stokes Square, 47 Progress Drive, Nightcliff NT			Coordinate System: GDA_1994_MGA_Zone_52	GREENCAP
Figure1: Site Location	Job Ref: J163803	Date: Sep. 2019	Author: Sam.K.	Checked: Stuart C.

No warranty is given in relation to the data (including accuracy, reliability, completeness or suitability) and accept no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of or reliance upon the data.Data must not be used for direct marketing or be used in breach of privacy laws, Nearmap imagery 13th June 2019.

Attachment 4: Soil Investigation Locations

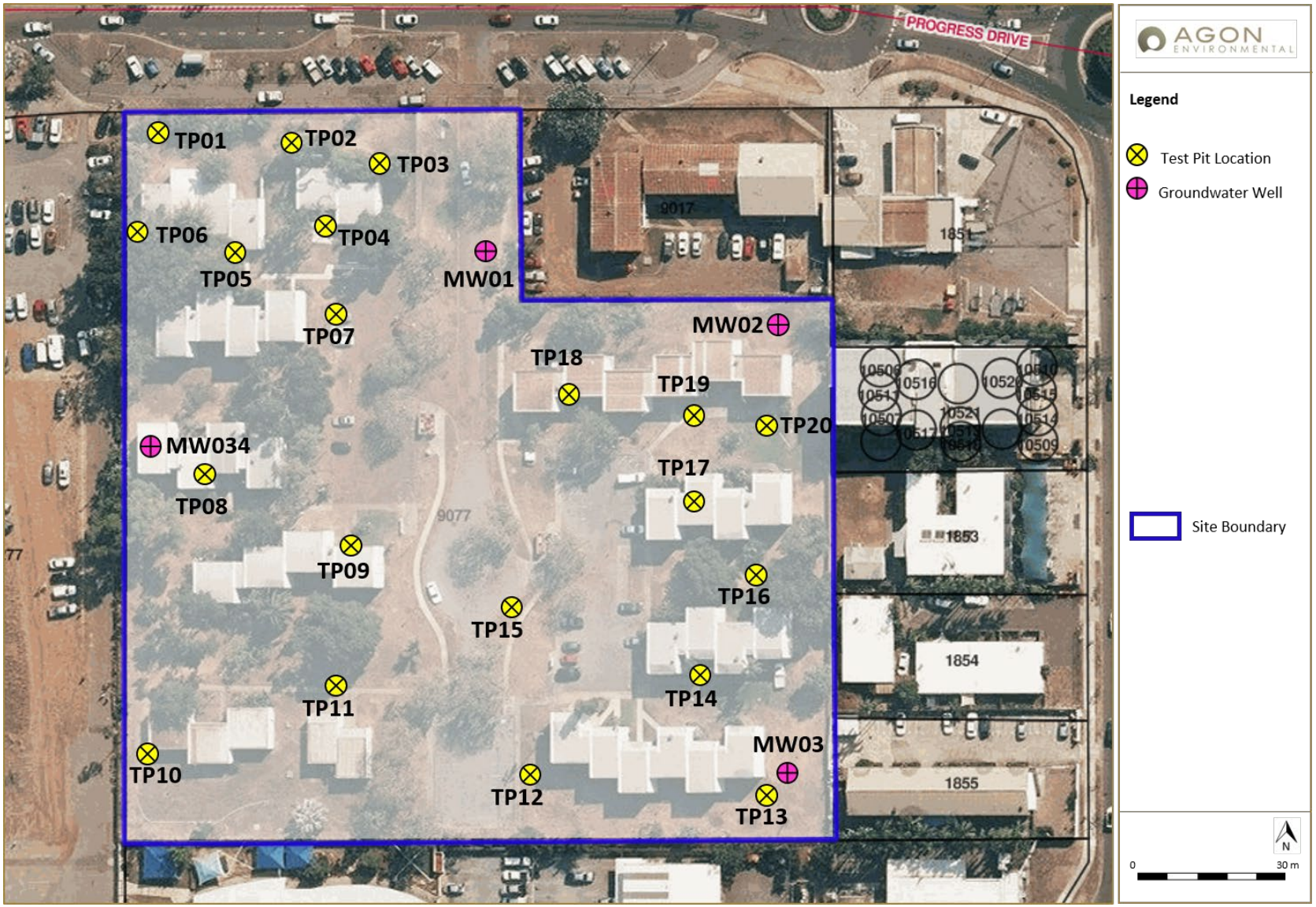


Figure 9: Agon Sample Locations

Source: NR Maps

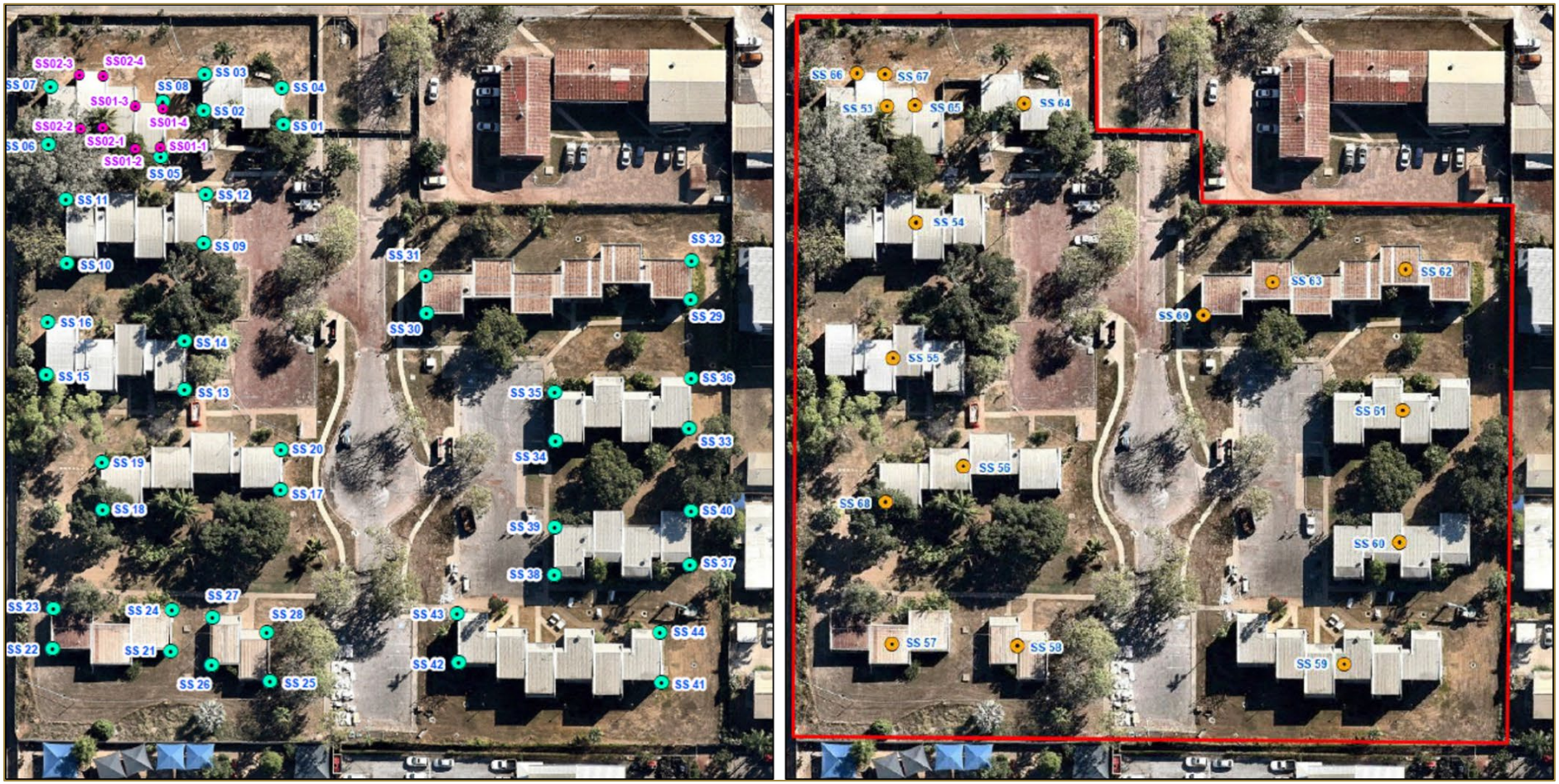


Figure 6: Previous Surface Sample Locations

Source: Greencap 2019a and 2019b (left) and Greencap 2019c (right)

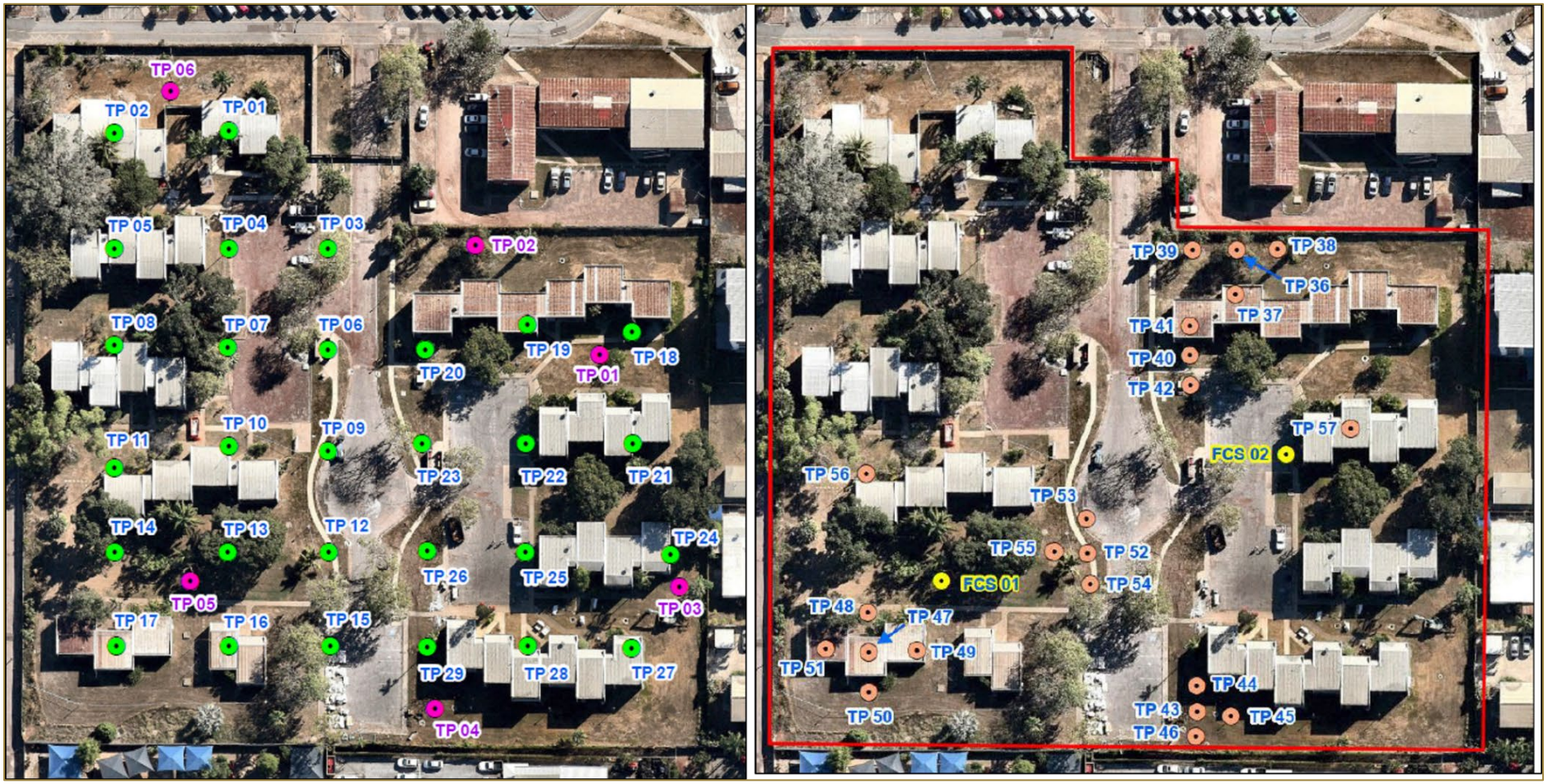


Figure 7: Previous Test Pit Sample Locations
Source: Greencap 2019a and 2019b (left) and Greencap 2019c (right)

Attachment 5: Groundwater Investigation Locations

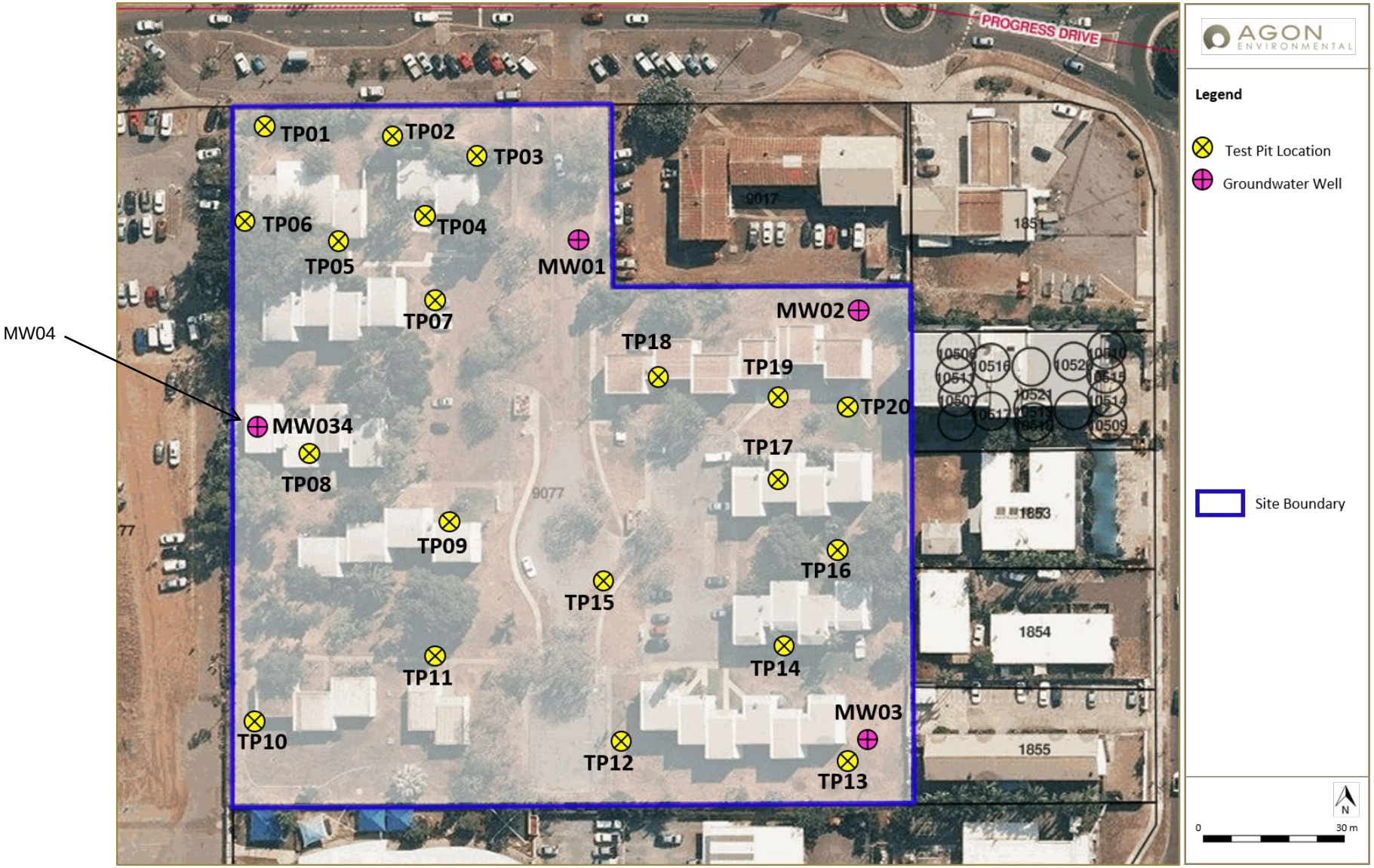


Figure 9: Agon Sample Locations

Source: NR Maps

Attachment 6: Conceptual Site Model

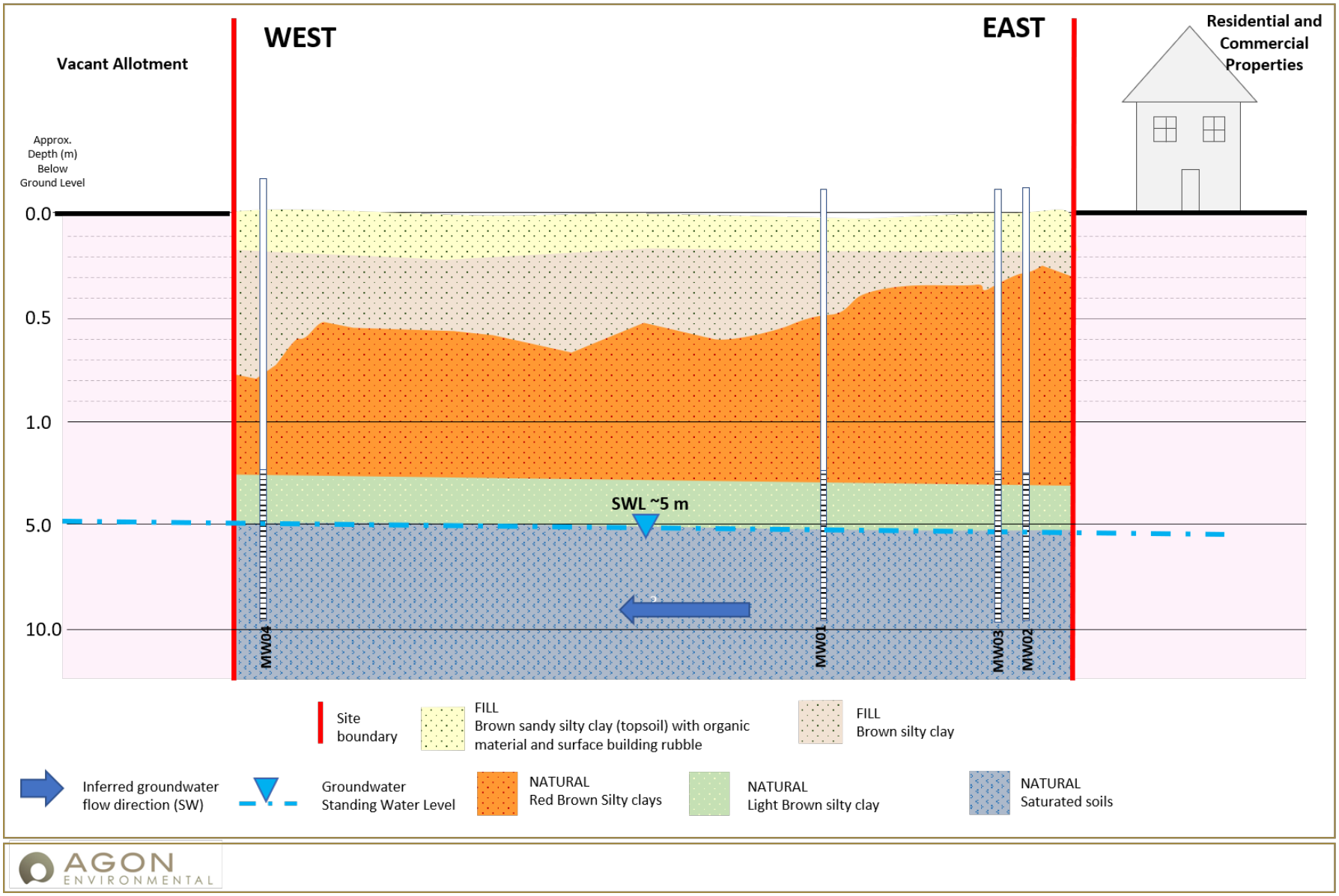
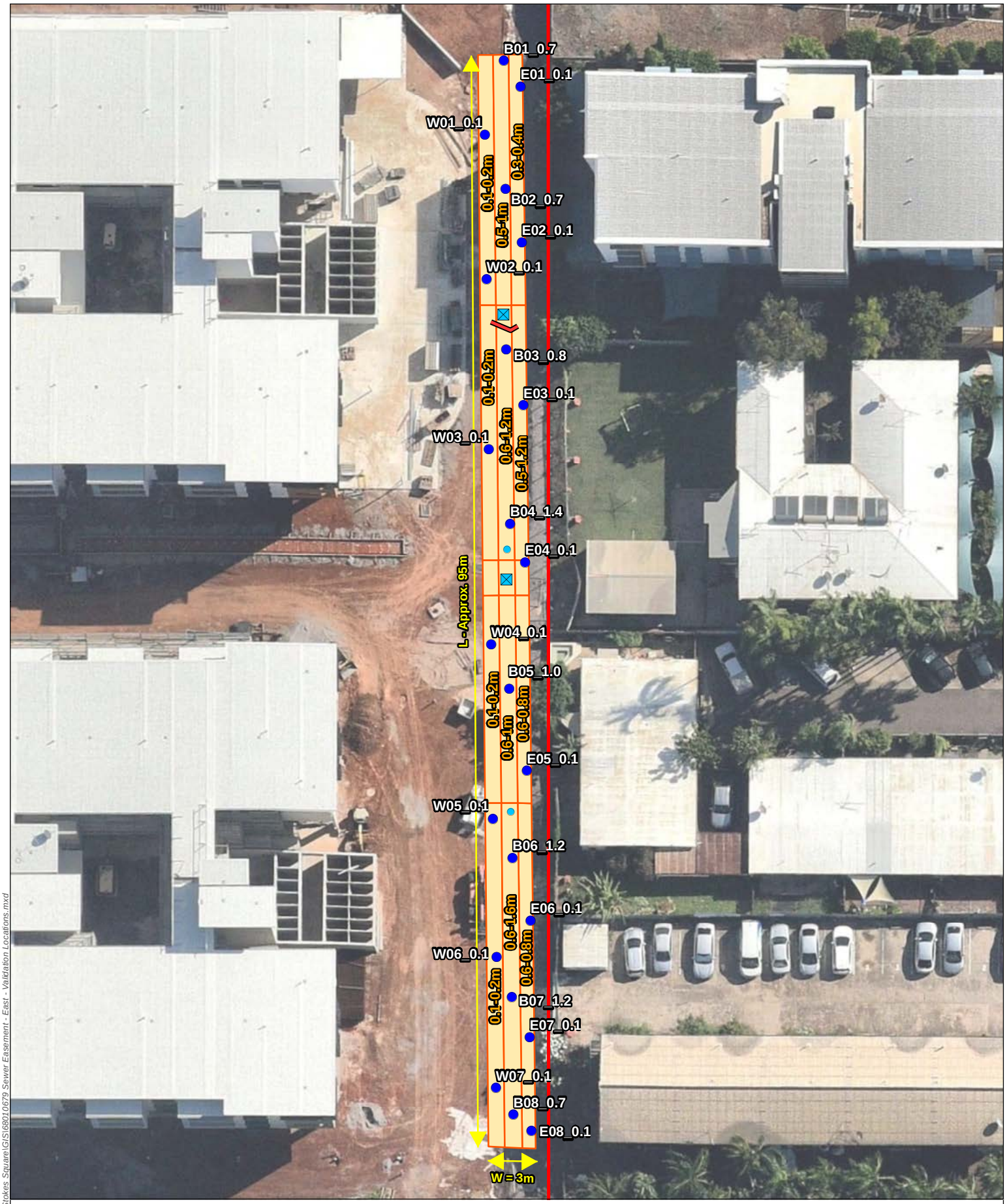


Figure 11: Graphical Conceptual Site Model

Attachment 7: Sewer Easement



0 5 10 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:440 at A4
Project Number:	680.10679
Date:	18-May-2022
Drawn by:	JG

IO
Manhole
Validation Locations
Asbestos Pipe
Sewer Easement
Project Area

JOHN STOKES SQUARE

Validation Locations

FIGURE 3

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 Sewer Easement - East - Validation Locations.mxd

JOHN STOKES SQUARE

Validation Locations (East)

FIGURE 1

0 2.5 5 m

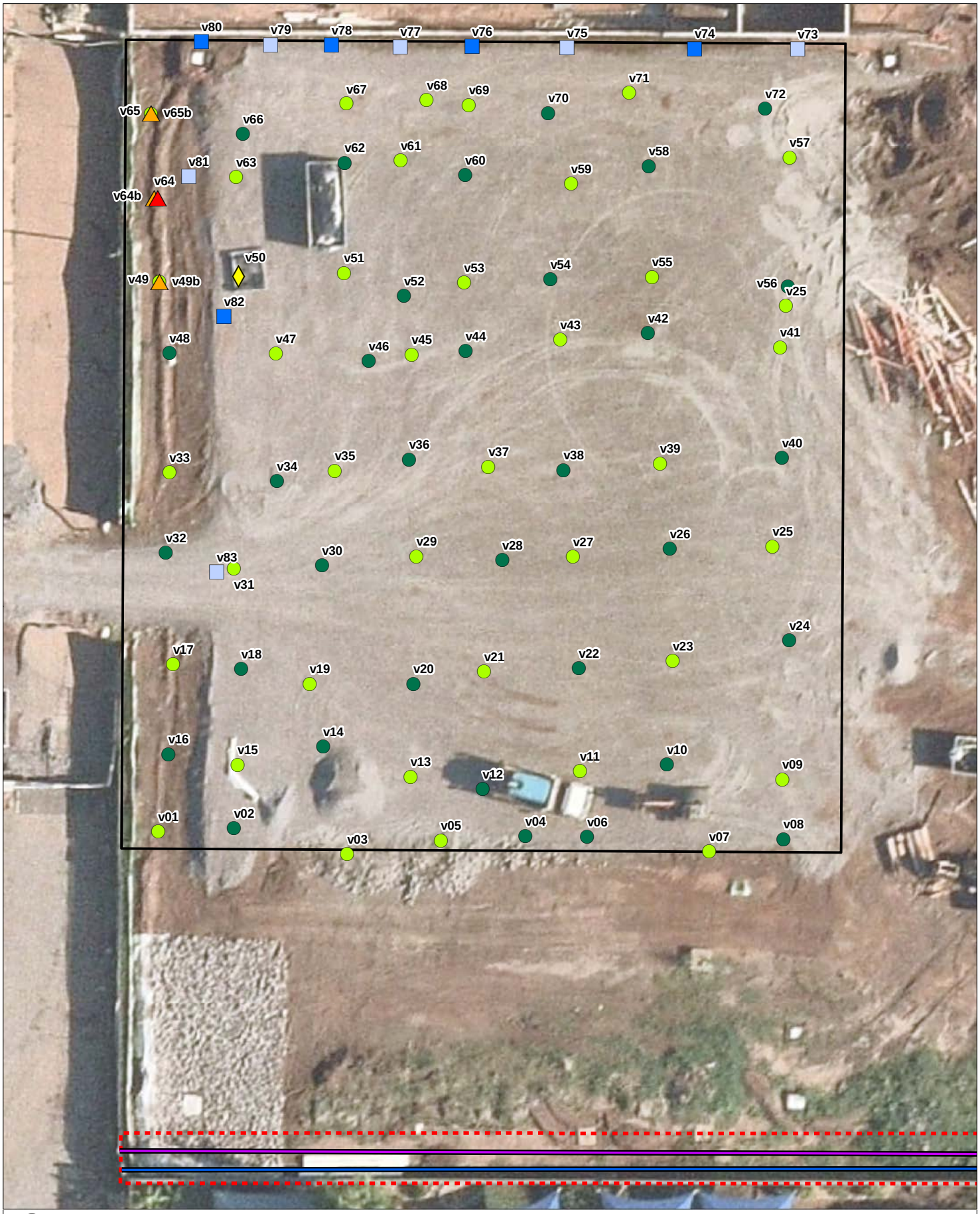
Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:300 at A4
Project Number:	680.10679
Date:	18-May-2022
Drawn by:	JG

- Manhole
- Vent
- Validation Locations
- Approximate Location of Geofabric
- Sewer Easement
- Project Area

SLR

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\68010679 Sewer Easement - South - Validation Locations E.mxd

Attachment 8: Validation Locations



0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:300 at A4
Project Number:	680.10679
Date:	16-Feb-2021
Drawn by:	JG

SLR

- Hotspot Locations
- Hotspot Validation Samples
- Trench Wall Samples on Hold
- Trench Wall Samples Analysed
- CHAR-Val
- Surface Validation Samples on Hold
- Surface Validation Samples Analysed
- Live Sewer Pipe
- Live Stormwater Pipe
- Service Easement
- Proposed Allotment B1

JOHN STOKES SQUARE

Validation Sample Locations in Lot B1

FIGURE 3

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 F04 Validation Sampling Locations in Lot B1.mxd

0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:350 at A4
Project Number:	680.10679
Date:	19-Jan-2022
Drawn by:	JG

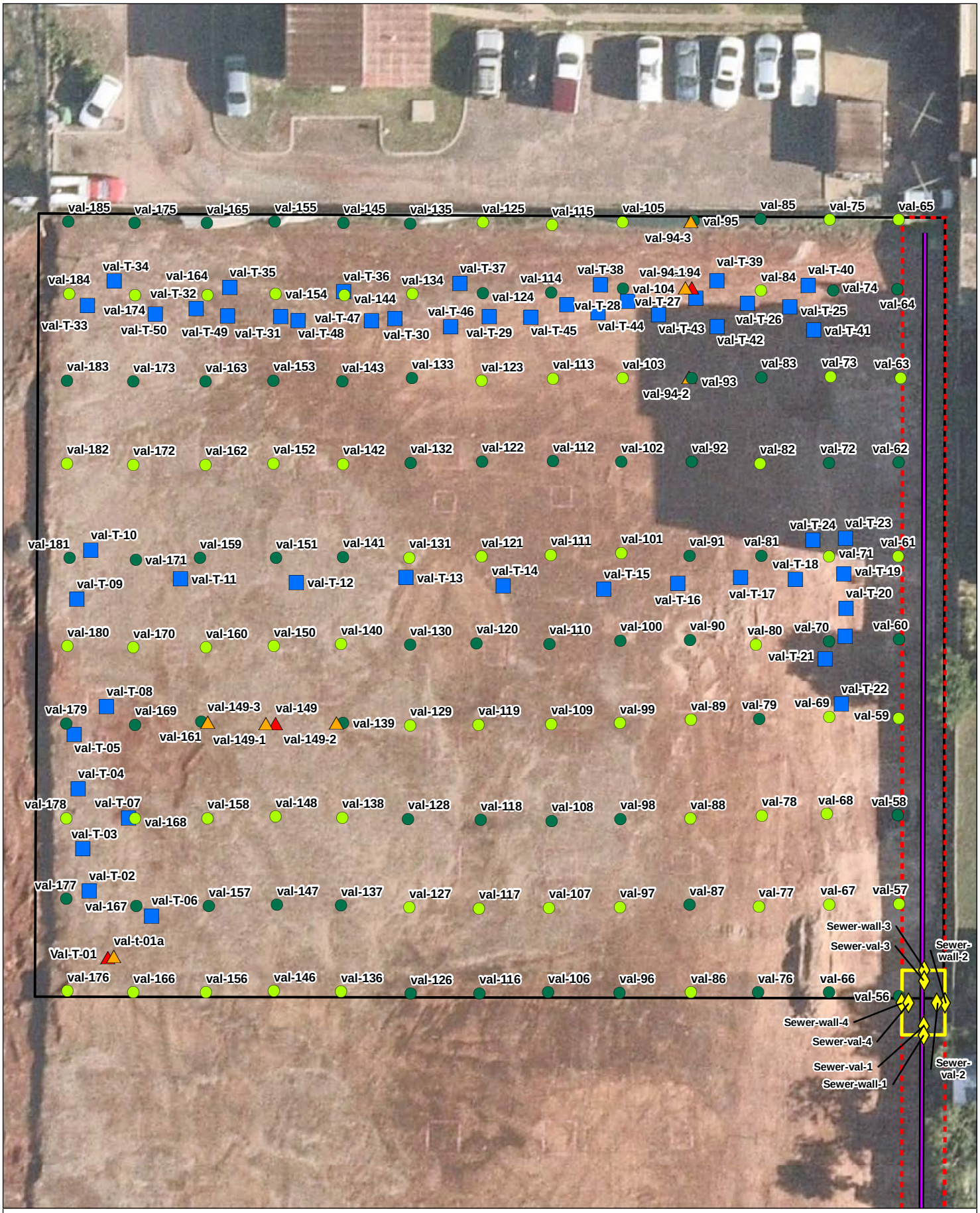
- Sewer Riser Sample Locations
- Asbestos Pipe Validation Samples
- Asbestos Pipe Validation Samples on Hold
- Hotspot Locations
- Hotspot Validation Sampling
- Stockpile Validation Samples
- Surface Validation Sampling Analysed
- Surface Validation Sampling on Hold
- Trench Wall Sampling
- Live Sewer Pipe
- Sewer Riser Area
- Service Easement
- Proposed Allotment B2

JOHN STOKES SQUARE

Validation Sampling Locations in Lot B2

FIGURE 4

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 F04 Validation Sampling Locations in Lot B2.mxd



0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:350 at A4
Project Number:	680.10679
Date:	19-Jan-2022
Drawn by:	JG

- Sewer Riser Sample Locations
- Hotspot Locations
- Hotspot Validation Sampling
- Surface Validation Sampling Analysed
- Surface Validation Sampling on Hold
- Trench Wall Sampling
- Live Sewer Pipe
- Sewer Riser Area
- Service Easement
- Proposed Allotment B3

JOHN STOKES SQUARE

Validation Sampling Locations in Lot B3

SLR

FIGURE 5

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 F05 Validation Sampling Locations in Lot B3.mxd

Attachment 9: Location of Geofabric

JOHN STOKES SQUARE

Validation Locations (East)

FIGURE 1

0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:300 at A4
Project Number:	680.10679
Date:	18-May-2022
Drawn by:	JG

- Manhole
- Vent
- Validation Locations
- Approximate Location of Geofabric
- Sewer Easement
- Project Area

SLR

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\68010679 Sewer Easement - South - Validation Locations E.mxd

Appendices

Appendix A
EPA Summary Information

NOTIFICATION OF COMPLETION AND ISSUE OF STATEMENT OR CERTIFICATE OF ENVIRONMENTAL AUDIT

The following *pro forma* must be used by auditors when notifying EPA of the completion and issue of a statement of environmental audit or a certificate of environmental audit. This *pro forma* should be forwarded electronically (in .docx and .pdf format).

8 September 2022
Manager – Environmental Audit
EPA Victoria
GPO Box 4395
MELBOURNE, 3001

I, Jean Paul Pearce, a person appointed as an environmental auditor (contaminated land) by the Environment Protection Authority under s. 53S of the *Environment Protection Act 1970* (Vic.), have completed an environmental audit and issued a certificate/statement (*select appropriate*) of environmental audit for the site located at (*insert site address as per SoEA/CoEA*). Details are as follows.

Auditor	Jean Paul PEARCE
Auditor account number	101292
Auditor appointment end date	26 November 2022
Auditor's appointment category	CL
Audit Type	53X (site suitability audit)
Date EPA notified of audit	21 November 2019
Audit service order number	PRL8565 (NTEPA2019/0099-199)
Name of person requesting audit	Ms Sinead Redmond Project Management Lead Northern Territory Department of Infrastructure, Planning and Logistics Land Development Unit sinead.redmond@hksolutions EPA customer account number (if available). – n/a
Relationship of person requesting audit to site	Authorised representative of site owner
Name of premises owner	DIPL Representative Project Manager
Date of auditor engagement	20/11/2019
Completion date of the audit	1/04/2020
Reason for Audit	Due to the identified pesticide and asbestos contamination, we understand EPA has required an Auditor to determine the site is suitable for use;
Audit Categorisation	Risk
Environmental Segments	Air, Land, Groundwater, Surface water
If the audit was required by an EPA notice, licence or other, please provide EPA reference number	n/a
Current land use zoning	Zone MR (medium density residential), recently changed to Specific Use (SU) Zone SD49.
EPA Region	Darwin
Municipality	Nightcliff
Dominant Lot on title plan	Lot 9077 Town of Nightcliff Lot 9077 has since been subdivided creating Lot 12840 (Lot B1), Lot 12842 (Lot B3) and Lot 12843 (Lot B2)

Additional Lot on title plan(s)	The project area has been split into three audit areas based on the proposed development. This audit is the second audit area (Stage 2 of 3 stages) and comprises three residential lots referred to as Lot B1, B2 and B3 (referred to as Lot B) Lot B is defined as Lot 12840 (Lot B1), Lot 12842 (Lot B3) and Lot 12843 (Lot B2).
Site/Premises name	John Stokes Square Nightcliff Development
Building/complex sub-unit/lot No.	--
Street/Lot – Lower No.	47
Street/Lot – Upper No.	
Street Name	Progress,
Street type (road, court, etc)	Drive
Street suffix (North, South etc)	--
Suburb	Nightcliff
Postcode	0810
GIS Coordinate of Site centroid[1] Latitude (GDA94)	-12.388587°
Longitude (GDA94)	130.850751°
Site area (in square metres)	8,985 m^2
Plan of site/premises showing the audit site boundary attached	Yes
Plan of site/premises showing the audit site boundary attached in a spatial data format	No
Members and categories of support team utilised	Shandel Coleman (internal audit support). Bridget Roder (internal audit support).
Further works or requirements	No
Nature and extent of continuing risk	Risks in groundwater have not been found to be significant, however the condition of the groundwater should be tested by an appropriately qualified environmental consultant (to determine the suitability thereof) prior to being utilised for extractive use. Risks in soil vapour have not been found to be significant. Risks in soil have not been found to be significant apart from residual ACM on the site boundary covered by a geofabric marker liner and slightly beyond the site boundary. This is not a risk to future site users, but excavation workers in the area should be aware of this. This is located within a PWC sewer easement and excavation works are therefore restricted to PWC accredited contractors who would be familiar with and have procedures in place to deal with asbestos finds.
Outcome of the audit	Statement of Environmental Audit with conditions
Has EPA determined CUTEP at this site?	No
Has the Auditor determined CUTEP at this site?	No
Has a GQRUZ been identified at	No

[1] Longitude and latitude (decimal degrees) co-ordinates in the 1994 Geocentric Datum of Australia (GDA94) is required to six decimal places.

the site/beyond the site by EPA?	
Does NAPL remain at the site?	No – never encountered

<table>
<tr><td>Please indicate which of the Protected Beneficial Uses of groundwater are precluded due to pollution</td><td>e.g. including site-sourced and regional pollution.<table>
<tr><th>Protected Use</th><th>Precluded?</th></tr>
<tr><td>Maintenance of Ecosystems</td><td>No</td></tr>
<tr><td>Potable Water Supply (Desirable)</td><td>No</td></tr>
<tr><td>Potable Water Supply (Acceptable)</td><td>No</td></tr>
<tr><td>Potable Mineral Water Supply</td><td>N/A</td></tr>
<tr><td>Agriculture, Parks and Gardens</td><td>No</td></tr>
<tr><td>Stock Watering</td><td>No</td></tr>
<tr><td>Primary Contact Recreation</td><td>No</td></tr>
<tr><td>Industrial water use</td><td>No</td></tr>
<tr><td>Buildings and Structures</td><td>No</td></tr>
</table></td></tr>
</table>

Historical land use	Residential
Current land use	Recently redeveloped for residential properties
Proposed future land use	High density residential
Surrounding land use – north	The police station (Lot A) north of Lot B1 and existing offsite residential north of Lot B2 and B3. Progress Drive then commercial, with low density residential beyond A service station is located to the north-east of the site
Surrounding land use – south	Proposed public open space (Lot C) Child care centre and tyre retailer then commercial A service station is located south-east of the site
Surrounding land use – east	Road Reserve, proposed residential (Lot B3), then Dick Ward Drive
Surrounding land use – west	Proposed residential (Lot B1), Lot A, vacant land and laneway then commercial
Proposed land use zoning	Specific Use (SU) Zone SD49
Nearest surface water receptor – name	Outer Estuary of Darwin Harbour
Nearest surface water receptor – distance (m)	160 m
Nearest surface water receptor – direction	West
Likely point of groundwater discharge	Outer Estuary of Darwin Harbour, 160 m west of the site
Site aquifer formation	Unconsolidated soils
Groundwater flow direction	West
Groundwater TDS range (mg/L)	120 to 430 mg/L
Groundwater Segment	Segment A1
Are there multiple aquifers impacted by pollution at the site	n/a
Perched groundwater depth – upper (metres below ground level (mbgl))	n/a

Perched groundwater depth – lower (mbgl)	n/a

Regional groundwater depth – upper (mbgl)	6
Regional groundwater depth – lower (mbgl)	10
Number of bores within 2 km	46
Closest extractive use (distance in m)	Bore RN000130 (300 m from the site).
Zone of groundwater plume influence (m from site boundary)	Not applicable – non-source site
Year groundwater last monitored	2020
Have you attached electronic copies of Current Groundwater Analytical Results presented as a summary table?	Yes, refer to Appendix A

In notifying EPA of the completion of an environmental audit and issuing of a statement of environmental audit, I state that:

I am not aware of any conflict of interest that would preclude me from completing the environmental audit or issuing a certificate/statement (*select appropriate*) of environmental audit for the above site.

I have not had prior involvement in any assessment or cleanup works at the site, which would preclude me from completing the environmental audit or issuing a certificate/statement (*select appropriate*) of environmental audit for the above site.

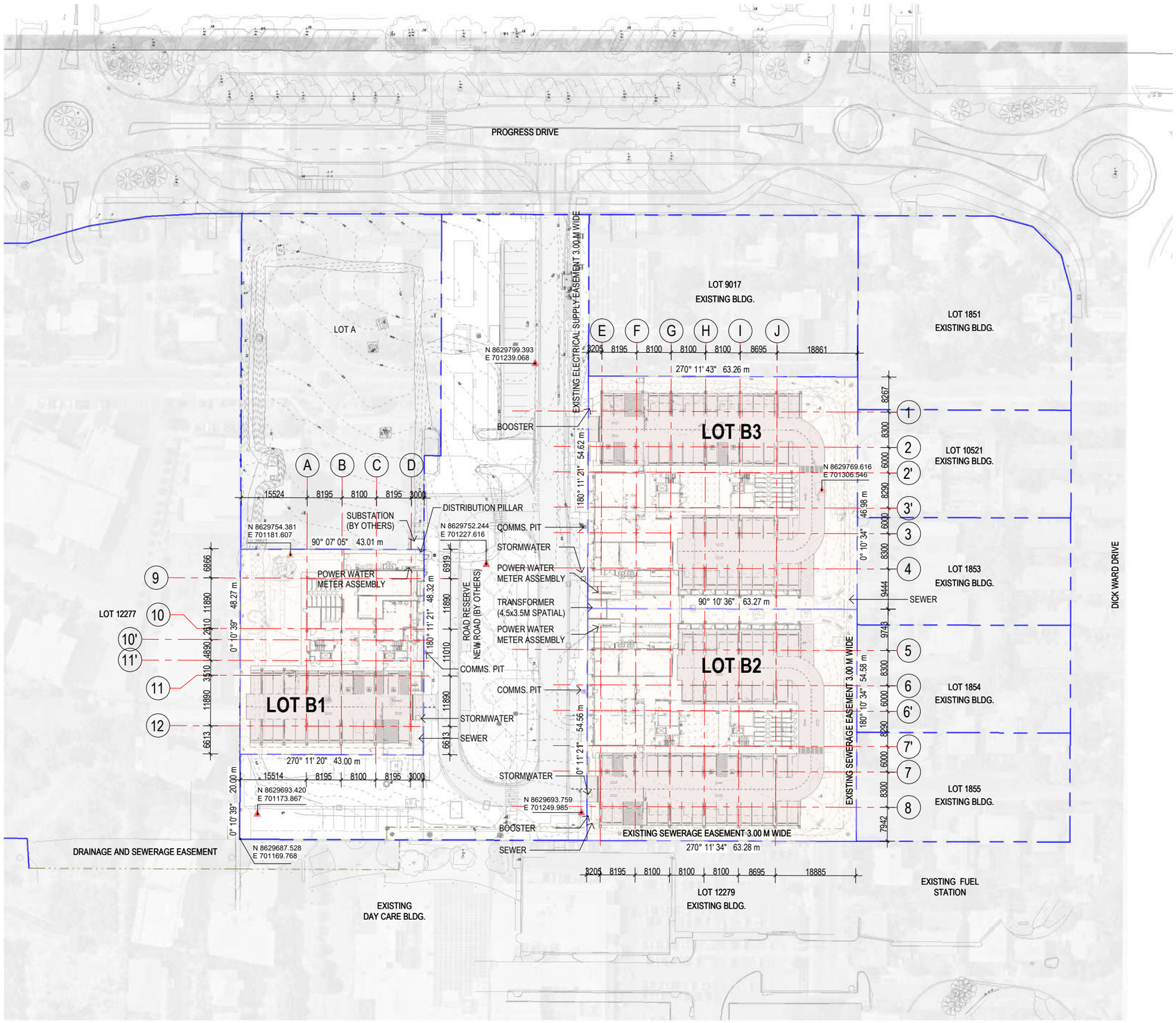
Yours sincerely,

Signed: _____

JEAN PAUL PEARCE

ENVIRONMENTAL AUDITOR

(APPOINTED PURSUANT TO *THE ENVIRONMENT PROTECTION ACT 1970*)



1 OVERALL SITE PLAN
1 : 500

0 2500 10000 20000 25000
1:500mm

GENERAL NOTES

BCA
CLASS: GROUND FLOOR - **5, 6 & 7a** LEVEL 1 to 3 - **2**
CLIMATE ZONE: 1
CLIMATE REGION: A
SECTION J: COMPLY WITH BCA 2009 SECTION J
FIRE RESISTING CONSTRUCTION: TYPE A
WIND REGION: C

78 APARTMENT UNITS

LOT B1 = TOTAL 18 1 BEDROOM UNITS
LOT B2 = TOTAL 30 UNITS (24 -1 BEDROOM UNITS, 6 -2 BEDROOM UNITS)
LOT B3 = TOTAL 30 UNITS (24 -1 BEDROOM UNITS, 6 -2 BEDROOM UNITS)

LOT B1 NGO OFFICE = approx. 70 sqm.
LOT B2 NGO OFFICE = approx.153 sqm.
LOT B3 NGO OFFICE = approx.153 sqm.

1. VERIFY ALL DIMENSIONS PRIOR TO ORDERING & FABRICATION OF MATERIALS. DO NOT SCALE THE DRAWINGS UNLESS OTHERWISE NOTED.

2. ALL NEW MATERIALS & CONSTRUCTION METHODS ARE TO BE IN ACCORDANCE WITH THE CURRENT N.T. DEEMED TO COMPLY, BUILDING CODE OF AUSTRALIA, SAA STANDARDS & THE MANUFACTURER'S DIRECTION/SPECIFICATIONS.

3. NEW FINISHES AND MATERIALS TO COMPLY WITH BCA FIRE HAZARD INDICES SPECIFICATION C 1.10

4. INSTALL FIRE EXTINGUISHERS TO THE REQUIREMENTS OF NT FIRE SERVICES & IN ACCORDANCE WITH BCA CLAUSE E1.8 & AS 2444.

6.SURVEY BACKGROUND DRAWINGS PREPARED BY **EJA SURVEY** ref.*11397-1 (2020-01-10)*

DEMOLITION NOTES

1. CONTRACTOR TO DEMOLISH ALL EXISTING ABOVE & BELOW GROUND STRUCTURES & SERVICES AND MAKE SITE READY FOR NEW WORKS

2. ALL DEMOLITION WORKS SHALL BE IN ACCORDANCE WITH RELEVANT CODES INCLUDING SAA, AS2601 AND ALL LOCAL AUTHORITY REQUIREMENTS

3. ANY OR ALL SERVICES AFFECTED BY DEMOLITION WORKS ARE TO BE MADE GOOD OR CAPPED OFF, AS REQUIRED, AND DETERMINED ON SITE.

4. REMOVE DEMOLISHED MATERIALS AND RUBBISH FROM SITE UNLESS NOTED OTHERWISE

5. WHERE EXISTING SURFACES ARE DAMAGED BY DEMOLITION WORKS, THEY SHALL BE MADE GOOD TO MATCH EXISTING ADJACENT SURFACES.

6. ENSURE STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE MODEL WORK HEALTH AND SAFETY REGULATIONS

LOT AREA SUMMARY TABLE	
LOT	Area
LOT B2	3452.59 m²
LOT B3	3454.74 m²
LOT B1	2077.13 m²
	8984.47 m²

CARPARK SUMMARY

BUILDING 1	23
BUILDING 2	47
BUILDING 3	47
TOTAL CARPARKING	117

CONTRACT DRAWING

No.	DESCRIPTION	DATE	NAME	DEPT/COMPANY
2	CONTRACT DRAWINGS - ISSUED FOR APPROVAL	24/08/2020	CD	CD
1	CONTRACT DRAWINGS (100% DOCUMENTATION)	01/05/2020	AW	CD
0	CONTRACT DRAWINGS (50% DOCUMENTATION)	06/03/2020	AW	CD

AMENDMENTS

DISCLAIMER
THIS IS NOT A CONTROLLED DOCUMENT, VERIFY IT IS CURRENT BEFORE USE.
THIS IS A REPRESENTATIONAL DRAWING. DO NOT ASSUME THAT THIS DRAWING IS COMPLETE, ACCURATE OR DRAWN EXACTLY TO SCALE.
THIS DRAWING IS CERTIFIED AS IS AND ONLY FOR THIS PROJECT (UNLESS NOTED OTHERWISE). ANY ALTERATION OF THIS DRAWING IN ANY WAY RENDERS THE CERTIFICATION INVALID. USE OF INFORMATION FROM THIS DRAWING FOR ANY OTHER PROJECT OR OTHER ELEMENT OF THIS PROJECT REQUIRES VERIFICATION OF ITS ADEQUACY AND NEW CERTIFICATION.

concept designs
Concept Designs JOB No: 20036JST

DRAWN	KA	CHECKED	GS
DATE	14/09/20	DATE	14/09/20
DESIGNED	DKJ Projects Architecture	CHECKED	GS
DATE	14/09/20	DATE	14/09/20
DESIGN PROJECT LEADER	GS	NTG PROJECT MANAGER	SR
DATE	14/09/20	DATE	14/09/20

Northern Territory Government

DARWIN REGION
LOT 9077, PROGRESS DRIVE, NIGHTCLIFF

REDEVELOPMENT OF JOHN STOKES SQUARE - RESIDENTIAL PRECINCT

OVERALL SITE PLAN

NTG PROJECT No.	NTG ASSET No.	SHEET No.	NTG DRAWING No.	AMENDMENT	SHEET SIZE
HOD34932 /HOD35051	86/22030	A050 OF 70	B20-4396	2	A1

Z:\Concept Designs\Concept Designs Projects\20\20036JST - Greenspace John Stokes\New Revit Central\194041_AR_DKJ_NTG-JSSR_DD_RVT20_LIVE Central_model.rvt

AGON ENVIRONMENTAL

Groundwater Analytical Results

	Unit	EQL	ADWG 2018 Health	ADWG 2018 Aesthetic	ANZECC 2000 FW 95%	ANZECC 2000 FW 99%	ANZECC 2000 MW 90%	ANZECC 2000 MW 95%	ANZECC 2000 Recreational water quality and aesthetics	ANZECC 2000 Irrigation Long-term trigger value (LTV)	ANZECC 2000 Irrigation Short-term trigger value (STV)	NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Clay 2-4m	NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Clay 4-8m	NEPM 2013 Table 1A(4) Res HSL A & B GW for Vapour Intrusion, Clay 2-4m	NEPM 2013 Table 1A(4) Res HSL A & B GW for Vapour Intrusion, Clay 4-8m	WHO DWQG 4th Ed	JF1066_MW01_201021	JF1066_MW02_201022	JF1066_MW03_201022	JF1066_MW04_201022
Field ID																	JF1066_MW01_201021	JF1066_MW02_201022	JF1066_MW03_201022	JF1066_MW04_201022
Date																	21/01/2020	22/01/2020	22/01/2020	22/01/2020
Lab Report Number																	698341	698341	698341	698341
Sample Comments																				
Metals																				
Arsenic (filtered)	mg/L	0.001	0.01						0.05	0.1	2					0.01	0.002	<0.001	<0.001	<0.001
Beryllium (filtered)	mg/L	0.001	0.06							0.1	0.5						<0.001	<0.001	<0.001	<0.001
Boron (filtered)	mg/L	0.05	4		0.37	0.09			1	0.5						2.4	<0.05	<0.05	<0.05	<0.05
Cadmium (filtered)	mg/L	0.0002	0.002		0.0002	0.00006	0.014	0.0055	0.005	0.01	0.05					0.003	<0.0002	<0.0002	<0.0002	<0.0002
Calcium	mg/L	0.5															11	7.7	5.3	5.7
Chromium (III+VI) (filtered)	mg/L	0.001							0.05	0.1	1					0.05	0.014	<0.001	<0.001	<0.001
Cobalt (filtered)	mg/L	0.001					0.014	0.001		0.05	0.1						0.006	0.002	0.005	0.002
Potassium	mg/L	0.5															1.9	1.0	0.6	<0.5
Copper (filtered)	mg/L	0.001	2	1	0.0014	0.001	0.003	0.0013	1	0.2	5					2	0.017	0.001	0.006	0.004
Magnesium	mg/L	0.5															10	3.5	2.7	4.6
Lead (filtered)	mg/L	0.001	0.01		0.0034	0.001	0.0066	0.0044	0.05	2	5					0.01	0.035	0.009	0.005	0.002
Manganese (filtered)	mg/L	0.005	0.5	0.1	1.9	1.2			0.1	0.2	10						0.21	0.19	0.14	0.032
Mercury (filtered)	mg/L	0.0001	0.001		0.0006	0.00006	0.0007	0.0004	0.001	0.002	0.002					0.006	<0.0001	<0.0001	<0.0001	<0.0001
Nickel (filtered)	mg/L	0.001	0.02		0.011	0.008	0.2	0.07	0.1	0.2	2					0.07	0.12	0.009	0.025	0.016
Selenium (filtered)	mg/L	0.001	0.01		0.011	0.005			0.01	0.02	0.05					0.04	<0.001	<0.001	<0.001	<0.001
Zinc (filtered)	mg/L	0.005		3	0.008	0.0024	0.023	0.015	5	2	5						0.26	0.044	0.093	0.034
PAH																				
Benzo(b+j)fluoranthene	µg/L	1															<1	<1	<1	<1
Benzo(k)fluoranthene	µg/L	1															<1	<1	<1	<1
Acenaphthylene	µg/L	1															<1	<1	<1	<1
Anthracene	µg/L	1															<1	<1	<1	<1
Benz(a)anthracene	µg/L	1															<1	<1	<1	<1
Acenaphthene	µg/L	1															<1	<1	<1	<1
Naphthalene	µg/L	1			16	2.5	90	70									<1	<1	<1	<1
Benzo(a) pyrene	µg/L	1	0.01						0.01							0.7	<1	<1	<1	<1
Benzo(g,h,i)perylene	µg/L	1															<1	<1	<1	<1
Chrysene	µg/L	1															<1	<1	<1	<1
Dibenz(a,h)anthracene	µg/L	1															<1	<1	<1	<1
Fluoranthene	µg/L	1															<1	<1	<1	<1
Fluorene	µg/L	1															<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	1															<1	<1	<1	<1
Phenanthrene	µg/L	1															<1	<1	<1	<1
PAHs (Sum of total)	µg/L	1															<1	<1	<1	<1
Pyrene	µg/L	1															<1	<1	<1	<1
BTEX																				
Toluene	µg/L	1	800	25												700	<1	<1	<1	<1
Xylene Total	µg/L	3	600	20												500	<3	<3	<3	<3
Benzene	µg/L	1	1		950	600	900	700	10			30,000	30,000	5,000	5,000	10	<1	<1	<1	<1
Ethylbenzene	µg/L	1	300	3												300	<1	<1	<1	<1
Xylene (m & p)	µg/L	2															<2	<2	<2	<2
Xylene (o)	µg/L	1			350	200											<1	<1	<1	<1
TRH																				
C6-C10	µg/L	20															<20	<20	<20	<20
C6-C10 (F1 minus BTEX)	µg/L	20															<20	<20	<20	<20
C10-C16	µg/L	50															80	<50	<50	<50
C16-C34	µg/L	100															200	200	<100	<100
C34-C40	µg/L	100															<100	<100	<100	<100
C10-C40 (Sum of total)	µg/L	100															280	200	<100	<100
C10-C16 (F2 minus Naphthalene)	µg/L	50															80	<50	<50	<50
TRH - 2013 NEPM Fractions (after silica gel clean-up)																				
TRH >C10-C16 (after silica gel clean-up)	µg/L	50															<50	-	-	-
TRH >C16-C34 (after silica gel clean-up)	µg/L	100															<100	-	-	-
TRH >C34-C40 (after silica gel clean-up)	µg/L	100															<100	-	-	-
TPH																				
C6-C9	µg/L	20															<20	<20	<20	<20
C10-C14	µg/L	50															80	<50	<50	<50
C15-C28	µg/L	100															300	200	<100	<100
C29-C36	µg/L	100															<100	<100	<100	<100
+C10-C36 (Sum of total)	µg/L	100															380	200	<100	<100
TRH - 1999 NEPM Fractions (after silica gel clean-up)																				
TRH C10-C14 (after silica gel clean-up)	µg/L	50															<50	-	-	-
TRH C10-C36 (Total) (after silica gel clean-up)	µg/L	100															<100	-	-	-
TRH C15-C28 (after silica gel clean-up)	µg/L	100															<100	-	-	-
TRH C29-C36 (after silica gel clean-up)	µg/L	100															<100	-	-	-
Organochlorine Pesticides																				
Aldrin + Dieldrin	µg/L	0.1	0.3													0.03	<0.1	<0.1	<0.1	<0.1
chlordane	µg/L	1	2		0.08	0.03			6							0.2	<1	<1	<1	<1
Endrin ketone	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
Organochlorine pesticides EPAVic	µg/L	1															<1	<1	<1	<1
Toxaphene	mg/L	0.01			0.0002	0.0001											<0.01	<0.01	<0.01	<0.01
Other organochlorine pesticides EPAVic	µg/L	1															<1	<1	<1	<1
Hexachlorobenzene	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1			0.02	0.01	0.01	0.008	1							0.6	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	µg/L	0.1															<0.1	<0.1	<0.1	<0.1

AGON ENVIRONMENTAL

Groundwater Analytical Results

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Field ID																	JF1066_MW01_201021	JF1066_MW02_201022	JF1066_MW03_201022	JF1066_MW04_201022
Date																	21/01/2020	22/01/2020	22/01/2020	22/01/2020
Lab Report Number																	698341	698341	698341	698341
Sample Comments																				
Aldrin	µg/L	0.1							1								<0.1	<0.1	<0.1	<0.1
g-BHC (Lindane)	µg/L	0.1	10		0.2	0.07			10							2	<0.1	<0.1	<0.1	<0.1
DDT+DDE+DDD	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	0.3		0.09	0.01			3								<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
a-BHC	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
b-BHC	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
d-BHC	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
DDD	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
DDT	µg/L	0.1	9		0.01	0.006			3								<0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1							1								<0.1	<0.1	<0.1	<0.1
Endosulfan I	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
Endosulfan II	µg/L	0.1															<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1														20	<0.1	<0.1	<0.1	<0.1
Organophosphorous Pesticides																				
Azinophos methyl	µg/L	2	30		0.02	0.01			10								<2	<2	<2	<2
Bolstar (Sulprofos)	µg/L	2	10						20								<2	<2	<2	<2
Chlorfenvinphos	µg/L	2	2						10								<2	<2	<2	<2
Chlorpyrifos-methyl	mg/L	0.002															<0.002	<0.002	<0.002	<0.002
Coumaphos	µg/L	20															<20	<20	<20	<20
Demeton-O	µg/L	2															<2	<2	<2	<2
Demeton-S	µg/L	20															<20	<20	<20	<20
Diazinon	µg/L	2	4		0.01	0.00003			10								<2	<2	<2	<2
Dichlorvos	µg/L	2	5						20								<2	<2	<2	<2
Dimethoate	µg/L	2	7		0.15	0.1			100							6	<2	<2	<2	<2
Disulfoton	µg/L	2	4						6								<2	<2	<2	<2
Merphos	mg/L	0.002															<0.002	<0.002	<0.002	<0.002
EPN	µg/L	2															<2	<2	<2	<2
Methyl parathion	µg/L	2	0.7						6								<2	<2	<2	<2
Ethion	µg/L	2	4						6								<2	<2	<2	<2
Ethoprop	µg/L	2	1						1								<2	<2	<2	<2
Mevinphos (Phosdrin)	µg/L	2	5						6								<2	<2	<2	<2
Fenitrothion	µg/L	2	7		0.2	0.1			20								<2	<2	<2	<2
Fensulfothion	µg/L	2	10						20								<2	<2	<2	<2
Monocrotophos	µg/L	2	2						2								<2	<2	<2	<2
Fenthion	µg/L	2	7														<2	<2	<2	<2
Malathion	µg/L	2	70		0.05	0.002			100								<2	<2	<2	<2
Naled (Dibrom)	µg/L	2															<2	<2	<2	<2
Omethoate	µg/L	2	1						0.4								<2	<2	<2	<2
Phorate	µg/L	2															<2	<2	<2	<2
Pyrazophos	µg/L	2	20						1,000								<2	<2	<2	<2
Ronnel	µg/L	2							60								<2	<2	<2	<2
Terbufos	µg/L	2	0.9														<2	<2	<2	<2
Tetrachlorvinphos	mg/L	0.002	0.1														<0.002	<0.002	<0.002	<0.002
Tokuthion	mg/L	0.002															<0.002	<0.002	<0.002	<0.002
Trichloronate	µg/L	2															<2	<2	<2	<2
Chlorpyrifos	µg/L	20	10		0.01	0.00004	0.04	0.009	2							30	<20	<20	<20	<20
Phenols																				
2,4,5-Trichlorophenol	µg/L	10							1								<10	<10	<10	<10
3&4-Methylphenol (m&p-cresol)	µg/L	6															<6	<6	<6	<6
2,4-Dimethylphenol	µg/L	3															<3	<3	<3	<3
2,6-Dichlorophenol	µg/L	3															<3	<3	<3	<3
Phenols (Total Halogenated)	mg/L	0.01															<0.01	<0.01	<0.01	<0.01
2-Chlorophenol	µg/L	3	300	0.1	490	340											<3	<3	<3	<3
Tetrachlorophenols	µg/L	30															<30	<30	<30	<30
2-Methylphenol	µg/L	3															<3	<3	<3	<3
2,4-Dinitrophenol	mg/L	0.03			0.045	0.013											<0.03	<0.03	<0.03	<0.03
4,6-Dinitro-2-methylphenol	µg/L	30															<30	<30	<30	<30
4,6-Dinitro-o-cyclohexyl phenol	µg/L	100															<100	<100	<100	<100
4-chloro-3-methylphenol	µg/L	10															<10	<10	<10	<10
2,4-Dichlorophenol	µg/L	3	200	0.3	160	120											<3	<3	<3	<3
4-Nitrophenol	µg/L	30															<30	<30	<30	<30
Phenol	µg/L	3			320	85	520	400									<3	<3	<3	<3
2,4,6-Trichlorophenol	µg/L	10	20	2	20	3			10							200	<10	<10	<10	<10
2-Nitrophenol	µg/L	10															<10	<10	<10	<10
Pentachlorophenol	µg/L	10	10		10	3.6	33	22	10							9	<10	<10	<10	<10
Phenols (Total Non Halogenated)	mg/L	0.1															<0.1	<0.1	<0.1	<0.1
Chlorinated Hydrocarbons																				
1,1-dichloroethane	µg/L	1															<1	<1	<1	<1
1,2,3-trichloropropane	µg/L	1															<1	<1	<1	<1
1,1-dichloroethene	µg/L	1	30						0.3								<1	<1	<1	<1
1,2-dichloropropane	µg/L	1														40	<1	<1	<1	<1
1,2-dichloroethane	µg/L	1	3						10							30	<1	<1	<1	<1
1,3-dichloropropane	µg/L	1															<1	<1	<1	<1
1,1,1,2-tetrachloroethane	µg/L	1															<1	<1	<1	<1
1,1,1-trichloroethane	µg/L	1															<1	<1	<1	<1
Chloroform	µg/L	5														300	6	10	<5	<5

AGON ENVIRONMENTAL

Groundwater Analytical Results

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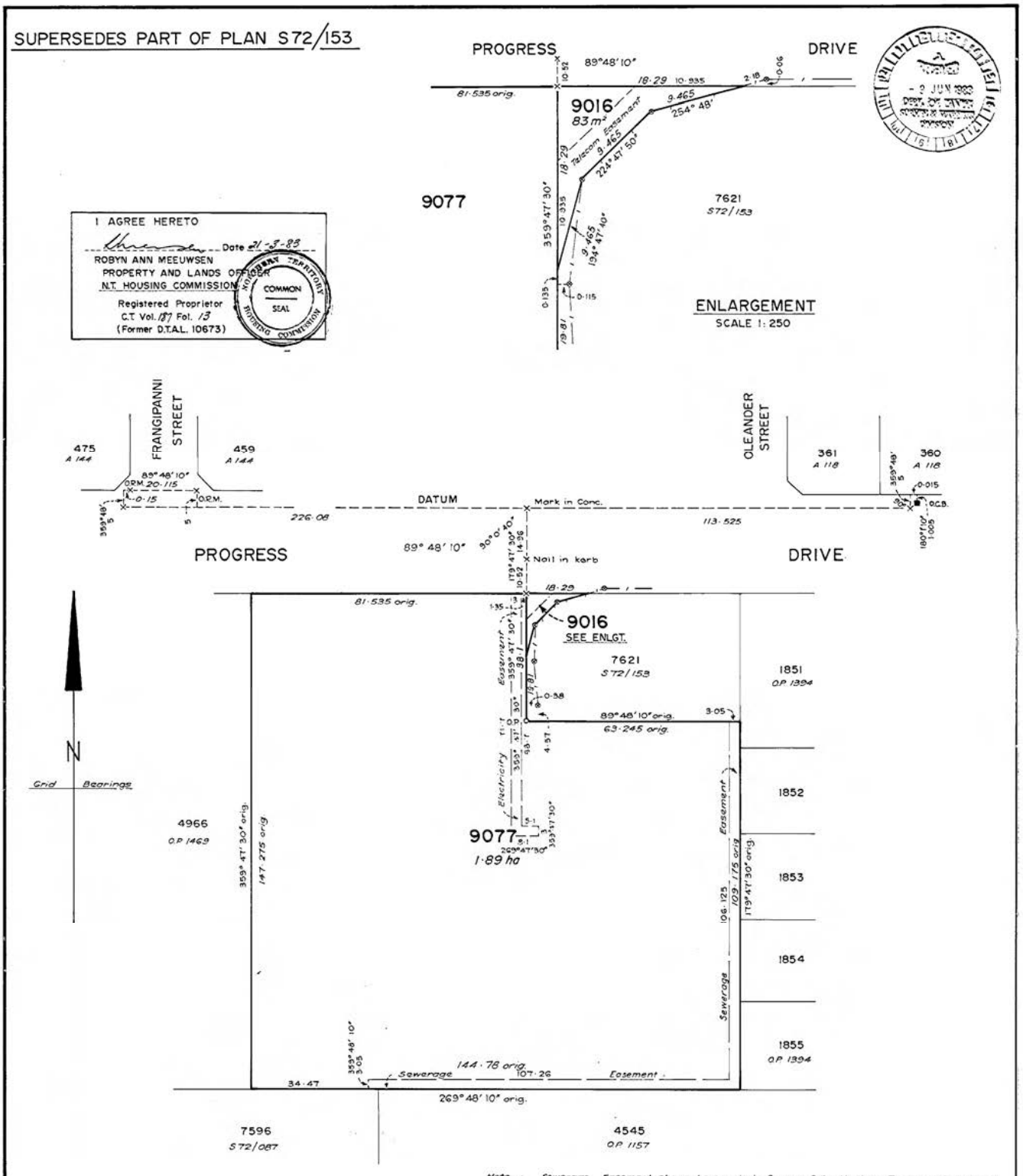
Field ID																	JF1066_MW01_201021	JF1066_MW02_201022	JF1066_MW03_201022	JF1066_MW04_201022
Date																	21/01/2020	22/01/2020	22/01/2020	22/01/2020
Lab Report Number																	698341	698341	698341	698341
Sample Comments																				
1,1,2,2-tetrachloroethane	µg/L	1															<1	<1	<1	<1
Chloromethane	µg/L	1															<1	<1	<1	<1
Dibromomethane	µg/L	1															<1	<1	<1	<1
cis-1,3-dichloropropene	µg/L	1															<1	<1	<1	<1
Tetrachloroethene	µg/L	1	50						10							40	<1	<1	<1	<1
Other chlorinated hydrocarbons EPAVic	µg/L	5															6	10	<5	<5
Trichloroethene	µg/L	1							30							20	<1	<1	<1	<1
Bromodichloromethane	µg/L	1														60	<1	<1	<1	<1
Dichloromethane	µg/L	1	4													20	<1	<1	<1	<1
Chlorinated hydrocarbons EPAVic	µg/L	5															6	10	<5	<5
cis-1,2-dichloroethene	µg/L	1															<1	<1	<1	<1
1,1,2-trichloroethane	µg/L	1			6,500	5,400	5,800	1,900									<1	<1	<1	<1
trans-1,3-dichloropropene	µg/L	1															<1	<1	<1	<1
Vinyl chloride	µg/L	1	0.3													0.3	<1	<1	<1	<1
Bromoform	µg/L	1														100	<1	<1	<1	<1
Carbon tetrachloride	µg/L	1	3						3							4	<1	<1	<1	<1
Chlorodibromomethane	µg/L	1														100	<1	<1	<1	<1
trans-1,2-dichloroethene	µg/L	1															<1	<1	<1	<1
Ethyl tert-Butyl Ether (ETBE)	µg/L	1															<1	<1	<1	<1
tert-Amyl Methyl Ether (TAME)	µg/L	1															<1	<1	<1	<1
tert-Butyl alcohol	µg/L	25															<25	<25	<25	<25
Halogenated Benzenes																				
1,2-dichlorobenzene	µg/L	1	1,500	1	160	120										1,000	<1	<1	<1	<1
1,3-dichlorobenzene	µg/L	1		20	260	160											<1	<1	<1	<1
1,4-dichlorobenzene	µg/L	1	40	0.3	60	40										300	<1	<1	<1	<1
Chlorobenzene	µg/L	1	300	10													<1	<1	<1	<1
Halogenated Hydrocarbons																				
Iodomethane	µg/L	1															<1	<1	<1	<1
Bromomethane	µg/L	1	1														<1	<1	<1	<1
1,2-dibromoethane	µg/L	1	1													0.4	<1	<1	<1	<1
Trichlorofluoromethane	µg/L	1															<1	<1	<1	<1
Herbicides																				
Dinoseb	µg/L	100															<100	<100	<100	<100
Pesticides																				
Parathion	µg/L	2	20		0.004	0.0007			30								<2	<2	<2	<2
Pirimiphos-methyl	mg/L	0.02	0.09						0.06								<0.02	<0.02	<0.02	<0.02
Inorganics																				
Alkalinity (Bicarbonate as CaCO3)	mg/L	20															<20	<20	<20	<20
Alkalinity (Hydroxide) as CaCO3	mg/L	20															<20	<20	<20	<20
Alkalinity (total) as CaCO3	mg/L	20															<20	<20	<20	<20
Chloride	mg/L	1		250					400								190	38	17	16
Sodium	mg/L	0.5		180					300								100	17	15	16
Alkalinity (Carbonate as CaCO3)	mg/L	10															<10	<10	<10	<10
Sulphate	mg/L	5		250					400								56	17	26	32
TDS	mg/L	10		600					1,000								430	120	120	150
pH (Lab)	-	0.1		6.5-8.5					6.5-8.5	6-8.5							6.1	6.2	4.5	4.9
Solvents																				
MTBE	mg/L	0.001															<0.001	<0.001	<0.001	<0.001
VOCs																				
Diisopropyl ether	mg/L	0.001															<0.001	<0.001	<0.001	<0.001

Appendix B
Certificate of Title



Note : Sewerage Easement shown hereon is in favour of the Northern Territory of Australia.
Electricity Easement shown hereon is in favour of the Northern Territory Electricity Commission.
Telecom Easement shown hereon is in favour of the Australian Telecommunications Commission.

METRES 20 0 20 40 60 80

No	REFERENCE	DETAILS	APPROVED	DATE
2	File LTO 83/10 folio 27	Telecom Easement added to Lot 9016		23/9/83
1	File LTO 83/10 folio 27	Electricity Easement added to Lot 9077		23/9/83

AMENDMENTS

SURVEYOR'S CERTIFICATE

I, COLIN JOHN JONES
hereby certify that the survey represented on this plan was carried out by me or under my immediate supervision and was completed on 2 February 1983 and that this survey has been executed in accordance with the Licensed Surveyors Act and the Regulations thereunder.

Licensed Surveyor 28/2/83 Date

File No L.T.O. 83/10
Field Book No L.T.O. 83/10
Drawn by S.M. Willshire 9-2-83
Charted on I.P. DARWIN 2500 SHEET 30-27
Examined by W Schneider 14-7-83
Charted on P.P. DARWIN 2500 SHEET 30-27

SURVEY MAPPING

SURVEY APPROVED

Surveyor-General 11·8·1983 Date

PASSED

CHIEF DRAFTSMAN (T) 11·8·83 Date

LOTS 9016 AND 9077
SUBDIVISION OF LOT 7622
TOWN OF NIGHTCLIFF

HUNDRED OF BAGOT COUNTY OF PALMERSTON

LEGEND
Concrete Block
Concrete Post
Wooden Post, Peg or Stake O
Reference Mark X
Lockspit
Fence Post

AZIMUTH
A Assumed from S72/153
B Observed at
Latitude Datum

SCALE
1 : 750

L.T.O. 83/10

COPY TO L.T.O. 12-8-83 AMENDED COPY TO LTO 30·9·83 N/N 2254

Appendix C
Consultants' Reports

VALIDATION REPORT

John Stokes Square Redevelopment
Proposed Residential Lots B1, B2 and B3

Prepared for:

HK Solutions on behalf of Department of Infrastructure, Planning and Logistics
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

(Report to be in conjunction with addendum titled: "Sewer Easement Remediation and Validation Report, John Stokes Square Redevelopment, Proposed Residential Lots B1, B2 and B3", SLR Consulting (Australia) Pty Ltd, December 2021 (reference: 680.10679.00200_R13))

SLR Ref: 680.10679.00100-R05
Version No: -v4.0
January 2022

PREPARED BY

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with HK Solutions on behalf of Department of Infrastructure, Planning and Logistics (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
680.10679.00100-R05-v4.0	19 January 2022	Robin Birua	Paul Turyn	Paul Turyn
680.10679.00100-R05-v3.0	24 February 2021	Robin Birua	Julie McDowell	Julie McDowell
680.10679.00100-R05-v2.0	15 February 2021	Robin Birua	Julie McDowell	Julie McDowell
680.10679.00100-R05-v1.0	2 February 2021	Robin Birua	Julie McDowell	Julie McDowell

Executive Summary

The Department of Infrastructure, Planning and Logistics (DIPL), through Project Management Consultants HK Solutions Pty Ltd, have engaged SLR Consulting Australia Pty Ltd (SLR) to provide environmental consultancy services relating to the redevelopment of John Stokes Square, located at 47 Progress Drive, Nightcliff, Darwin, Northern Territory (herein referred to as the "Project Area").

The Project Area is planned to be subdivided as part of the redevelopment project, with varying land use classifications including high density residential, public open space, community and commercial. Works were undertaken across the Project Area to characterise, remediate and validate the newly defined land parcels to ensure suitability for the proposed land uses.

This report outlines the remediation and validation works that were undertaken for proposed allotments Lot B1, Lot B2 and Lot B3 (herein referred to as the "Site"). Results of the remediation and validation works undertaken within other areas of the Project Area are included under separate cover in the reports titled *"Validation Assessment, John Stokes Square Redevelopment, Lot A"* (SLR ref: 680.10679.00100-R02), and *"Validation Report, John Stokes Square Redevelopment, Road Reserve and Lot C"* (SLR ref: 680.10679.00100-R06).

This report has been prepared for endorsement by the appointed Auditor (*as defined in Part 9 of the Waste Management Pollution Control Act, 1998*) (WMPC Act) for the Site, Jean-Paul Pearce (Australian Environmental Auditor, "the Auditor") and in accordance with the *Northern Territory Contaminated Land Guidelines NT EPA, June 2017, Version 1.0*. The main role of the Auditor is to evaluate the environmental conditions of the Site at the date of signing of the certificate of statement and to form an opinion, on which others can rely, regarding the suitability of the Site for future land uses. In doing so, the Auditor is required to review the environmental site assessment undertaken by environmental consultants in relation to site contamination to confirm the remediation objectives have been met prior to redevelopment of the Site.

All remediation and validation work undertaken at the Site have been completed in accordance with the Auditor's endorsed memorandum: *Remediation Strategy - John Stokes Square - Residential Lots (Lots B1, B2 and B3), ref:680.10679.00000-M04-v2.0* prepared for the Site. Remediation works conducted at the Site involved the following key activities undertaken by SLR -

- Oversaw the stripping and excavation of uncontrolled fill materials to apparent natural soil conditions (either weathered rock or rock) across the Site. Inspected the spoil material and resultant excavation for evidence of any asbestos containing material (ACM) or other contaminants of potential concern (COPC). Based on visual observations, potentially impacted spoil was progressively segregated and stockpiled separately from non-impacted spoil.
- Oversaw the removal of abandoned underground services including stormwater pipes, sewer pipes, electrical cables and pipes, communication cables, water supply network including irrigation and fire hydrant pipes, and visually inspected the services, spoil, and resultant excavations for evidence of ACM or other COPC. Based on visual observations, potentially impacted spoil and services constructed out of ACM were progressively segregated and stockpiled separately from non-impacted spoil.
- Visually inspected and collected validation samples of the remediated areas of the Site (i.e. resultant excavations/trenches). Collated details of the areas remediated including the extent and depth of excavation, validation sample locations, sample identification numbers, date sampled and photographic logs.

- Inspected excavated spoil throughout the screening process for visual evidence of ACM contamination. The earthworks contractor screened geotechnically unsuitable anthropogenic waste materials such as construction and demolition rubble from the stockpiled spoil. The screened spoil was then placed into smaller stockpiles and sampled by SLR's environmental consultant for characterisation purposes to inform either beneficial reuse onsite or offsite disposal.
- Oversaw the removal of asbestos impacted stockpiles from the Site by a licenced asbestos removal company for appropriate offsite disposal. SLR's environmental consultant visually inspected and collected validation samples of the surface areas where asbestos material was stored for the purpose of confirming that all ACM had been adequately removed.
- Oversaw the reinstatement of excavated areas on Lots B1, B2 and B3 with spoil characterised as being suitable for reuse onsite. Spoil was reinstated in approximately 200 mm thick lifts. SLR's environmental consultant visually inspected each lift for the purpose of providing ACM clearance certificates.

Even though all known asbestos impact has been removed from the Site, remediation works detailed in this report did not extend into the deeper fill material surrounding the "live" sewer mains that were present at the time of these works. Contractors conducting works associated with the removal/upgrade of these "live" services were advised to employ precautionary measures such as having safe work method statements and/or work-specific management plans addressing exposure to potentially asbestos impacted soils, unexpected finds protocol and associated training, to ensure workers understood the controls required to be implemented in the unlikely event unexpected asbestos was encountered.

Results of the remediation and validation works associated with the removal/upgrade of the sewer main along the eastern and southern boundaries of the Site, that were overseen by SLR, are presented in the addendum report titled *"Sewer Easement Remediation and Validation Report, John Stokes Square Redevelopment, Proposed Residential Lots B1, B2 and B3"*, December 2021 (ref: 680.10679.00200_R13) and should be read in conjunction with this report.

Based on the field observations and analytical results obtained for the remediation and validation works conducted at the Site, SLR considers that Lots B1, B2 and B3 are suitably remediated and validated for the proposed high density residential land use, subject to the considerations outlined in this report.

CONTENTS

1 INTRODUCTION 8
1.1 Purpose and Objectives 8
1.2 Scope of Work 9
1.3 Legislative Framework 10
2 BACKGROUND INFORMATION 10
2.1 Site Identification 10
2.2 Surrounding environment 11
2.2.1 Surrounding Land Uses and Activities 11
2.2.2 Regional Geology 12
2.2.3 Regional Topography 12
2.2.4 Registered Groundwater Bore Information 12
2.2.5 Acid Sulphate Soils 13
2.3 Previous Environmental Investigations 13
2.3.1 Limited Soil Investigation (July 2019, Greencap) 14
2.3.2 Detailed Soil Investigation (September 2019, Greencap) 14
2.3.3 Additional Soil Investigation (October 2019; Greencap) 15
2.3.4 Detailed Site Investigation (February 2020; Agon) 16
2.3.5 Detailed Site Investigation (August 2020, SLR) 18
2.4 Source of Asbestos Impact – Site 18
3 REMEDIATION AND VALIDATION METHODOLOGY 19
3.1 Remediation Strategy and Deviations 19
3.2 Soil Sampling Methodology 20
3.3 Decontamination of Equipment 22
3.4 Analytical Assessment 22
3.5 Screening Criteria 22
3.6 Air monitoring 23
4 RESULTS 24
4.1 Remediation and Validation of Lot B1 24
4.1.1 Field observations 25
4.1.2 Summary of Analytical Results 25
4.1.3 Clearance Inspections 27
4.2 Remediation and Validation of Lot B2 27
4.2.1 Field observations 27
4.2.2 Summary of Analytical Results 28

4.2.3 Clearance Inspections 31
4.3 Remediation and Validation of Lot B3 31
4.3.1 Field observations 31
4.3.2 Summary of Analytical Results 32
4.3.3 Clearance Inspections 35
4.4 Spoil Management 35
4.4.1 Cross contamination potential 49
4.5 Air Monitoring 50
4.6 Data Quality Review 50
4.6.1 Field Duplicate Samples 50
4.6.2 Equipment Rinsates 51
5 CONCEPTUAL SITE MODEL 52
6 FUTURE SITE MANAGEMENT CONSIDERATIONS 56
7 CONCLUSION 56
8 LIMITATIONS 56
9 REFERENCES 57

DOCUMENT REFERENCES

TABLES

Table 1 Site Information Details 11
Table 2 Summary of Surrounding Land Uses 11
Table 3 Summary of registered bore search 12
Table 4 Soil sampling methodology 21
Table 5 Air Monitoring Action Levels 24
Table 6 Validation and Characterisation Samples in Lot B1 26
Table 7 Validation and Characterisation Samples in Lot B2 30
Table 8 Validation and characterisation Samples in Lot B3 33
Table 9 Stockpile Summary 36
Table 10 Surface samples collected beneath former asbestos waste stockpiles 49
Table 11 Summary of QC Combinations 50
Table 12 Summary of RPDs exceeding the acceptable limit 51
Table 13 List of equipment rinsate blanks 52
Table 14 Conceptual Site Model 54

APPENDICES

Appendix A Figures
Appendix B Remediation Strategy
Appendix C Clearance Certificate
Appendix D Photographic Logs for Lot B1
Appendix E Photographic Logs for Lot B2
Appendix F Photographic Logs for Lot B3
Appendix G Analytical Tables
Appendix H Certified Laboratory Documentation
Appendix I Air Quality Monitoring Reports
Appendix J Shoal Bay Waste Management Facility Receipts

1 Introduction

The Department of Infrastructure, Planning and Logistics (DIPL), through Project Management Consultants HK Solutions Pty Ltd, have engaged SLR Consulting Australia Pty Ltd (SLR) to provide environmental consultancy services relating to the redevelopment of John Stokes Square, located at 47 Progress Drive, Nightcliff, Darwin, Northern Territory (herein referred to as the "Project Area"). The location of the Project Area is shown in **Figure 1 (Appendix A)**.

The Project Area is planned to be subdivided as part of the redevelopment project, with varying land use classifications, as shown in **Figure 2 (Appendix A)**. Works were undertaken to characterise, remediate and validate the newly defined land parcels to ensure suitability for the proposed future land use.

This report outlines the remediation and validation works that were undertaken for proposed allotments Lot B1, Lot B2 and Lot B3 (herein referred to as the "Site"). Results of the remediation and validation works undertaken within other areas of the Project Area are included under separate cover in the reports titled *"Validation Assessment, John Stokes Square Redevelopment, Lot A"* (SLR ref: 680.10679.00100-R02), and *"Validation Report, John Stokes Square Redevelopment, Road Reserve and Lot C"* (SLR ref: 680.10679.00100-R06).

This report has been prepared for endorsement by the appointed Auditor (*as defined in Part 9 of the Waste Management Pollution Control Act, 1998*) (WMPC Act) for the Site, Jean-Paul Pearce (Australian Environmental Auditor, "the Auditor") and in accordance with the *Northern Territory Contaminated Land Guidelines NT EPA, June 2017, Version 1.0*. The main role of the Auditor is to evaluate the environmental conditions of the Site at the date of signing of the certificate of statement and to form an opinion, on which others can rely, regarding the suitability of the Site for future land uses. In doing so, the Auditor is required to review the environmental site assessment undertaken by environmental consultants in relation to site contamination to confirm the remediation objectives have been met prior to redevelopment of the Site.

All remediation and validation work undertaken at the Site have been completed in accordance with the Auditor's endorsed memorandum: *Remediation Strategy - John Stokes Square - Residential Lots (Lots B1, B2 and B3), ref:680.10679.00000-M04-v2.0* prepared for the Site. The details of the Auditor's advice on previous investigations and a copy of the remediation strategy are included in **Appendix B.**

1.1 Purpose and Objectives

The purpose of this report is to document the remediation and validation works undertaken at the Site to confirm the Site's suitability for high density residential land use with minimal access to soil. Furthermore, it is to ensure that remediation works have been accomplished in accordance with the Remediation Strategy and if so, whether the strategy's objectives have been met.

The objectives of the remediation strategy were as follows:

- Ensure all remedial and development works were undertaken in a manner that does not present an unacceptable risk to human health or the environment.
- Ensure the remedial and development works adhere to all applicable legislative requirements, guidelines, and standards.
- Effectively remediate and manage all identified soil impacts within Lots B1, B2 and B3, enabling the Site to be utilised for its proposed future land use (high density residential).

1.2 Scope of Work

The following scope of works was undertaken by suitably qualified and experienced SLR environmental consultants to meet the objectives of the remediation strategy for Lots B1, B2 and B3.

- Oversaw the stripping and excavation of uncontrolled fill materials to apparent natural soil conditions (either weathered rock or rock) across the Site. Inspected the spoil material and resultant excavation for evidence of any asbestos containing material (ACM) or other contaminants of potential concern (COPC). Based on visual observations, potentially impacted spoil was progressively segregated and stockpiled separately from non-impacted spoil.
- Oversaw the removal of abandoned underground services including stormwater pipes, sewer pipes, electrical cables and pipes, communication cables, water supply network including irrigation and fire hydrant pipes, and visually inspected the services, spoil, and resultant excavations for evidence of ACM or other COPC. Based on visual observations, potentially impacted spoil and services constructed out of ACM were progressively segregated and stockpiled separately from non-impacted spoil.
- Visually inspected and collected validation samples of the remediated areas of the Site (i.e. resultant excavations/trenches). Collated details of the areas remediated including the extent and depth of excavation, validation sample locations, sample identification numbers, date sampled and photographic logs.
- Inspected excavated spoil throughout the screening process for visual evidence of ACM contamination. The earthworks contractor screened geotechnically unsuitable anthropogenic waste materials such as construction and demolition rubble from the stockpiled spoil. The screened spoil was then placed into smaller stockpiles and sampled by SLR's environmental consultant for characterisation purposes to inform either beneficial reuse onsite or offsite disposal. In the majority of cases stockpile material was not mixed with other stockpiled material until laboratory result were received, the material classified, and advice provided on appropriate reuse or disposal options.
- Maintained a log of stockpiles generated during the remediation works in a soil tracking spreadsheet. Information collected included stockpile identification number, the origin of the material, stockpile locations, locations of all characterisation samples, stockpile volume, dates of sampling, further segregation (if required based on analytical results) and final destination being either offsite disposal or onsite reuse.
- Oversaw the removal of asbestos impacted stockpiles from the Site by a licenced asbestos waste removal company for appropriate offsite disposal. SLR's environmental consultant visually inspected and collected validation samples of the surface areas where asbestos material was stored for the purpose of confirming that all ACM had been adequately removed.
- Samples were collected and analysed for one or more of the following COPC at a National Association of Testing Authorities (NATA) accredited laboratory.
  - Total Recoverable Hydrocarbons (TRH).
  - Benzene, Toluene, Ethylbenzene and Xylene (BTEX).
  - Organochlorine/ Organophosphate (OC/OP) pesticides.
  - Polycyclic aromatic hydrocarbons (PAHs)
  - Metals (arsenic, cadmium, chromium, copper, lead, nickel, zinc, and mercury).
  - Asbestos (presence/absence and/or AF/FA).

- Comparison of analytical results with relevant investigation levels (ILs) as prescribed in the remediation strategy. In the event validation samples returned results above the nominated ILs, further excavations and validation sampling were undertaken to ensure the Site's remediation objectives were met.
- Oversaw the reinstatement of excavated areas on Lots B1, B2 and B3 with spoil characterised as being suitable for reuse onsite. Spoil was reinstated in approximately 200 mm thick lifts. SLR's environmental consultant visually inspected each lift for the purpose of providing ACM clearance certificates.
- Air quality monitoring for the presence of air borne asbestos fibres was conducted during all remediation and validation works undertaken at the Site.
- Collation of all field notes, photographic logs, certified laboratory reports, soil movement logs, asbestos clearance certificates, waste disposal documentation and air quality monitoring results.
- Preparation of this validation report documenting all remediation and validation works undertaken at the Site.

1.3 Legislative Framework

The soil remediation and validation works were undertaken in accordance with the following regulatory requirements:

- ASC NEPM 2013, National Environmental Protection (Assessment of Site Contamination) Measures 1999, (as amended on 16 May 2013).
- West Australian (WA) Department of Health (DOH) 2009, "Guideline for the Assessment, Remediation and Management of Asbestos - Contaminated Sites in Western Australia".
- Standards Australia AS 4482.1-2005, "Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil. Part 1 Non-volatile and semi volatile compounds".
- New South Wales (NSW) Environmental Protection Authority (EPA) 2014, "Resource Recovery Order under Part 9, Clause 93 of the protection of the Environment Operations (Waste) Regulation 2014- the excavated natural material order 2014".
- NSW EPA 2014b, "Waste Classification Guidelines, Part 1: Classifying Waste".
- Northern Territory (NT) EPA 2017, "Northern Territory Contaminated Land Guidelines".
- NT EPA 2016, "Waste Management and Pollution Control Act".
- Safe Work Australia 2020, "How to manage and control asbestos in the workplace Code of Practice".

2 Background Information

2.1 Site Identification

A summary of the Site identification information is detailed in **Table 1**. Refer to **Figure 1 (Appendix A)** for a plan of the locality surrounding the Project Area and **Figure 2 (Appendix A)** for the extent and boundary definition of the Site (i.e. Lots B1, B2 and B3 areas).

The planned redevelopment of the Project Area will comprise of high-density residential buildings within Lots B1, B2 and B3, a police station within Lot A, and roadways and public open space within the Road Reserve and Lot C. Construction of new and upgraded land servicing infrastructure will be delivered as part of the redevelopment project.

Table 1 Site Information Details

Site information	Details
Site Owner	Northern Territory Government, Department of Local Government Housing and Community Development
Site Address	47 Progress Drive Nightcliff, Darwin, NT
Parcel Reference	Prior to subdivision, Lot 9077 Town of Nightcliff
Project Area Extent (approximate)	18,900 m^2
Lot B1 Area (approximate)	2077 m^2
Lot B2 Area (approximate)	3453 m^2
Lot B3 Area (approximate)	3455 m^2
Current Occupier	DIPL
Current Land Use	Currently unoccupied, under redevelopment
Future Land Use	Police Station (Lot A), High Density Residential (Lots B1, B2 and B3), Road Reserve, Parking and Public Open Space (Lot C)
Current Zoning	Rezoned from Medium Density Residential to Specific Use Zone to facilitate the redevelopment of the broader Project Area for a mix of commercial, community, residential and public open space purposes.
Central GPS Coordinates (latitude and longitude)	-12.388 828°, 130.851 451°

2.2 Surrounding environment

2.2.1 Surrounding Land Uses and Activities

A summary of the properties adjacent to the Project Area at the time of this assessment is detailed in **Table 2**.

Table 2 Summary of Surrounding Land Uses

Direction	Description
North	Progress Drive and a medium residential building, followed by commercial land uses and single dwelling residences.
South	Commercial land use including a childcare centre, shopping centre, service station, followed by single dwelling residences.
East	Commercial land use and medium density residential buildings including a fuel service station, Dick Ward Drive and further single dwelling residences.
West	A vacant lot zoned for commercial use, followed by high-density residential dwellings, vegetation and open water frontage.

2.2.2 Regional Geology

A review of the *Darwin Northern Territory Australian 1:250,000 Geological Series* map (NTDME, 1988) indicated the strata which underlay the Site consisted of unconsolidated sand, ferruginous and clayey, sandy and gravelly soils including pisolitic and mottled laterite from the early period of the Cainozoic era. Additional geological features of the Site included kaolinitic claystone, commonly raiolaria-rich, silty in places, montmorillonite, glauconitic and calcareous when fresh; basal conglomerate, minor bioturbated siltstone, carbonate, sandy claystone and clayey sandstone.

2.2.3 Regional Topography

The *Nightcliff 5073 1:2,500 Topographic Map* (DIPL, 2016) indicated the ground elevation drops approximately 3 metres from the north east corner to the south west corner, towards Darwin Harbour. At the time of this investigation, the proposed redevelopment project and associated remediation works included earthworks across all areas of the Site.

2.2.4 Registered Groundwater Bore Information

A search of the Department of Environment and Natural Resources (DENR) *Natural Resource Maps* online database (DENR, 2018) indicated that eight (8) registered groundwater bores existed within a 500m radius of the centre of the site. Note that information pertaining to the quality of groundwater was not provided within each registered bore report. **Table 3** provides a summary of the location and details of the identified registered bores.

Table 3 Summary of registered bore search

Registered Number	Completion date	Completion depth (mbgl)	Water level (mbgl)	Location
RN038557	24-03-2014	15.4	6	Approximately 85m east of the Project Area boundary
RN001722	Nil	Nil	Nil	Approximately 430m south east of the Project Area boundary
RN038558	25-03-2014	15.8	6	Approximately 85m east of the Project Area boundary
RN001721	Nil	Nil	Nil	Approximately 270m south east of the Project Area boundary
RN000130	03-08-1944	67	9.1	Approximately 110m east of the Project Area boundary
RN008096	23-03-1973	Nil	Nil	Approximately 190m south east of the Project Area boundary
RN005203	03-12-1965	12.2	Nil	Approximately 300m north of the Project Area boundary
RN005204	03-12-1965	12.2	Nil	Approximately 300m north of the Project Area boundary

mbgl = metres below ground level
nil = no information listed

2.2.5 Acid Sulphate Soils

Acid Sulphate Soils (ASS) are a characteristic natural feature of lowland coastal environments in Darwin, particularly where landform elevations are below 5m Australian Height Datum (AHD). ASS contain highly reactive iron sulphides generally in the form of framboidal pyrite. ASS are benign when in a waterlogged state. However, when these soils are drained or excavated, oxygen from the atmosphere reacts with the iron sulphides in the soil resulting in the production of sulphuric acid and the potential release of metal compounds from disturbed soils.

A review of the *Atlas of Australian Acid Sulfate Soils* (CSIRO Land & Water, 2011) indicates that the south western corner of the Site, closest to the marine environment, has a greater probability of encountering ASS than the remainder of the Site. Literature describes the soil in the south western corner as Hydrosols, with the remainder of the Site containing soils described as Kandosol, Tenosols, Podosols, Kurosols and Rudosols, with ASS generally occurring in the upper 1m in wet riparian areas.

Although ASS investigations were not conducted on Lots B1, B2 and B3 specifically, SLR conducted a Detailed Site Investigation (DSI) on the adjacent Road Reserve and Lot C of the Project Area (SLR reference: 680.10679-R03-v2.0). Test pitting conducted during this DSI did not encounter any soils typically associated with lowland coastal environments (e.g., mangrove soils). This observation was further supported by observations made by the geotechnical consultant contracted to undertake works within the Project Area (Douglas Partners, 2020). Elevations across the Project Area range from 8.5m and 10m above AHD, which are above elevations normally considered to pose an acid sulphate soil risk.

2.3 Previous Environmental Investigations

SLR understands that DIPL commenced demolition of former public housing buildings in mid-2019, which were distributed across the Project Area. Majority of demolition waste from the Site was removed and a portion of crushed concrete rubble was screened and spread across the Site as general fill. The EPA raised concerns that pesticides may have been historically used under the building's foundations, and that ACM contaminated fill material may have been historically imported to the Site. As such, the first limited site investigation was undertaken by Greencap Pty Ltd (Greencap) in June 2019 to assess the presence of contamination associated with termite control chemicals at the building block located in the north west corner of the project area, and potential ACM, asbestos fines (AF) and fibrous asbestos (FA) contamination at the footprints of demolished building blocks. Furthermore, a DSI was undertaken by Greencap in September 2019 to assess the nature and broader extent of contamination associated with pesticides residue and ACM identified in fill material across the Site.

To further facilitate the environmental audit report for the Site, in February 2020 Agon Environmental Pty Ltd (Agon) conducted further investigations and remediation works at the Site to address previously identified asbestos and pesticide-related contamination.

A detailed review of these reports has been undertaken by SLR and summaries of these are provided in the sections below.

2.3.1 Limited Soil Investigation (July 2019, Greencap)

Greencap conducted a Limited Soil Investigation (ref. J163245, July 2019) at the Site to understand the presence of pesticides beneath the building block located in the north-west corner of the Project Area (Lot A) and ACM in the fill material across the Project Area. The soil samples collected near surface were analysed for organochlorine pesticides (OCP) and heavy metals, and samples collected at depth (maximum depth of one meter below ground level (mbgl)) were analysed for the presence/absence of ACM. OCP were identified at seven of the eight near surface soil sampling locations and comprised of chlordane, aldrin, dieldrin and heptachlor epoxide. Concentrations of aldrin and dieldrin exceeded the nominated health-based IL for residential land use at three of the sample locations.

SLR understands that this investigation was limited in its scope and as such the sampling program undertaken did not provide a comprehensive understanding of the extent and nature of asbestos contamination across the Project Area. However, the investigation did identify that fill material was present across the Project Area to a maximum depth of 0.8 mbgl. The investigation did not assess the other areas of the Project Area where building blocks were once present for OCP and arsenic based compounds.

Sample locations conducted in this investigation that relate directly to soil conditions within Lots B1, B2 and B3 are summarised below.

- Testpit locations TP01, TP02, TP03, TP04 and TP05, samples collected at depths ranging from 0.0-0.1 to 0.3-0.4 m bgl.

ACM fragments were reported in samples TP02_0.1-0.2 and TP04_0.2-0.3. The areas where these soil samples were collected from have since been excavated and, screened and validated as part of the subsequent remediation works conducted at the Site.

The clearance certificate for lots B1, B2 and B3 is provided as **Appendix C** and validation analytical results are presented in **Appendix G**.

None of the surface soil samples analysed for OCPs and heavy metals during this investigation were collected from Lots B1, B2 and B3.

2.3.2 Detailed Soil Investigation (September 2019, Greencap)

Greencap conducted a DSI (ref. J163803) to further evaluate the extent of termite control pesticides in near surface soils and the extent of potential asbestos impact within the fill material identified across the Project Area. Near surface samples collected from or adjacent to the footprint of 11 residential building blocks were analysed for OCP and heavy metals. Deeper soil samples collected to a maximum depth of 1 mbgl across the Project Area were analysed for the presence/absence of asbestos where suspected, based on visual observations. The OCP concentrations were reported above the laboratory's detection levels in the majority of near surface soil samples with results exceeding the adopted health-based IL from two of the building footprints of the Site. Bonded asbestos was detected at six sampling locations and friable asbestos was detected at one sampling location.

Sample locations conducted in this investigation that relate directly to soil conditions within Lots B1, B2 and B3 are summarised below.

- Surface soil samples: SS 17 – SS 44, samples collected at depths ranging from 0.0 – 0.1 mbgl, that were collected to assess potential pesticide and heavy metal impact.

- Testpits: TP10, TP11, TP13, TP14, TP16, TP17, TP18, TP19, TP21, TP22, TP24, TP25, TP27, and TP28, where testpit samples were collected at various depths ranging from 0.00-0.05 to 0.00 – 0.8 mbgl.

Fragments of possible ACM were only detected in the bulk sampling and sieving of TP11 (0.00-0.8 mbgl) and TP17 (0.00-0.4 mbgl). The calculated bonded asbestos in soil concentration (calculated in general accordance with ASC NEPM 2013) for the following samples were compared to the adopted human health-based IL for residential land use (0.01 w/w%).

- TP11 (0.00-0.8 mbgl) – 0.0014 w/w%, which is below the nominated IL.
- TP17 (0.00-0.4 mbgl) – 0.0.156 w/w%, which exceeds the nominated IL.

None of the samples collected from the Site and submitted for AF/FA analysis detected asbestos above the laboratory's limit of reporting.

Pesticide impact above the adopted human-health based IL for residential land use was only detected in surface soil samples SS18 (heptachlor – 7.8 mg/kg) and SS30 (aldrin + dieldrin – 368.8 mg/kg). Heavy metal impact was not detected above the nominated ILs.

The areas of the Site where samples reported impact above the nominated human health based ILs, have since been excavated, screened and validated as part of the subsequent remediation works conducted at the Site.

The clearance certificate for lots B1, B2 and B3 is provided as **Appendix C** and validation analytical results are presented in **Appendix G**.

2.3.3 Additional Soil Investigation (October 2019; Greencap)

Greencap conducted an Additional Soil Investigation (ref J163803-02) to:

- address data gaps in previous investigations undertaken within the Project Area
- delineate the extent and nature of asbestos impact found within the fill material
- delineate the extent of OCP identified within the former building footprints and immediate surroundings.

OCP were detected under most building footprints across the Project Area. Many forms of bonded ACM fragments were identified across the Project Area and were associated with the layers of fill. It was also observed that ACM fragments were scattered sporadically across the surface of the Project Area possibly due to historical demolition works. Friable asbestos was also identified at several locations and concentrations detected exceeded the adopted health-based criteria.

Sample locations assessed in this investigation that related directly to the soil conditions within Lots B1, B2 and B3 are summarised below.

- Surface soil samples: SS56, SS57, SS58, SS59, SS60, SS61, SS62, SS63, SS68 (used to delineate impact previously detected at SS18), SS69 (used to delineate impact previously impact detected at SS30), with samples collected at depths ranging from 0.0 to 0.5 mbgl.
- Testpits: TP36, TP37, TP38, TP39, TP40, TP41, TP42, TP43, TP44, TP45, TP46, TP47, TP48, TP49, TP51, TP56 and TP57, with samples collected from various depths ranging from 0.0 – 0.05 mbgl to 0.6 – 0.7 mbgl.

Asbestos impact was detected in the following testpit samples.

- TP38 (0.00-0.1 mbgl) – AF/FA in soil 0.0012 w/w%, which is above the nominated IL (0.001 w/w%).
- TP39 (0.0-0.1 mbgl) – AF/FA in soil 0.01 w/w%, which is above the nominated IL (0.001 w/w%).
- TP40 (0.0-0.1 mbgl) – bonded ACM in soil 0.017 w/w%, which is above the nominated IL (0.01 w/w%).
- TP42 (0.3-0.4 mbgl) – bonded ACM in soil 0.235 w/w%, which is above the nominated IL (0.01 w/w%).
- TP42 (0.6 – 0.7 mbgl) – bonded ACM in soil 0.011 w/w% (above the nominated IL) and AF/FA in soil 0.0064 w/w% (above the nominated IL).
- TP43 (0.0 -0.1 mbgl) – bonded ACM in soil 0.003 w/w%, which is below the nominated IL (0.01 w/w%).
- TP45 (0.1-0.2 mbgl) – bonded ACM in soil 0.012 w/w%, which is above the nominated IL (0.01 w/w%).
- TP51 (0.0-0.05 mbgl) – AF/FA in soil 0.00002 w/w%, which is below the nominated IL (0.001 w/w%).

In addition to the soil samples collected from the testpits, two samples of possible ACM debris were collected from the surface of the Site (FCS01 and FCS02) and were confirmed to contain asbestos.

Pesticide impact above the adopted human-health based IL for residential land use was only detected in surface soil sample SS69_S(5)_0.0 (aldrin + dieldrin – 23.4 mg/kg).

The areas of the Site where samples reported impact above the nominated human health based ILs for residential landuses, have since been excavated, screened and validated as part of the subsequent remediation works conducted at the Site.

The clearance certificate for lots B1, B2 and B3 is provided as **Appendix C** and validation analytical results are presented in **Appendix G**.

2.3.4 Detailed Site Investigation (February 2020; Agon)

Agon conducted a risk based DSI followed by remediation work within the Project Area. The investigation process was assessed by the Auditor to confirm if the Project Area is suitable for the proposed future development. The DSI included the investigation of asbestos, pesticides and groundwater to characterise the environmental condition of the Project Area. The findings were consistent with the previous investigations with fill material being encountered evenly across the Project Area.

Sample locations assessed in the Agon investigation that relate directly to soil and groundwater conditions within residential allotments Lots B1, B2 and B3 are summarised below.

- Testpits: TP09 (0.1 mbgl, 0.7 mbgl), TP011 (0.2 mbgl, 0.8 mbgl), TP13 (0.1 mbgl, 0.6 mbgl), TP14 (0.1 mbgl, 0.6 mbgl), TP16 (0.1 mbgl, 1.0 mbgl), TP17 (0.2 mbgl), TP18 (0.1 mbgl, 1.0 mbgl), TP19 (0.1 mbgl, 0.7 mbgl), TP20 (0.1 mbgl, 0.8 mbgl).
- Soil samples collected when installing monitoring wells MW02 (4 mbgl, 5 mbgl) and MW03 (4 mbgl, 5 mbgl).
- Groundwater samples collected from monitoring wells MW02 and MW03.

Visible evidence of ACM was not detected in any of the testpits advanced across the Site during this investigation. Pesticide impact above the adopted human-health based IL for residential land uses was detected in soil sample TP9_0_0.1 (aldrin+dieldrin – 7.5 mg/kg). Nickel was detected in one sample (TP19_0_0.1 - 16 mg/kg) at a concentration above the environmental based IL specified for an urban residential and public open space setting but it did not exceed the adopted human health-based IL for residential land uses.

Minor concentrations of chloroform and TRH fractions were reported in the groundwater samples collected during this investigation. However, silica gel clean-up was conducted on the highest results which reduced the TRH results to below the laboratory's limit of reporting (LOR). Groundwater samples collected from monitoring wells installed across the Project Area reported analytes' concentrations either below the laboratory's LOR or below the adopted assessment criteria. Some heavy metals exceeded the adopted assessment criteria in the groundwater samples collected, however they are not considered to pose a risk to future commercial users of Lot A as access to groundwater is considered unlikely.

During this investigation, Agon oversaw the removal of surface soils that reported pesticide concentrations above the nominated health-based ILs for residential land uses (but below the health-based ILs specified for commercial/industrial land uses) from the wider Project Area. Soil from these "hotspot" areas were removed and relocated onto Lot A (proposed police station). According to the Agon report, the following "hotspots" were remediated that relate specifically to Lots B1, B2 and B3.

- SS18 (heptachlor) (Greencap).
- SS30 (aldrin+dieldrin) (Greencap).
- SS69_S (aldrin+dieldrin) (Greencap).
- TP09_0_0.1 (aldrin+dieldrin) (Agon DSI).

Remediation works involved the removal of fill material from a 5 m^2 area around each "hotspot" location to a depth of 5 mbgl. The excavated soils were relocated to Lot A (proposed police station). Approximately 35 m^3 of soil was moved from the Site (i.e. Lots B1, B2 and B3) to the commercial area of the Project Area (i.e. Lot A).

As part of the Agon's investigation and remediation works, ACM, soil containing bonded ACM and soils containing AF/FA concentrations that exceeded the adopted criteria for residential land use, were remediated and resultant excavations visually validated. According the Agon report, the following "hot spots" that were remediated that relate specifically to Lots B1, B2 and B3 are listed below.

- TP38 (0.00-0.1 mbgl).
- TP39 (0.00-0.1 mbgl).

Remediation works involved the removal of fill material from a 5 m^2 area around each of the "hotspot" locations. The depth of the excavation extended down into natural soils. Where asbestos material was encountered, the ACM material was placed into double sealed bags for appropriate offsite disposal by the licenced asbestos removal contractor. The resultant excavated area was visually inspected by an Agon representative (Agon, 2020).

Although ACM was also previously detected in testpit samples TP17 (0.0-0.4 mbgl), TP40 (0.0-0.1 mbgl), TP42 (0.3-0.4 mbgl and 0.6-0.7 mbgl), TP43 (0.0-0.1 mbgl), TP45 (0.0-0.2 mbgl) and TP51 (0.0-0.05 mbgl) these locations were not targeted for further remediation works during the remediation works conducted by Agon. However, given that the subsequent remediation works presented in this report involved the removal of fill material across the Site (i.e. Lots B1, B2 and B3) and removal of abandoned underground services, including those constructed out of ACM, SLR considers that these previously identified "hotspot" locations have been excavated, screened and validated as part of the remediation works undertaken by SLR (and subsequently presented herein).

The clearance certificate for lots B1, B2 and B3 is provided as **Appendix C** and validation analytical results are presented in **Appendix G**.

2.3.5 Detailed Site Investigation (August 2020, SLR)

SLR completed a DSI within the Road Reserve and Lot C (SLR report *680.10679-R03-v1.0 DSI – Road Reserve and Lot C*). The findings of this investigation as it pertains to the Site is summarised below.

- Asbestos impacted soils were identified along the boundary between the Road Reserve and western boundary of proposed Lots B2 and B3. Evidence of asbestos was visually identified in seven test pits. Laboratory testing confirmed that bonded ACM and soils containing AF/FA were present above the adopted criteria. Lateral delineation of the impact found on the western boundary of proposed Lots B2 and B3 had not been achieved during the DSI, and it was suspected that it would extend into a portion of Lots B2 and B3.
- Chemical analysis of soils indicated that, aside from the asbestos impacted areas, the material within the remainder of the Site was considered low risk and excess spoil could be disposed of as General Solid Waste (non-putrescible) with reference to the NSW Waste Classification Guidelines 2014b.
- Abandoned services were encountered in many locations across the Site including irrigation, conduit (assumed to be electrical), Polyvinyl Chloride (PVC) pipe (assumed to be sewerage), and concrete (assumed to be stormwater) lines.
- Reworked fill material was encountered across the Road Reserve and Lot C area of investigation. Apparent natural ground was intersected in 37 of the 40 test pits within which the average depth of fill was 0.53mbgl (ranging from 0.2–1.3mbgl). Further to the asbestos related impacts detailed above, additional anthropogenic waste was found in some test pits and appeared to be primarily related to old sub-surface infrastructure or construction demolition works including concrete, plastic conduit, and bricks.

None of the testpits completed during this investigation were collected from residential allotments Lots B1, B2 and B3.

2.4 Source of Asbestos Impact – Site

In summary, based on the results from previous investigations and observations noted during remediation works conducted across the Site, identified asbestos impact appears to have resulted from a number of sources as described below.

- Asbestos impact identified within the uncontrolled fill material present across the Project Area (including the Site), appears to be residential building debris (mainly fragments of ACM sheeting). The presence of asbestos debris within surface soils is a common feature in Darwin due to the widespread damage caused by Cyclone Tracy in December 1974. The 1975 aerial imagery covering the Project Area, clearly shows the presence of scattered debris post Cyclone Tracy.
- Sheeting made from ACM appeared to be used as forming during the installation/construction of some of the concrete stormwater risers encountered along the boundaries between the Road Reserve, and Residential Lot B2 and Lot B3. ACM debris was also identified in the rework material around these stormwater risers.
- Asbestos impacted fill material was also identified between layers of asphalt found in the Road Reserve, which suggests that fill material impacted with asbestos debris had been used to construct (or upgrade) the road system within the Project Area.
- Pipes made from ACM products were used for the Project Area's water distribution system and in some instances used as a conduit for communications cables, and as such, are considered additional primary source of asbestos impact. Asbestos pipes were found in the middle (Road Reserve) to the southern portion of the Project Area (Residential Lot B2).

3 Remediation and Validation Methodology

3.1 Remediation Strategy and Deviations

Remediation and validation activities conducted at the Site were completed in general accordance with the remediation strategy (SLR ref: 680.10679.00000-M04-v2.0 20200603) endorsed by the Auditor and included in **Appendix B**.

The remediation strategy was developed in general accordance with the following guidelines and standards.

- National Environment Protection Council (1999, 2013 revision), National Environment Protection (Assessment of Site Contamination) Measure (ASC NEPM).
- Australian Standard AS 4482.1-2005, "Guide to the Sampling and Investigation of Potentially Contaminated Soil. Part 1: Non-volatile and semi-volatile compounds".
- WA DoH 2019, "Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, Consultation Draft", November 2019.
- NT EPA 2017, "Northern Territory Contaminated Land Guidelines".

In addition, SLR's Standard Operating Procedures (SOPs) were followed to ensure integrity was maintained and sampling procedures were completed in general accordance with the relevant guidelines and standards.

In essence, the remediation and validation activities that were carried out at each of the residential allotments included the following.

- Stripping and excavating uncontrolled fill materials to apparent natural soil conditions (either weathered rock or rock) across the Site. Visually inspecting the spoil and resultant excavations during the stripping and excavations works for evidence of ACM or other COPCs. Based on visual observations, progressively segregating the potentially impacted spoil to be stockpiled separately from non-impacted spoil.

- Removal of all known or encountered abandoned underground services (including the fill material surrounding them) that were present within the Site. Visually inspecting the services, spoil and resultant excavations during the removal works for evidence of ACM or other COPC. Progressively segregating, based on visual observations, potentially impacted spoil and services constructed out of ACM products to be stockpiled separately from non-impacted spoil.
- Visually inspecting the surfaces of, and collecting validation samples from, the remediated areas of the Site (i.e., resultant excavations/trenches). Collecting details of the areas remediated at the Site including extent and depth of excavations, validation sample locations, sample identification numbers, date sampled and photographic logs. Validation samples were collected and analysed by a NATA accredited laboratory in accordance with the methodology outlined in **Section 3.2.**
- Screening geotechnically unsuitable anthropogenic waste materials such as construction and demolition rubble from the stockpiled spoil. Visually inspecting the spoil throughout the screening process for visual evidence of ACM. Placing the screened spoil into smaller stockpiles to facilitate characterisation sampling to inform if the spoil is suitable for beneficial reuse onsite or requires offsite disposal. Spoil samples were collected and analysed in accordance with the methodology outlined in **Section 3.2.**
- Developing and maintaining a tracking log for stockpiles generated during the remediation works. Details collected included stockpile identification numbers, the origin of the material, description based on visual assessment, stockpile locations, locations of all characterisation samples, stockpile volumes, dates of sampling, future segregation (if required based on analytical results) and final destination being either offsite disposal or onsite reuse.
- Engaging a licenced asbestos removal company for the appropriate offsite disposal of services made from ACM, ACM debris and asbestos impacted soil. Visually inspecting and collecting validation samples of the surface areas where asbestos impacted material was stockpiled to confirm that all ACM was adequately removed.
- Comparing analytical results obtained for soil samples collected at the Site with relevant ILs. Where validation samples returned results above the ILs, undertaking further excavation and validation sampling to ensure the Site's remediation objectives were achieved.
- Overseeing the reinstatement of excavated areas with spoil material characterised as being suitable for reuse on Site, in approximately 200mm thick lifts. Visually inspecting each lift for the purpose of providing ACM clearance certificates.
- Undertaking air quality monitoring to determine the presence of air borne asbestos fibres during all remediation and validation works undertaken at the Site.
- Collating all field notes, photographic logs, certified laboratory reports, soil movement logs, asbestos clearance certificates, waste disposal document and air quality monitoring results.
- Preparing a validation report document all remediation and validation works undertaken at the Site.

3.2 Soil Sampling Methodology

Soil validation and characterisation sampling were undertaken in accordance with the remediation strategy, the details of which are provided in **Table 4**.

Table 4 Soil sampling methodology

Activity	Comment / Details
Soil sampling frequencies	• Spoil characterisation samples were collected from the excavated, stockpiled material at a frequency of one sample every 70 m^3 with a minimum of three samples per stockpile material. Asbestos samples were sieved and analysed in accordance with WA DOH guidelines for stockpiled material. • Validation samples were collected from the base of each excavation at a minimum rate of one sample per 25 m^2 of excavation base, with a minimum of one sample collected from each excavation base. Given the low risk of ACM within natural materials, asbestos analysis of validation samples only included presence/absence. • Co-ordinates of sample locations were recorded using a handheld GPS device.
Field quality control sampling	• Duplicate samples were collected at a rate of 1:20 for soil samples. • One equipment rinsate blank (taken from re-usable equipment) collected for each day of sampling and analysed for COPC.
Sample collection	• Samples were collected in general accordance with AS4482.1-2005 and SLR SOPs. Dedicated disposable nitrile gloves and laboratory supplied sample containers were used for sample collection.
Sample preservation	• Samples were placed in laboratory supplied jars and stored as close to 4°C as practicable, in insulated chilled containers while onsite and in transit to the laboratory.
Sample submission	• Chain of custody (COC) documentation were completed at the time of sample collection and submitted with the samples to the nominated laboratory. • All samples were submitted to a NATA accredited laboratory for analysis. • 50% of spoil characterisation samples were submitted for analysis, with the rest held by the laboratory for further analysis if required should substantial[#1] variability in analytical results required further statistical assessment. • 50% of validation samples were submitted for analysis, with the rest held by the laboratory for further analysis if required should substantial variability in analytical results required further statistical assessment. In the event a validation sample recorded asbestos impact, samples collected in the near vicinity of the validation sample were analysed to determine the extent of the residual impact.

#1 substantial variability will be assessed via a coefficient of variation (CV) assessment as per the NSW EPA Sampling Design Guidelines (1995) with stockpiles with a CV value >1 considered to have substantial variability.

3.3 Decontamination of Equipment

A 20-ton excavator was used to remove contaminated asbestos soil, fill material and abandoned underground services in Lots B1, B2 and B3. The excavator was solely used for the earthworks of the Site and decontamination procedures were followed. The excavator bucket was washed within asbestos stockpile footprints area and the ground surface was visually inspected and validation samples collected to assess the contamination from the excavator.

3.4 Analytical Assessment

Spoil characterisation and validation samples were submitted to laboratories NATA accredited for the analyses performed, and included:

- ALS Pty Ltd (ALS) – for analyses of all COPCs
- Eurofins Environment Testing Australia Pty Ltd (Eurofins) - for analyses of all COPCs
- Greencap Pty Ltd (Greencap) – asbestos analysis only.

Scheduled soil samples were analysed for:

- Soil characterisation as per the ASC NEPM
- Total recoverable Hydrocarbons (TRH) and Total Petroleum Hydrocarbon (TPH)
- Polynuclear Aromatic Hydrocarbon (PAH)
- Benzene, toluene, ethylbenzene and xylene (BTEX)
- Organochlorine Pesticides (OCPs) and organophosphorus pesticides (OPPs)
- Asbestos (WA DoH/NEPM samples)
- Asbestos (presence/absence)
- Priority metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc).

All non-scheduled samples were placed on hold at the laboratory should further analysis be required as part of the characterisation and validation process.

The DSI previously undertaken by SLR (SLR DSI 2020) confirmed that asbestos impact, when identified, appeared to be confined to the fill material overlaying the natural deeper red silty clay soil material. As the excavations extended down into the natural red soil material, it was agreed with the Auditor when developing the remediation strategy, that the base of the excavations would be visually assessed and soil samples collected from the base analysed for presence/absence only, to verify whether asbestos impact had been adequately removed.

3.5 Screening Criteria

The following criteria were used to assess the potential risk posed to current and future users of the Site and sites at which spoil materials could be reused. The nominated screening criteria were selected from the following guidelines:

ASC NEPM:

- Health based Investigation Levels (HILs) for Residential B sites
- Soil Health Screening Levels (HSL) for vapour intrusion – Residential B sites
- Ecological Investigation Levels (EIL) for Urban Residential, Parks and Open Space (URPOS) sites
- Ecological Screening Levels (ESL) for URPOS sites
- Management limits for TPH fractions in soil – URPOS sites.

WA DOH:

- Soil Asbestos Screening Criteria for AF/FA, all site uses
- Soil Asbestos Screening Criteria for ACM -residential sites
- For clarity, screening criteria for asbestos will be high density residential (Residential B) as per Table 7 of the NEPM (ASC) 2013 Schedule B1 - Guideline on Investigation Levels for Soil and Groundwater.

3.6 Air monitoring

Air monitoring was conducted for the duration of the stripping, stockpiling and characterisation works as a precautionary measure. The airborne asbestos monitoring was conducted at the boundaries of the Site (north, south, east and west) and were static locations.

Monitors were setup at the commencement of the shift (approximately 0700) and collected at the completion of Site works (ranges from 1600 – 1700 on weekday and from 12 noon -1300 on Saturday).

Each monitor was calibrated as per SLR's internal NATA accredited procedure and set at a flow rate of 1 L/minute Monday to Friday and 2 L/min on Saturday (as the work shift is shorter, 0700 – 1300, so the flow rate is increased to ensure an appropriate sampling volume is achieved over the shorter shift).

SLR is NATA accredited in our Darwin laboratory to conduct all sampling and analysis of filters. SLR's accreditation number is 3130**.** Air monitoring was conducted in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust, 2nd Edition [NOHSC: 3003 (2005)].

All air monitoring results were compared to the public health exposure standard of 0.01 fibres/mL.

Consideration was given to the asbestos air-quality limit of 0.01 fibres/mL, for protecting the public around contaminated sites as endorsed by the enHealth Council in Management of asbestos in the non-occupational environment 2005 document (enHealth 2005).

In the event results of the airborne asbestos monitoring showed respirable asbestos fibre levels in excess of the levels outlined in **Table 5** action was taken immediately.

Table 5 Air Monitoring Action Levels

Action Level	Control	Action
Less than 0.01 fibres/mL	No new control measures are necessary	• Continue with current measures.
At 0.01 fibres/mL or more than 0.01 fibres/mL but less than or equal to 0.02 fibres/mL	1. Review	• Review control measures.
	2. Investigate	• Investigate the cause.
	3. Implement	• Implement additional or alternative controls to eliminate or minimise exposure and prevent further releases. • Communicate any additional controls during daily pre-start meeting.
More than 0.02 fibres/mL	1. Stop removal works	• Cease excavation/transport of material.
	2. Notify Regulator	• Notify the Head Contractor, followed by the regulator (NT WorkSafe) both verbally and in written communication.
	3. Investigate the cause	• Conduct a thorough assessment across the Site to determine the cause. • Consult with all personal involved in the works. • Determine ongoing mitigation measures. • Continue to carry out air-monitoring to ensure further controls have mitigated the problem.

Table adopted form the Code of Practice under Section 274 of *the Work Health and Safety (National Uniform Legislation) Act 2011 (the WHS Act): How to safely remove Asbestos*

4 Results

The remediation and validation activities undertaken in Lots B1, B2 and B3 were completed between 20 July and 28 September 2020.

Civil works were completed in general accordance with the Principal contractor's (Greenspace Pty Ltd) Construction Environmental Management Plan (CEMP) T20-1056_V2.0. THE Mining Pty Ltd was engaged by the Principal Contractor to undertake earthworks across the Site. Earthworks were required to remove uncontrolled fill material identified across the Site including ACM, abandoned underground services, and screening and segregation of excavated spoil stockpiles originating from Lots B1, B2 and B3. Northern Trade Solutions Pty Ltd (NTS) were engaged to appropriately remove and dispose of ACM products and asbestos impacted soils. NTS holds a Class A Licence in asbestos removal and demolition.

Field observations and summaries of the analytical results obtained for the remediation and validation activities undertaken within each of the residential allotments are provided below.

4.1 Remediation and Validation of Lot B1

A photographic log of the remediation work is provided in **Appendix D**. The extent of the excavation works conducted in Lot B1 is shown in **Figure 3 (Appendix A)**.

4.1.1 Field observations

Key field observations noted during the remediation work are summarised below.

- Vegetation (grass/weeds) and tree roots were noted across the surface of the allotment. This material was removed and stockpiled on Lot B3.
- Subsurface soil profile encountered across Lot B1 was typically fill material comprising of greyish to light brown sandy silt and fine sandy gravelly silt at depths varying from 0.4 mbgl to a maximum of 1.8 mbgl.
- The maximum depth of the excavation was 2.0 mbgl.
- The concrete footings from Lot B1 were removed and loaded directly onto trucks and stockpiled at locations on the adjacent Lot B2 and the Road Reserve. Any ACM observed within the crushed concrete layer noted across the Site was also segregated and placed within the designated asbestos waste stockpile (STP5).
- The surface soils (fill material) across Lot B1 were excavated to apparent natural soil conditions. Spoil from the excavation was inspected for asbestos contamination and segregated where required. Spoil was loaded directly onto trucks and stockpiled at designated locations in the adjacent Lot B3 and the Road Reserve for further screening and characterisation.
- Numerous ACM fragments were found during the stripping of fill material from Lot B1. ACM fragments and soils impacted with ACM were segregated and stockpiled within a designated area for offsite disposal as asbestos waste (STP5). The designated asbestos waste stockpile was located on a sealed surface within the Road Reserve and was lined with geofabric to prevent cross contamination to the ground surface. The asbestos waste stockpile was deliberately positioned above an area that had already been confirmed as being impacted with asbestos and was earmarked for future remediation works as detailed in the Lot C and Road Reserve remediation strategy (SLR reference: 680.10679-R04-v5.0).
- The majority of spoil from Lot B1 was stockpiled at designated locations on the Road Reserve and Lot B3. The stockpiles were screened to remove geotechnically unsuitable anthropogenic waste materials such as construction and demolition rubble.
- Several abandoned underground services including, stormwater, sewer pipes, water distribution pipes, electrical and communications cables were removed from Lot B1. Any ACM fragments and soils impacted with ACM were segregated and stockpiled at the designated asbestos waste stockpile (STP5). Upon underground services removal, the resultant trenches were visually inspected for evidence of any residual ACM.
- No stained or odorous soils were encountered across the allotment during earthworks.
- Excavated areas within Lot B1 were reinstated with screened spoil characterised as being suitable for Site reuse. The surface of each 200mm lift of reinstated material was visually inspected for the presence of any ACM. Asbestos clearance certificates are provided in **Appendix C**.

4.1.2 Summary of Analytical Results

A tabulated summary of the analytical laboratory results is included in **Appendix G** and certified laboratory certificates are provided in **Appendix H**.

A summary of the validation samples collected for Lot B1 is provided in **Table 6**. Sample locations are shown on **Figure 3 (Appendix A)**. A summary of analytical results is as follows.

- A total of 82 validation samples were collected from the excavation base on Lot B1. Of the samples collected, 41 samples were submitted for laboratory analysis. All samples that were submitted for laboratory analysis reported concentrations of COPC below the nominated ILs except for sample V64, which detected chrysotile asbestos.
- Further excavation was undertaken around sample location V64, which resulted in extending the depth of the excavation 0.3 m into the natural reworked soils within an approximate area of 30 m^2 around the "hot spot". Three additional validation samples were collected from the resultant excavation (Val49B, Val64B and Val65B). Asbestos was not detected in the additional samples collected.
- Eleven samples were collected from the walls/bases of excavations resulting from the removal of underground services. Of these samples, five were submitted for laboratory analyses. All samples that were submitted for laboratory analysis reported concentrations below the nominated ILs.
- Concentrations of OCPs were detected in a number of validation samples submitted for analyses. The concentrations detected were below the nominated ILs. Compounds detected included aldrin and dieldrin and to a lesser extent chlordane and heptachlor.
- Metals were detected in all validation samples submitted for analyses. The concentrations detected were below the nominated IL. Metals detected included arsenic, lead, total chromium (III+IV), copper, nickel and zinc.
- Hydrocarbons (TPH/TRH), BTEXN and PAH compounds were not detected in any of the samples submitted for laboratory analyses.

Table 6 Validation and Characterisation Samples in Lot B1

Sample Type	Sample Identification	Analysis
Characterisation sample	CHAR-VAL – Sample was collected at validation sampling location V50	*Characterisation as per the ASC NEPM
Characterisation samples	V30, V60 and V80	Leachable metals (arsenic and chromium)
Base validation samples	V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80, V82	*Presence/absence of asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals
	V01, V03, V05, V07, V09, V11, V13, V15, V17, V19, V21, V23, V25, V27, V29, V31, V33, V35, V37, V39, V41, V43, V45, V47, V49, V51, V53, V55, V57, V59, V61, V63, V63, V65, V67, V69, V71, V73, V75, V77, V79, V81, V83	On hold
Hotspot (V64) validation samples	V49B, V64B, V65B	Presence/absence of asbestos in soils

Sample Type	Sample Identification	Analysis
Trench wall/base samples	V74, V76, V78, V80, V82	*Presence/absence of asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals
	V73, V75, V77, V79, V81, V83	On hold
Field QC samples – field duplicates	QC2/V10 QC3/V30, QC4/V50 QC5/V70	*TPH/TRH *PAHs *BTEXN *OCP/OPP *metals
Field QC samples – equipment rinsate blanks	RINSATE (23-07-2020)	*TPH/TRH *PAHs *BTEXN *OCP/OPP *metals (filtered)
Surface samples collected beneath areas where asbestos waste stockpiles were stored		

4.1.3 Clearance Inspections

Visual inspections were conducted after each lift of spoil during the reinstatement of the excavations. No visual evidence of asbestos was identified on the surface of any of the lifts. The visual clearance certificate is included in **Appendix C**.

4.2 Remediation and Validation of Lot B2

A photographic log of the remediation work is provided in **Appendix E**. The extent of the excavation works conducted in Lot B2 is shown in **Figure 4 (Appendix A)**.

4.2.1 Field observations

Key field observations noted during the remediation work are summarised below.

- Vegetation (grass/weeds) and tree roots were noted across the surface of the allotment. This material was removed and stockpiled on Lot B3.
- Subsurface soil profile encountered in Lot B2 was similar to Lot B1 and comprised of greyish to light brown sandy silt and fine gravelly silt at depths varying from 0.4 mbgl to a maximum of 1.8 mbgl.
- The maximum depth of the excavation was 2.0 mbgl.
- The concrete footings from Lot B2 were removed and loaded directly onto trucks and stockpiled at locations on the adjacent Lot B3 and the Road Reserve. Any ACM observed within the crushed concrete layer was segregated and placed within the designated asbestos waste stockpile (STP5).

- The surface soils (fill material) across Lot B2 were excavated to apparent natural soil conditions. Spoil from the excavation was inspected for asbestos contamination and segregated where required. Spoil was loaded directly onto trucks and stockpiled at designated locations in the adjacent Lot B3 and the Road Reserve for further screening and characterisation.
- ACM fragments and soils impacted with ACM were segregated and stockpiled within a designated area for offsite disposal as asbestos waste (STP5).
- Numerous ACM fragments were found during the stripping of fill material from Lot B2. The condition of the ACM fragments was observed to be more degraded than those found in Lot B1. Following confirmation that fill material in Lot B2 contained ACM debris in poor condition, 11 test pits were completed across the allotment to understand whether there were any changes in composition of fill material and the likely extent of the ACM debris found to be in poor condition.
- The majority of spoil from Lot B2 was stockpiled at designated locations on the Road Reserve and Lot B3. The stockpiles were screened to remove geotechnically unsuitable anthropogenic waste materials such as construction and demolition rubble.
- Various abandoned underground services including, stormwater, sewer pipes, water distribution pipes, irrigation pipes and electrical and communication cables, were removed from Lot B2. Any ACM fragments and soils impacted with ACM were segregated and stockpiled at the designated asbestos waste stockpile.
- Two abandoned asbestos pipes were identified within Lot B2. One pipe was a former water distribution pipe (part of the fire water system) and the other was used as a conduit for communication cables. The asbestos products were in relatively good condition (i.e., bonded). They were removed and the ACM products stockpiled at the designated asbestos waste stockpile for appropriate offsite disposal.
- Upon underground services removal, the resultant trenches were visually inspected for evidence of any residual ACM.
- No stained or odorous soils were encountered across the allotment during earthworks.
- Excavated areas within Lot B2 were reinstated with screened spoil characterised as being suitable for Site reuse. The surface of each 200mm lift of reinstated material was visually inspected for the presence of any ACM. Asbestos clearance certificates are provided in **Appendix C**.
- A “live” sewer main is located along the eastern and southern boundaries of Lot B2. Remediation works within 3m of these boundaries were limited due to the presence of this “live” underground service and potential destabilisation of neighbouring fences, retaining walls and structures. Remediation works conducted in this area included topsoil stripping (to a depth of 0.3m) and targeted removal of soil where asbestos impact was visually determined (e.g. around the sewer riser).
- After topsoil stripping had occurred above the “live” sewer main, asbestos debris/fragments were visually observed in the eastern wall of the resultant excavation, within the fill layer. Where noted, the debris was removed, however further excavation to the east could not be undertaken as this would involve encroaching onto neighbouring properties.

4.2.2 Summary of Analytical Results

A tabulated summary of the analytical laboratory results is included in **Appendix G** and certified laboratory certificates are provided in **Appendix H**.

A summary of the validation samples collected for Lot B2 is provided in **Table 7**. Sample locations are shown on **Figure 4 (Appendix A)**. A summary of analytical results is as follows.

- A total of 133 validation samples were collected from the excavation base on Lot B2. Of the samples collected, 66 samples were submitted for laboratory analyses. All samples that were submitted for laboratory analysis reported concentrations of COPC below the nominated ILs except for samples V84, V174 and V192. Chrysotile and amosite asbestos were identified in samples V84 and V174. Only chrysotile asbestos was detected in sample V192.
  - Further excavation was undertaken around sample location V84, which resulted in extending the depth of the excavation 0.3 m into the natural reworked soils within an approximate area of 50 m^2 around the "hot spot". Two additional samples were collected from the resultant excavation (V84A and V85A). No asbestos was detected in the additional samples collected.
  - Further excavation was undertaken around sample location V174, which resulted in extending the depth of the excavation 0.3 m into the natural reworked soils within an approximate area of 90 m^2 around the "hot spot". Four additional samples were collected from the resultant excavation (V161A, V173A, V174A, V175A). No asbestos was detected in the additional samples collected.
  - Further excavation was undertaken around sample location V192, which resulted in extending the depth of the excavation 0.3 m into the natural reworked soils within an approximate area of 25 m^2 around the "hotspot". One additional sample was collected from the resultant excavation (V192a). Asbestos was not detected in the additional sample collected.
- A total of 64 samples were collected from the walls/bases of excavations resulting from the removal of underground services. Of the samples collected, 60 were submitted for laboratory analyses. All samples that were submitted for laboratory analysis reported concentrations of COPC below the nominated ILs except for sample Val-T-27, which reported chrysotile asbestos. Further excavation was undertaken around this sample location (depth extended 0.3 m across a 25m^2 area) and an additional sample was collected from the resultant excavation (Val-T-27a). Asbestos was not detected in the additional sample collected.
- Concentrations of OCPs were detected in a number of validation samples submitted for analyses. The concentrations detected are below the nominated ILs. Compounds detected included aldrin, dieldrin and chlordane and to a lesser extent heptachlor.
- Metals were detected in all validation samples submitted for analyses. The concentrations detected are below the nominated ILs. Metals detected included arsenic, lead, total chromium (III+IV), copper, nickel and zinc.
- Hydrocarbons (TPH/TRH), BTEXN and PAH compounds were not detected in any of the samples submitted for laboratory analyses.

Figure 4 also shows the locations of a number of surface samples (VS01 – VS08) that were collected beneath areas where asbestos waste stockpiles were stored. These samples were collected for the purpose of demonstrating that all stockpiles containing asbestos were adequately removed from the Site. Further discussion on these samples is provided in **Section 4.4.1**.

Table 7 Validation and Characterisation Samples in Lot B2

Sample Type	Samples Identification	Analysis
Base validation samples	V84, V86 V88, V90, V92, V94, V96, V98, V100, V102, V102, V104, V106, V108, V110, V112, V114, V116, V118, V120, V122, V124, V126, V128, V130, V132, V134, V136, V138, V140, V142, V144, V146, V148, V150, V152, V154, V156, V158, V160, V162, V164, V166, V168, V170, V172, V174, V176, V178, V180, V182, V184, V186, V188, V190, V192, V194, V196, V198, V200, V202, V204, V206, V208, V210, V212 and V214	*Presence/absence of asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals
	V85, V87, V89, V91, V93, V95, V97, V99, V101, V103, V105, V107, V109, V111, V113, V115, V117, V119, V121, V123, V125, V127, V129, V131, V133, V135, V137, V139, V141, V143, V145, V147, V149, V151, V153, V155, V157, V159, V161, V163, V165, V167, V169, V171, V173, V175, V177, V179, V181, V183, V185, V187, V189, V191, V193, V195, V197, V199, V201, V203, V205, V207, V209, V211, V213 and V215	On hold
Hotspot (V84) validation samples	V84A, V85A,	Presence/absence of asbestos in soils
Hotspot (V174) validation samples	V161A, V173A, V174A, V175A	Presence/absence of asbestos in soils
Hotspot (V192) validation samples	V192a	Presence/absence of asbestos in soils
Trench wall/base samples	Val-t-1, Val-t-2, Val-t-3, Val-t-4, Val-t-5, Val-t-6, Val-t-7, Val-t-8, Val-t-9, Val-t-10, Val-t-11, Val-t-12, Val-t-13, Val-t-14, Val-t-15, Val-t-16, Val-t-17, Val-t-18, Val-t-19, Val-t-20, Val-t-21, Val-t-22, Val-t-23, Val-t-24, Val-t-25, Val-t-26, Val-t-27, Val-t-28, Val-t-29, Val-t-30, Val-t-31, Val-t-32, Val-t-33, Val-t-34, Val-t-35, Val-t-36, Val-t-37, Val-t-38, Val-t-39, Val-t-40, Val-t-41, Val-t-42, Val-t-43, Val-t-44, Val-t-45, Val-t-46, Val-t-47, Val-t-48, Val-t-49, Val-t-50, Val-t-51, Val-t-52, Val-t-53, Val-t-54, Val-t-55.	Presence/absence of asbestos in soils
Hotspot (val-t-27) validation sample	Val-t-27a	Presence/absence of asbestos in soils
Validation sample collected after the removal of asbestos pipe	Val-p-100	Presence/absence of asbestos in soils
Validation samples collected after the removal of asbestos pipe	VP02, VP04, VP06, VP08	Presence/absence of asbestos in soils
	VP01, VP03, VP05, VP07	On hold

Sample Type	Samples Identification	Analysis
Field QC samples – field duplicates	QC9/V90 QC10/V110 QC11/V130 QC12/V150 QC13/V170 QC15/V190 QC16/V210	*TPH/TRH *PAHs *BTEXN *OCP/OPP *metals
Field QC samples – equipment rinsate blanks	RINSATE 4/08/2020 RINSATE 5/08/2020 RINSATE 6/08/2020 RINSATE (12-Aug-2020)	*TPH/TRH *PAHs *BTEXN *OCP/OPP *metals (filtered)

4.2.3 Clearance Inspections

Visual inspections were conducted after each lift of spoil during the reinstatement of the excavations. No visual evidence of asbestos was identified on the surface of any of the lifts. The visual clearance certificate is included in **Appendix C**.

4.3 Remediation and Validation of Lot B3

A photographic log of the remediation work is provided in **Appendix F**. The extent of the excavation works conducted in Lot B3 is shown in **Figure 5 (Appendix A)**.

4.3.1 Field observations

Key field observations noted during the remediation work are summarised below.

- Vegetation (grass/weeds) and tree roots were noted across the surface of the allotment. This material was removed and stockpiled on Lot B3.
- Subsurface soil profile encountered in Lot B3 was similar to Lots B1 and B2 and comprised of greyish to light brown sandy silt and fine gravelly silt at depths varying from 0.4 mbgl to a maximum of 1.8 mbgl.
- The maximum depth of the excavation was 2.0 mbgl.
- The concrete footings from Lot B3 were removed and loaded directly onto trucks and stockpiled on the Road Reserve. Any ACM observed within the crushed concrete layer was segregated and placed within the designated asbestos waste stockpile (STP23).
- The surface soils (fill material) across Lot B3 were excavated to apparent natural soil conditions. Spoil from the excavation was inspected for asbestos contamination and segregated where required. Spoil was loaded directly onto trucks and stockpiled at designated locations in the adjacent Road Reserve for further screening and characterisation.
- Numerous ACM fragments were found during the stripping of fill material from Lot B3. Bonded ACM fragments/sheets were also identified at the former buildings' footings and stormwater risers. Moreover, sheeting made from ACM was used as forming during the installation/construction of the stormwater risers.

- ACM fragments and soils impacted with ACM were segregated and stockpiled within a designated area for offsite disposal as asbestos waste (STP23, STP34, STP35, STP36 and STP37). The designated asbestos waste stockpiles were located on a sealed surface within the Road Reserve and was lined with geofabric to prevent cross contamination to the ground surface. The asbestos waste stockpiles were deliberately positioned above an area that had already been confirmed as being impacted with asbestos and was earmarked for future remediation works as detailed in the Lot C and Road Reserve remediation strategy (SLR reference: 680.10679-R04-v5.0).
- The majority of spoil from Lot B3 was stockpiled at designated locations on the Road Reserve. The stockpiles were screened to remove geotechnically unsuitable anthropogenic waste materials such as construction and demolition rubble.
- Various abandoned underground services including stormwater, sewer pipes, water distribution pipes, electrical and communication cables, were removed from Lot B3. ACM fragments and soils impacted with ACM were segregated and stockpiled at designated asbestos waste stockpiles. Upon underground services removal, the resultant trenches were visually inspected for evidence of any residual ACM.
- No stained or odorous soils were encountered across the allotment during earthworks.
- Excavated areas in Lot B3 were reinstated with screened and stockpiled spoil characterised as being suitable for Site reuse. The surface of each 200mm lift of reinstated material was visually inspected for the presence of any ACM. Asbestos clearance certificates are provided in **Appendix C**.
- Asbestos impacted soil observed around the “live” sewer riser located across the south-eastern corner of Lot B3 and north-eastern corner of Lot B2, was removed. All impacted soils were loaded directly onto asbestos bin for appropriate offsite disposal.
- A “live” sewer main is located along the eastern boundary of Lot B3. Remediation works within 3m of this boundary were limited due to the presence of this underground service and potential destabilisation of fences, retaining walls and neighbouring structures. Remediation works conducted in this area included topsoil stripping (to a depth of 0.3m) and targeted removal of soil where asbestos impact was visually determined (e.g., around the sewer riser).

4.3.2 Summary of Analytical Results

A tabulated summary of the analytical laboratory results is included in **Appendix G** and certified laboratory certificates are provided in **Appendix H**.

A summary of the validation samples collected for Lot B3 is provided in **Table 8**. Sample locations are shown on **Figure 5 (Appendix A)**. A summary of analytical results is as follows.

- A total of 130 validation samples were collected from the excavation base on Lot B3. Of the samples collected, 65 samples were submitted for laboratory analyses. All samples that were submitted for laboratory analysis reported concentrations of COPC below the nominated ILs except for samples Val-94 and Val-149. Chrysotile asbestos was identified in sample Val-94, and both chrysotile and amosite asbestos were identified in sample Val-149.
    - Further excavation was undertaken around sample location Val-94 that extended the depth of the excavation 0.3 m into the natural reworked soils across an area of approximately 50 m^2. Three additional samples were collected from the resultant excavation (Val-94-1, Val-94-2, Val-94-3). No asbestos was detected in the additional samples collected.

- Further excavation was also undertaken around sample location Val-149 that extended the depth of the excavation 0.3 m into the natural reworked soils across an area of approximately 50 m^2. Three additional samples were collected from the resultant excavation (Val-149-1, Val-149-2 and Val-149-3). No asbestos was detected in the additional samples collected.

- A total of 50 samples were collected from the walls/bases of excavations resulting from the removal of underground services. All samples were submitted for laboratory analyses and reported concentrations of COPC below the nominated ILs except for sample Val-T-01. Chrysotile asbestos was identified in sample Val-T-01. Further excavation was undertaken around this sample location that extended the depth of the excavation 0.3 m into the natural reworked soils across an area of approximately 20 m^2 and an additional sample was collected from the resultant excavation (Val-T-1a). Asbestos was not detected in the additional sample collected.
- Validation samples were collected after removing the asbestos impacted soil around the "live" sewer riser and submitted for laboratory analyses. Four samples were collected from the base surface of the excavated area and one sample was collected from each wall of the excavation. Asbestos was detected in the eastern wall sample. This sample is located on the eastern boundary of the site and as such further removal works could not be undertaken as this would involve encroaching on neighbouring properties.
- Concentrations of OCPs were detected in a number of validation samples submitted for analyses. The concentrations detected are below the nominated ILs. Compounds detected included aldrin, dieldrin and chlordane.
- Metals were detected in all validation samples submitted for analyses. The concentrations detected are below the nominated ILs. Metals detected included arsenic, lead, total chromium, copper, nickel and zinc.
- Hydrocarbons (TPH/TRH), BTEXN and PAH compounds were not detected in any of the samples submitted for laboratory analyses.

Table 8 Validation and characterisation Samples in Lot B3

Locations	Samples Collected	Analysis
Base validation samples	Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-95, Val-96, Val-98, Val-100, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130, Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173, Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	*Presence/absence of asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals
	Val-93, Val-95, Val-169,	Presence/absence of asbestos in soils

Locations	Samples Collected	Analysis
	Val-57, Val-59, Val-61, Val-63, Val-65, Val-67, Val-69, Val-71, Val-73, Val-75, Val-77, Val-78, Val-80, Val-82, Val-84, Val-86, Val-88, Val-89, Val-91, Val-97, Val-99, Val-101, Val-103, Val-105, Val-107, Val-109, Val-111, Val-113, Val-115, Val-117, Val-119, Val-121, Val-123, Val-125, Val-127, Val-129, Val-131, Val-132, Val-134, Val-136, Val-138, Val-140, Val-142, Val-144, Val-146, Val-148, Val-150, Val-152, Val-154, Val-156, Val-158, Val-160, Val-162, Val-164, Val-166, Val-168, Val-170, Val-172, Val-174, Val-176, Val-178, Val-180, Val-182, Val-184	On hold
Hotspot (Val-94) validation sampling	Val-94-1, Val-94-2, Val-94-3	Presence/absence of asbestos in soils
Hotspot (Val-149) validation sampling	Val-149-1, Val-149-2, Val-149-3	Presence/absence of asbestos in soils
Trench wall/base samples	Val-T-01, Val-T-02, Val-T-03 Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17 Val-T-18 Val-T-19 Val-T-20 Val-T-21 Val-T-22 Val-T-23 Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40, Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47 Val-T-48, Val-T-49, and Val-T-50	*Presence/absence of asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals
Hotspot (Val-T-01) validation sample	Val-T-01a	Presence/absence of asbestos in soils
Sewer riser validation samples	Sewer-Wall-1, Sewer-Wall-2, Sewer-Wall-3, Sewer-Val-1, Sewer-Val-3,	Presence/absence of asbestos in soils
	Sewer-Wall-4, Sewer-Val-2, Sewer-Val-4	On hold
Field QC samples – field duplicates	QC19/Val-159 QC20/Val-171 QC21/Val-179 QC22/Val-181 QC23/Val-185	*TPH/TRH *PAHs *BTEXN *OCP/OPP *metals
Field QC samples – rinsate blanks	RB01 (8-Sep-20) RB02 (10-Sep-20) RB03 (11-Sep-20) RB04 (14-Sep-20)	*metals (filtered)

4.3.3 Clearance Inspections

Visual inspections were conducted after each lift of spoil during the reinstatement of the excavations. No visual evidence of asbestos was identified on the surface of any of the lifts. The visual clearance certificate is attached in **Appendix C**.

4.4 Spoil Management

Details of the stockpiles generated and their fate are summarised in **Table 9**. Comparison of the stockpile analytical results to the nominated ILs are included in **Appendix G.** Certified laboratory certificates are included in **Appendix H**.

Table 9 Stockpile Summary

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP ORG-1	80m^3	Organic waste material scrapped from Lot B1.	STP- ORG-1-1, STP-ORG-1-2, STP- ORG-1-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Shoal Bay Waste Management Facility (SBWMF) – clean fill (geotechnically unsuitable for Site reuse)
STP- ORG-2	300m^3	Organic waste material (topsoil, grass and weeds) cleared from scrapping the surface of Lots B2 and B3.	STP- ORG-2-1, STP-ORG-2-3, STP- ORG-2-3, STP- ORG-2-4, STP-ORG-2-5, STP- ORG-2-6, STP- ORG-2-7, STP-ORG-2-8, STP-ORG-2-9, STP-ORG-2-10, QC7 (field duplicate of STP-ORD2-2)	*Asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals *Asbestos id in bulk material	COPC<ILs	SBWMF – clean fill (geotechnically unsuitable for Site reuse)
STP1	60m^3	Concrete rubble and soil.	STP1-1, STP1-2, STP1-3	*Asbestos in soils *FA/AF *PAHs *TPH/TRH *BTEXN *OCP/OPP *metals	COPC<ILs	Crushed and reused on Site.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP2	360m^3	Screened spoil from Lot B1.	STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, QU1-DUP (field duplicate of STP2-4)	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Reused on Site.
STP3	30m^3	Screened spoil from Lot B1	STP3-1, STP3-2, STP3-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Consolidated into STP13.
STP4	90m^3	Screened spoil from Lot B1.	STP4-1, STP4-2, STP4-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Asbestos detected in one sample (STP4-3). FA/AF w/w% = 0.005 which is above the nominated IL. *All other COPC<ILs	Consolidated into STP13.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP5	265m^3	Asbestos impacted soil and ACM waste predominately from Lot B1 and Lot B2.	STP5-1, STP5-2, STP5-3, STP5-INSO*[1]	*Asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals *Asbestos id in bulk material	ACM confirmed to be chrysolite	SBWMF – "special waste – asbestos"
STP6	375m^3	Screened soil from Lot B1.	STP6-1, STP6-2, STP6-3, STP6-4 STP6-5, STP6-6, CHAR-STP	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals *Characterisation as per the ASC NEPM	COPC<ILs	Reused on Site.
STP7	450m^3	Screened spoil from Lot B1.	STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6 STP7-7, STP7-11	*Asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals *Asbestos id in bulk material	Asbestos fragments confirmed in one sample (STP7-1). Additional sieve testing of the stockpile did not identify any further bonded asbestos fragments. Based on agreed stockpile validation approach with the auditor this stockpile was considered suitable for Site reuse. *AF/FA was not detected in original samples. *Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs	Reused on Site.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP8	60m^3	Waste material (e.g. concrete, reinforced steel, etc) generated when screening spoil from Lot B1.	STP8-1, STP8-2, STP8-3, STP8-4 , QC6 (field duplicate of STP8-1)	*Asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs	SBWMF – general waste (geotechnically unsuitable for Site reuse)
STP9	130m^3	Waste material (e.g. concrete, etc) generated when screening spoil from Lot B2 and Lot B3.	STP9-1, STP9-2, STP9-3, STP9-4, STP9-5	*Asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	SBWMF – general waste (geotechnically unsuitable for Site reuse)
STP10	375m^3	Screened spoil from Lot B1.	STP10-1, STP10-2, STP10-3, STP10-4, STP10-5, STP10-6, STP10-7, STP10-8, STP10-9, STP10-11, STP10-12, QC8 (field duplicate of QC10-1)	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals *Asbestos id in bulk material	*Asbestos containing fragments confirmed in original samples (STP10-3, STP10-4 and STP10-6) *Stockpile resampled however asbestos containing fragments were found in two of the additional samples (STP10-9 and STP10-10) and asbestos in soil was confirmed in STP10-9. *Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	Auditor endorsed proposal regarding the management of this stockpile (verbal confirmation received from Jean-Paul Pearce on 7 August 2020). Impacted section of STP10 (10m^3) had been removed (11 August 2020) to STP5 and resultant residual stockpile (STP10A) was created.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP10A	365m^3	Screened spoil. STP10A is the residual stockpile after 10m^3 of asbestos impacted soil was removed from STP10.	STP10A-1, STP10A-2, STP10A-3, STP10A-4, STP10A-5, STP10A-6	*Asbestos in soils *FA/AF	COPC<ILs	Reused on Site.
STP11	390m^3	Screened spoil from Lot B1.	STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	Reused on Site
STP12	100m^3	Bitumen and surface soils scraped from Lot B2 and Lot B3.	STP12-1, STP12-2, STP12-3, STP12-4	*Asbestos in soils *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	SBWMF – general waste (geotechnically unsuitable for Site reuse)
STP13	120m^3	Consolidation of STP3 and STP4.	STP13-1, STP13-2, STP13-3, STP13-4 STP13-5, STP13-6	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs.	Reused on Site.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP14	150m^3	Surface soils from Lot B2	STP14-1, STP14-2, STP14-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC <ILs	SBWMF – clean fill (geotechnically unsuitable for Site reuse)
STP15	375m^3	Screened spoil from Lot B2.	STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17 (field duplicate of STP15-1)	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals *Asbestos id in bulk material	*Asbestos fragments detected in two samples (STP15-3, STP15-5) *Asbestos detected in one sample (STP15-6). FA/AF w/w% = 0.002 which is above the nominated IL. *Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	Impacted portion of STP15 (9m^3) removed to asbestos waste stockpile and resultant residual stockpile (STP15A) was created.
STP15A	367m^3	Screened spoil. STP15A is the residual stockpile after 9m^3 of asbestos impacted soil was removed from STP15.	STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	Reused on Site.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP16	175m^3	Screened spoil from Lot B2.	STP16-1, STP16-2, STP16-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*asbestos fines detected in one sample (STP16-2). FA/AF w/w% = 0.001 which is equivalent to the nominated IL. *All other COPC<ILs	As per agreement with the Auditor, section where asbestos fines were detected at concentrations equal to the nominated IL were removed (10m^3) to the asbestos waste stockpile and resultant residual stockpile (STP16A) was created.
STP16A*	165m^3	Screened spoil. STP16A is the residual stockpile after 10$m^3$of asbestos impacted soil was removed from STP16.	STP16A-1a, STP16A-2a	*Asbestos in soils	*Asbestos fragments and asbestos fines reported in sample STP16-2a.	Additional asbestos impacted soil was removed from STP16A (2m^3) to the asbestos waste stockpile and resultant residual stockpile (STP16B) was created.
STP16B*	163m^3	Screened spoil. STP16B is the residual stockpile after 2m^3 of asbestos impacted soil was removed from STP16A.	STP16B-1b, STP16B-2b, STP16B-3b, STP16B-4b, STP16B-5b, STP16B-6b	*Asbestos in soils	*Asbestos fragments and/or asbestos fiber bundles reported in samples STP16B-1b, STP16B-3b, STP16B-4b, STP16B-5b, STP16B-6b.	SBWMF – “special waste – asbestos”

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP17	350m^3	Screened spoil from Lot B2.	STP17-1, STP17-2, STP17-3, STP17-4, STP17-5	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals *Asbestos id in bulk material	*Asbestos fines detected in soil sample (STP17-3) however the FA/AF w/w% is calculated to be less than the nominated IL. *Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	Reused on Site.
STP18	375m^3	Screened spoil from Lot B2.	STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs	Reused on Site.
STP19	50m^3	Screened spoil from Lot B2.	STP19-1, STP19-2, STP19-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Asbestos fines detected in one sample (STP19-2) at concentrations below the FA/AF nominated IL. *Chromium detected above average concentration IL in soil samples collected from stockpile STP19. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	Reused on Site.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP20	560m^3	Screened spoil from Lot B2.	STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	Reused on Site.
STP21	100m^3	Screened spoil from Lot B2. Spoil generated when removing utility service lines.	STP21-1, STP21-2, STP21-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Asbestos fines detected in one sample (STP21-1) at concentrations above the FA/AF nominated IL.	Impacted portion of STP21 (5m^3) removed to asbestos waste stockpile and resultant residual stockpile (STP21A) was created.
STP21A*	95m	Screened spoil from Lot B2. STP21A is the residual stockpile after 5m^3 of asbestos impacted soil was removed from STP21.	STP21A-1a, STP21A-2a, STP21A-3a	*Asbestos in soils	*Asbestos fibres were detected in one sample (STP21A-3).	Additional impacted soil (5m^3) was removed from STP21A and resultant residual stockpile (STP21B) was created.
STP21B*	90m^3	Screened spoil from Lot B2. STP21B is the residual stockpile after 5m^3 of asbestos impacted soil was removed from STP21A.	STP21B-1b, STP21B-2b, STP21B-3b, STP21B-4b, STP21B-5b, STP21B-6b	*Asbestos in soils	*Asbestos fibres detected in three samples (STP21B-3b, STP21B-4b and STP21B-6b).	SBWMF – “special waste – asbestos”

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP22	80m^3	Screened spoil from Lot B2. Spoil generated when removing utility service lines.	STP22-1, STP22-2, STP22-3, STP22-4, STP22-5, STP22-6, STP22-7	*presence/absence of asbestos only	COPC<ILs.	Reused on Site.
STP23	15m^3	Asbestos waste from Lot B3 and around sewer riser located on Lot B2.	Asbestos stockpile	NA	NA	SBWMF – "special waste – asbestos"
STP24	400m^3	Screened spoil from Lot B3.	STP24-1, STP24-2, STP24-3, STP24-4, STP24-5, STP24-6, QC18 (field duplicate of STP24-5)	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs	Reused on Site.
STP25	270m^3	Screened spoil from Lot B3.	STP25-1, STP25-2, STP25-3, STP25-4	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Reused on Site.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP26	450m^3	Screened spoil from Lot B3.	STP26-1, STP26-2, STP26-3, STP26-4, STP26-5, STP26-6, STP26-7	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Reused on Site.
STP27	335m^3	Screened spoil from Lot B3.	STP27-1, STP27-2, STP27-3, STP27-4, STP27-5	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Reused onsite.
STP28	390m^3	Screened spoil from Lot B3.	STP28-1, STP28-2, STP28-3, STP28-4 STP28-5, STP28-6	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Reused onsite.
STP29	60m^3	Screened spoil from Lot B3.	STP29-1, STP29-2, STP29-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Reused onsite.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP30	420m^3	Screened spoil from Lot B3.	STP30-1, STP30-2, STP30-3, STP30-4, STP30-5, STP30-6	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Asbestos fines detected in one sample (STP30-3) at concentrations below the FA/AF nominated IL. *All other COPC<ILs.	Reused onsite.
STP31	65m^3	Screened spoil from Lot B3.	STP31-1, STP31-2, STP31-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Chromium detected above average concentration IL. Considered to be indicative of natural soil conditions. *All other COPC<ILs.	Reused on Site.
STP32	24m^3	Screened spoil from Lot B3.	STP32-1, STP32-2, STP32-3, QC29 (field duplicate of STP32-03)	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *PAHs *BTEXN *OCP/OPP *metals	COPC<ILs	Reused on Site.

Stockpile identification	Volume m^3	Description	Characterisation samples	Analysis	Summary of Analytical Results	Final Status
STP33	$18m^3$	Waste material (e.g. concrete, etc) generated when screening spoil from Lot B3.	STP33-1, STP33-2, STP33-3	*Asbestos in soils *FA/AF *TPH/TRH *PAHs *BTEXN *OCP/OPP *metals	*Asbestos fines detected in one sample (STP33-3) at concentrations equal to the FA/AF nominated IL. *All other COPC<ILs	SBWMF - "special waste – asbestos"
STP34	$5.12m^3$	Asbestos waste from Lot B3.	Asbestos stockpile	NA	NA	SBWMF – "special waste – asbestos"
STP35	$3.5m^3$	Asbestos waste from Lot B3.	Asbestos stockpile	NA	NA	SBWMF – "special waste – asbestos"
STP36	$13.5m^3$	Asbestos waste from Lot B3.	Asbestos stockpile	NA	NA	SBWMF – "special waste – asbestos"
STP37	$0.5m^3$	Asbestos waste from Lot B3.	Asbestos stockpile	NA	NA	SBWMF – "special waste – asbestos"

Designated asbestos waste stockpiles included STP5, STP23, STP34, STP35, STP36 and STP37. Of the stockpiles not designated as asbestos waste, only stockpiles STP10, STP15, STP16 and STP21 reported asbestos impact above the nominated IL in the first round of characterisation sampling. For each of these stockpiles, a portion of spoil was removed from the location where the sample reported asbestos impact above the nominated IL. The asbestos impacted spoil was transferred to the designated asbestos waste stockpile. The remaining stockpile volume was then resampled in its entirety to determine the presence of residual asbestos impact. For stockpiles STP10 and STP15, this process was sufficient to ensure that they were suitable for reuse on Site. For stockpiles STP16 and STP21, continued detection of asbestos impact above the IL meant that these stockpiles required offsite disposal as asbestos waste.

Concentrations of OCP were detected in all stockpiles except stockpile STP14. The concentrations detected were below the nominated ILs. Compounds detected included aldrin and dieldrin and to a lesser extent chlordane and heptachlor. Chlorpyrifos (OPP) was also detected in stockpile STP6 albeit at concentrations below the nominated IL.

Metals were detected in all stockpiles. The concentrations detected were below the nominated ILs. Metals detected included arsenic, lead, total chromium copper, nickel and zinc.

Hydrocarbons (TPH C_{29}-C_{36}) were detected in stockpile STP12, which comprised of bitumen material scraped from Lots B2 and B3. The concentrations detected were below the nominated IL. Hydrocarbons (TPH $C_{15} – C_{28}$) were detected in stockpile STP14. The source of hydrocarbon is unclear as this stockpile comprised of spoil from Lot B2. The concentrations detected are below the nominated IL. Both stockpiles STP12 and STP14 were disposed of to the Shoal Bay Waste Management Facility (SBWMF).

SBWMF disposal dockets are included in **Appendix J**.

4.4.1 Cross contamination potential

To demonstrate that all stockpiles containing asbestos were adequately removed from the Site, surface samples were collected from the areas where asbestos waste stockpiles were stored. Validation samples collected did not report any asbestos impact thereby confirming that the asbestos waste stockpiles were adequately removed from the Site and did not cross contaminate the surface where they were stored.

The details of these samples are summarised in **Table 10**. Comparison of the stockpile analytical results to the nominated ILs are included in **Appendix G.** Certified laboratory certificates are included in **Appendix H**.

Table 10 Surface samples collected beneath former asbestos waste stockpiles

Stockpile identification	Surface validation samples
STP5	VS01, VS02, VS03, VS04, VS05, VS06, VS07 and VS08. Refer to Figure 4 for sample locations.
STP21	STP21-val-01, STP21-val-02, STP21-val-03 (located within Project Area on proposed allotment referred to as ”Road Reserve”)
STP34	STP34-Val-1 (located within Project Area on proposed allotment referred to as ”Road Reserve”)
STP35	STP35-Val-1 (located within Project Area on proposed allotment referred to as ”Road Reserve”)
STP36	STP36-Val-1 (located within Project Area on proposed allotment referred to as ”Road Reserve”)
STP37	STP37-Val-1 (located within Project Area on proposed allotment referred to as ”Road Reserve”)

4.5 Air Monitoring

Air monitoring for airborne fibres was conducted for each day intrusive works were carried as part of the remediation works (20 July – 28 September 2020). Monitoring results did not report airborne fibres above the detection limit of the method used, which is 0.01 fibres/ml. Air monitoring reports are included in **Appendix I.**

4.6 Data Quality Review

4.6.1 Field Duplicate Samples

Table 11 outlines the primary and duplicate sample combinations collected and submitted for analyses during the remediation and validation work undertaken across the Site. Results are summarised in the analytical tables included in **Appendix G.** Certified laboratory certificates are included in **Appendix H**.

Table 11 Summary of QC Combinations

Parent samples	Duplicate
STP2-4	QU1-DUP
V10	QC2
V30	QC3
V50	QC4
V70	QC5
STP-8-1	QC6
STP-ORG2-2	QC7
STP10-1	QC8
V90	QC9
V110	QC10
V130	QC11
V150	QC12
V170	QC13
V190	QC15
V210	QC16
STP15-1	QC17
STP24-5	QC18
VaL-159	QC19
Val-171	QC20
Val-179	QC21
Val-181	QC22
Val-185	QC23
STP32-03	QC29

Except for the analytes listed below in **Table 12**, the remaining relative percent differences (RPDs) were considered acceptable for the primary and duplicate sample combinations. For this investigation, a 50% RPD acceptance criteria has been adopted.

Table 12 Summary of RPDs exceeding the acceptable limit

Parent sample	Sample date	Duplicate	Analyte	RPD %
STP2-4	21-07-2020	QUI-DUP	Chromium (III+IV)	78%
			Zinc	56%
STP8-1	27-07-2020	QC6	Dieldrin	57%
STP10-1	28-07-2020	QC8	Zinc	100%
STP15-1	04-08-2020	QC17	Dieldrin	58%
			Chlordane	57%
V130	05-08-2020	QC10	Dieldrin	109%
V150	05-08-2020	QC12	Chromium (III+IV)	74%
			Zinc	151%
Val-171	10-09-2020	QC20	Moisture content	112%
			Chromium (III+IV)	68%
			Chlordane	117%
			Dieldrin	156%
Val-179	10-09-2020	QC21	Moisture content	68%
			Zinc	82%
			Chlordane	138%
Val-181	10-09-2020	QC22	Chromium (III+IV)	75%
Val-185	10-09-2020	QC23	Moisture content	144%
STP33-02	18-09-2020	QC29	Zinc	140%

SLR considers the elevated RPDs reported in the sample combinations listed in **Table 12** to be representative of the heterogenous nature of the soils encountered across the Site.

4.6.2 Equipment Rinsates

Table 13 lists the 18 equipment rinsate blanks that were collected and analysed for quality assurance purposes. No analytes were detected at concentrations exceeding the laboratory's limit of reporting. Certified laboratory certificates are included in **Appendix H**.

Table 13 List of equipment rinsate blanks

QC Type	Sample identification (date collected)
Equipment rinsate blanks	RINSATE (21-Jul-20) RINSATE (23-07-2020) RINSATE (27-Jul-20) RINSATE (28-Jul-20) RINSATE 4/08/2020 (4-Aug-20) RINSATE 5/08/2020 (5-Aug-20) RINSATE 6/08/2020 (6-Aug-20) RINSATE (12-Aug-2020) RIN14 (14-Aug-20) RIN17 (17-Aug-20) RINSATE (20-Aug-20) RINSATE (2-SEP-20) RB01 (8-Sep-20) RB02 (10-Sep-20) RB03 (11-Sep-20) RB04 (14-Sep-20) RB05 (14-Sep-20) RINSATE (18-SEP-20)

5 Conceptual Site Model

The Site's Conceptual Site Model (CSM) has been updated taking into account the remediation and validation works conducted at the Site (and presented in this report), as well as the results from previous environmental investigations undertaken at the Site.

The CSM prepared for the Site and its surrounds is presented in **Table 14**.

In developing the CSM, the following points were considered.

- All known asbestos impact at the Site has been remediated and resultant excavations have been validated through either soil and/or visual clearance inspections, as detailed in this report.
- Pesticide soil impact previously identified at the Site (Greencap September and October 2019) was reported to be relocated to the commercial allotment (i.e. Lot A, proposed police station) (Agon DSI 2020). Soil samples collected during the Site's remediation and validation works conducted by SLR (and presented in this report), did not report any pesticide impact above the nominated ILs specified for residential land use. As such, pesticides are no longer considered a COPC for the Site.

- Heavy metals such as arsenic, copper, lead, nickel, zinc and total chromium were detected in validation samples collected located across the Site (resulted presented in this report). None of the concentrations detected exceeded the health-based and/or ecological ILs specified for residential land use. Elevated arsenic and total chromium concentrations were reported across the Site, however further analyses confirmed that concentrations detected are indicative of natural soil conditions (SLR DSI 2020). Heavy metal impact (nickel, exceeded the EIL specified for urban residential and public open space land uses) was only detected in one sample collected from the Site during previous investigations (Agon DSI 2020). This area has been subsequently remediated and validated as part of the works conducted by SLR. Given that the concentration detected was below the human health IL for residential land uses and the level of remediation works conducted, heavy metals are not considered COPC for soil conditions at the Site.
- Groundwater beneath the wider Project Area was intersected at depths between 2.69 and 3.79 mbgl and inferred to flow in a westerly direction towards coastal mangrove community and outer estuary of Darwin Harbor (located approximately 160 m from the Project Area) (Agon DSI 2020). According to the Agon DSI report (2020), groundwater samples reported dissolved heavy metal concentrations above the nominated ILs adopted for assessing potential impacts to groundwater users and marine aquatic ecosystems.
- Future users of the Site will not extract and use groundwater from beneath the Site and as such groundwater impact in the form of dissolved heavy metals, is not considered to pose an exposure risk to future users of Lots B1, B2 and B3.

Table 14 Conceptual Site Model

Sources		Exposure	Receptors			Complete Source-Pathway-Receptor Linkage
Primary Source	Secondary Sources	Transport Mechanism Possible and Routes of Exposure	Person or Ecological Receptor Potentially Exposed	Receptor Present		
				On-site	Off-site	
None – all known primary sources of impact (i.e. uncontrolled fill, building material and services made out of ACM) have been removed from the Site.	Soil contamination: • None. All known soil impacts (i.e. asbestos) have been removed and resultant excavations validated. Note: Asbestos detected in fill material on neighbouring properties to the east of the Site.	Dispersion • Uptake via plants • Dermal contact • Incidental ingestion • Leaching via percolation Wind Erosion: • Inhalation of dusts Volatilisation • Inhalation	Residents	×	✓	× *does not exist as all known sources have been removed
			Commercial workers	×	✓	× *does not exist as all known sources have been removed
			Intrusive workers	✓	✓	× *does not exist as all known sources have been removed
			People in open spaces	✓	✓	× *does not exist as all known sources have been removed
			Ecological receptors (terrestrial biota)	✓	✓	× *does not exist as all known sources have been removed
	Groundwater Contamination: • Heavy metals	Migration of groundwater and its extraction • Dermal contact	Residents	×	✓	× *although bores exist within the locality, the SPR linkage is not considered viable as groundwater within the locality is not expected to be used for domestic purposes especially given the availability of a reticulated, treated (mains) water supply and low groundwater yield.

Sources		Exposure	Receptors			Complete Source-Pathway-Receptor Linkage
Primary Source	Secondary Sources	Transport Mechanism Possible and Routes of Exposure	Person or Ecological Receptor Potentially Exposed	Receptor Present		
				On-site	Off-site	
		• Incidental ingestion • Inhalation • Terrestrial/ aquatic Groundwater impact is not volatile and therefore exposure pathway associated with the "migration of groundwater – volatilisation – inhalation" is not considered to exist.	Commercial workers	✗	✓	✗ *although bores exist within the locality, the SPR linkage is not considered viable as groundwater within the locality is not expected to be used for commercial purposes especially given the availability of a reticulated, treated (mains) water supply and low groundwater yield. There is no design to establish a bore onsite for future users of the Site.
			Intrusive workers	✓	✓	✗ *does not exist as groundwater is located at depths greater than 2.69 mbgl and as such is unlikely to enter typical excavations/underground service pits located either on site or within the surrounding locality.
			People in open spaces	✓	✓	✗ *does not exist as groundwater is not expected to be used by users of public open spaces.
			Ecological receptors (terrestrial and aquatic biota)	✗ (terrestrial only)	✓	**Potentially Complete** *possible that ground impact (dissolved heavy metals) could migrate offsite to the coastal mangrove communities located approximately 160 m west of the Project Area.

6 Future Site Management Considerations

A "live" sewer main is located along the eastern boundaries of both Lots B2 and B3, and along the southern boundary of Lot B2. Remediation works within 3m of these boundaries were limited due to the presence of this underground service and potential destabilisation of neighbouring fences, retaining walls and structures (e.g., sheds). Remediation works conducted in this area included topsoil stripping (to a depth of 0.3m) and targeted removal of soil where asbestos impact was visually determined (e.g., around the sewer riser).

Contractors conducting works associated with the removal/upgrade of these "live" services were advised to employ precautionary measures such as having safe work method statements and/or work-specific management plans addressing exposure to potentially asbestos impacted soils, unexpected finds protocol and associated training, to ensure workers understood the controls required to be implemented in the unlikely event unexpected asbestos was encountered.

Results of the remediation and validation works associated with the removal/upgrade of the sewer main along the southern boundary of the Site, that were overseen by SLR, are presented in the addendum report titled *"Sewer Easement Remediation and Validation Report, John Stokes Square Redevelopment Lots B1, B2 and B3"*, December 2021 (ref: 680.10679.00200_R13) and should be read in conjunction with this report.

7 Conclusion

Based on the field observations and analytical results obtained for the remediation and validation works conducted at the Site, SLR considers that Lots B1, B2 and B3 are suitably remediated and validated for the proposed high density residential land use, subject to the considerations outlined in this report.

8 Limitations

The following information will assist in understanding the uncertainties relating to the interpretation of the data obtained during this investigation and the recommendations presented in the report and help with assessment and interpretation of the report.

SLR assumes no responsibility for the quality or accuracy of data obtained from external sources, or for occurrences outside the scope of works defined in this report.

All work conducted, and reports produced by SLR are prepared for a particular Client's objective and are based on a specific scope, conditions and limitations, as agreed upon between SLR and the Client. Information and/or report(s) prepared by SLR may therefore not be suitable for any use other than the intended objective.

Before passing on to a third party any information and/or report(s) prepared by SLR, the Client is to inform fully the third party of the objective and scope, and all limitations and conditions, including any other relevant information which applies to the information and/or report(s) prepared by SLR.

It is the responsibility of third parties to investigate fully to their satisfaction if any information and/or report(s) prepared by SLR, is suitable for a specific objective.

Services were conducted in a conscientious and professional manner. The nature of the task, however, and the likely disproportion between any damage or loss which might arise from the work and any report prepared as a result and the cost of our services is such that SLR cannot guarantee that all issues of concern/contamination have been identified.

The report(s) and/or information produced by SLR should not be reproduced and/or presented/reviewed except in full.

9 References

Agon 2020 *"Detailed Site Investigation"* February 2020

AS 4482.1-2005 "*Guide to the Sampling and Investigation of Potentially Contaminated Soil. Part 1: Non-volatile and semi-volatile compounds"*

ASC NEPM 2013, *"National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended in 2013"*. National Environment Protection Council.

Douglas Partners 2019 "Report on Geotechnical Investigations John Stokes Square Development Lot 9077 Progress Drive Nightcliff" November 2019

Greencap 2019a *"Limited Soil Investigation"* July 2019

Greencap 2019b *"Detailed Soil Investigation"* September 2019

Greencap 2019c *"Additional Soil Investigation"* October 2019

NSW EPA 2014b *"Waste Classification Guidelines, Part 1: Classifying waste"*

NT EPA 2017, "*Northern Territory Contaminated Land Guideline."* Northern Territory Environment Protection Authority. Norther Territory of Australia.

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WA Department of Health 2009, *"Guidelines for the assessment, Remediation and management of Asbestos-contaminated sites in Western Australia".*

WA Department of Health 2019, "*Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, Consultation Draft"*, November 2019.

APPENDIX A

Figures

0 50 100 m

Proposed Residential Allotments

Project Area

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:3,000 at A4
Project Number:	680.10679
Date:	28-Jan-2021
Drawn by:	JG

SLR

JOHN STOKES SQUARE

Location of Project Area

FIGURE 1

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680010679 F01 Location of Project Area.mxd

0 10 20 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:1,000 at A4
Project Number:	680.10679
Date:	01-Dec-2020
Drawn by:	JG

Future Land Use

- Commercial/Industrial
- Public Space
- Residential

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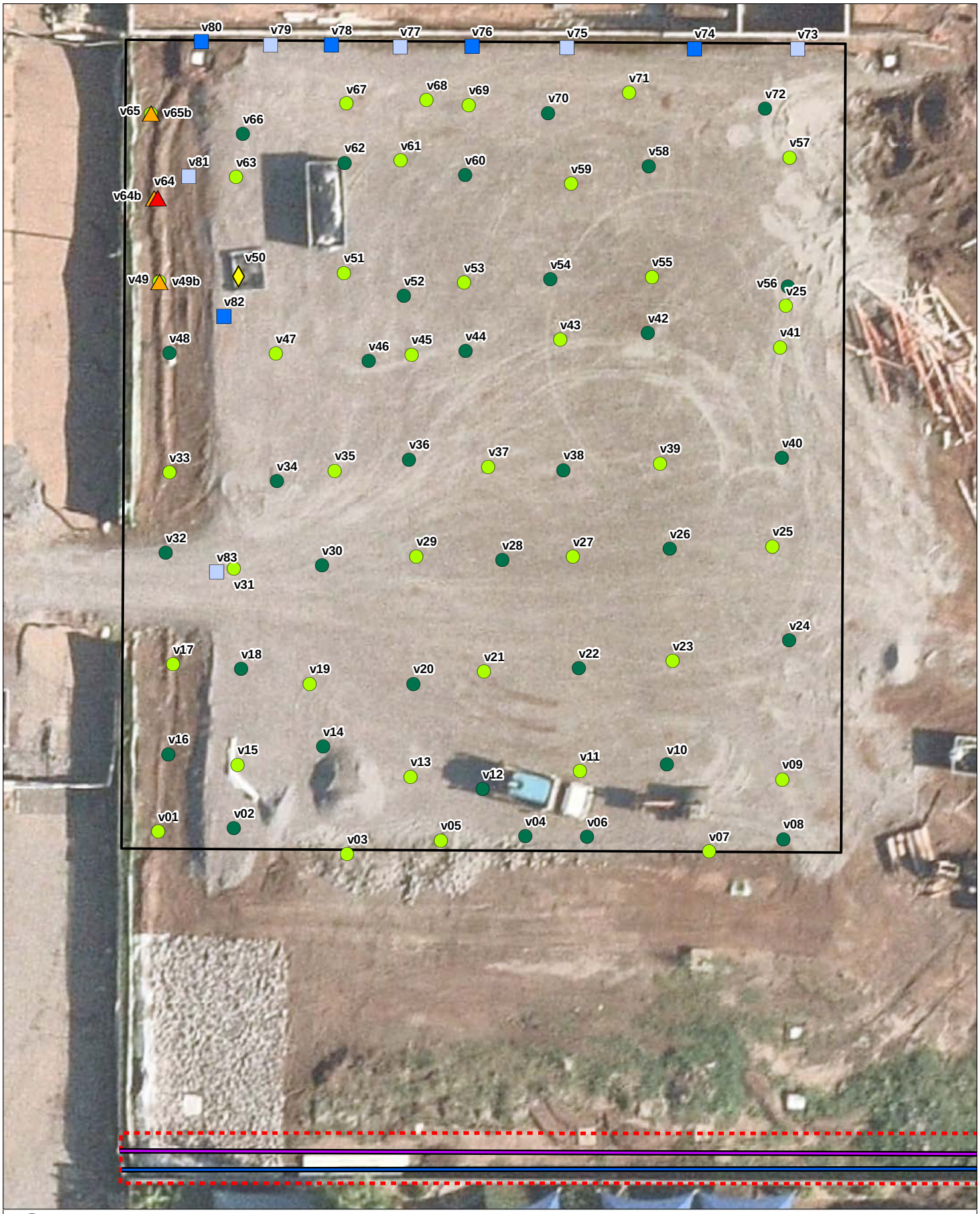
JOHN STOKES SQUARE

Location of the Site

FIGURE 2

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 Location of the Site.mxd



0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:300 at A4
Project Number:	680.10679
Date:	16-Feb-2021
Drawn by:	JG

SLR

- Hotspot Locations
- Hotspot Validation Samples
- Trench Wall Samples on Hold
- Trench Wall Samples Analysed
- CHAR-Val
- Surface Validation Samples on Hold
- Surface Validation Samples Analysed
- Live Sewer Pipe
- Live Stormwater Pipe
- Service Easement
- Proposed Allotment B1

JOHN STOKES SQUARE

Validation Sample Locations in Lot B1

FIGURE 3

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 F04 Validation Sampling Locations in Lot B1.mxd

0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:350 at A4
Project Number:	680.10679
Date:	19-Jan-2022
Drawn by:	JG

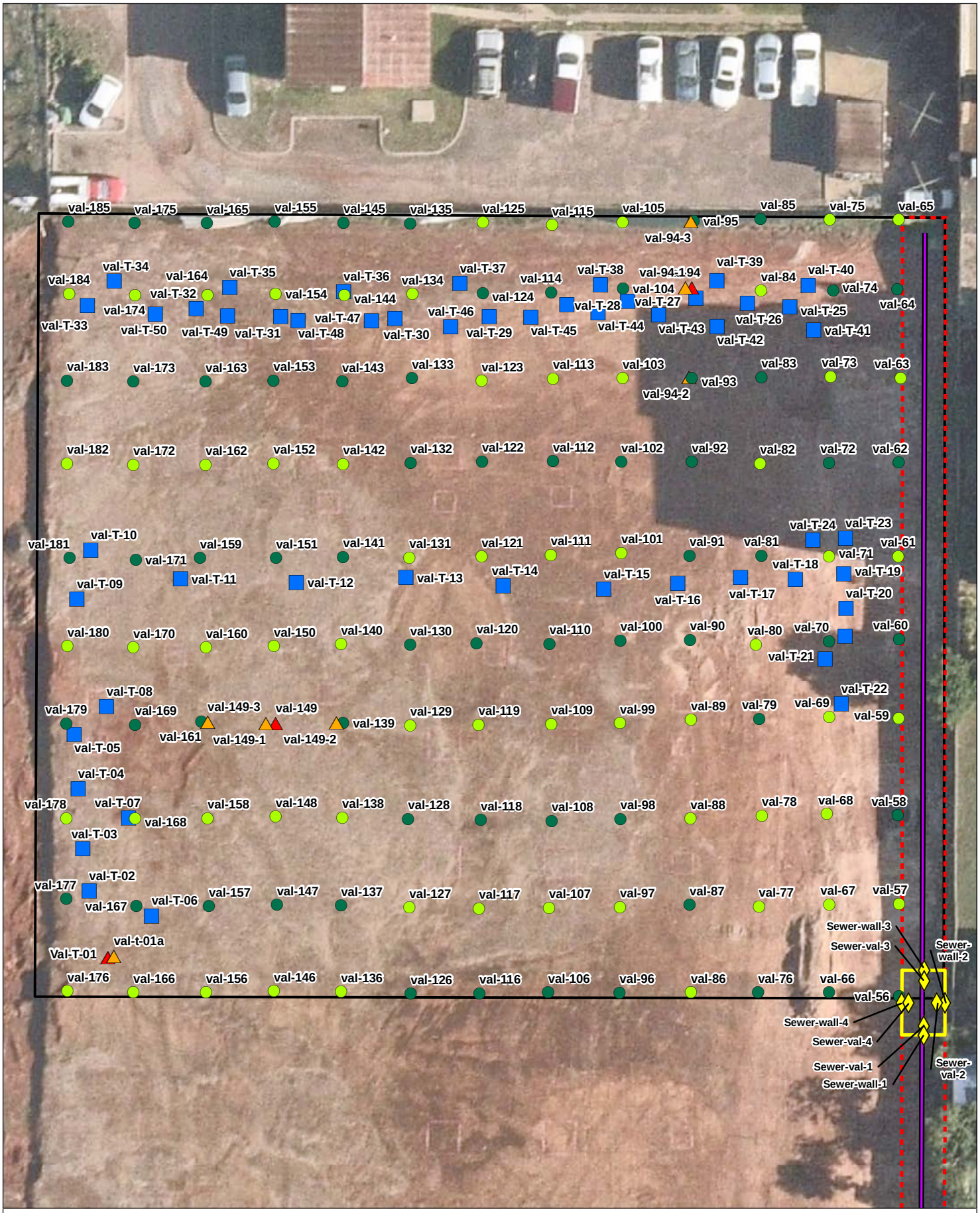
- Sewer Riser Sample Locations
- Asbestos Pipe Validation Samples
- Asbestos Pipe Validation Samples on Hold
- Hotspot Locations
- Hotspot Validation Sampling
- Stockpile Validation Samples
- Surface Validation Sampling Analysed
- Surface Validation Sampling on Hold
- Trench Wall Sampling
- Live Sewer Pipe
- Sewer Riser Area
- Service Easement
- Proposed Allotment B2

JOHN STOKES SQUARE

Validation Sampling Locations in Lot B2

FIGURE 4

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 F04 Validation Sampling Locations in Lot B2.mxd



0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:350 at A4
Project Number:	680.10679
Date:	19-Jan-2022
Drawn by:	JG

- Sewer Riser Sample Locations
- Hotspot Locations
- Hotspot Validation Sampling
- Surface Validation Sampling Analysed
- Surface Validation Sampling on Hold
- Trench Wall Sampling
- Live Sewer Pipe
- Sewer Riser Area
- Service Easement
- Proposed Allotment B3

JOHN STOKES SQUARE

Validation Sampling Locations in Lot B3

FIGURE 5

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 F05 Validation Sampling Locations in Lot B3.mxd

APPENDIX B

Remediation Strategy

Memorandum

To:	Bill Kmon	**At:**	Harris Kmon Solutions Pty Ltd
From:	Paul Turyn	**At:**	SLR Consulting Australia Pty Ltd
Date:	3 June 2020	**Ref:**	680.10679.00000-M04-v2.0 20200603.docx
Subject:	Remediation Strategy John Stokes Square - Residential Lots (Lots B1, B2 and B3)		

CONFIDENTIALITY

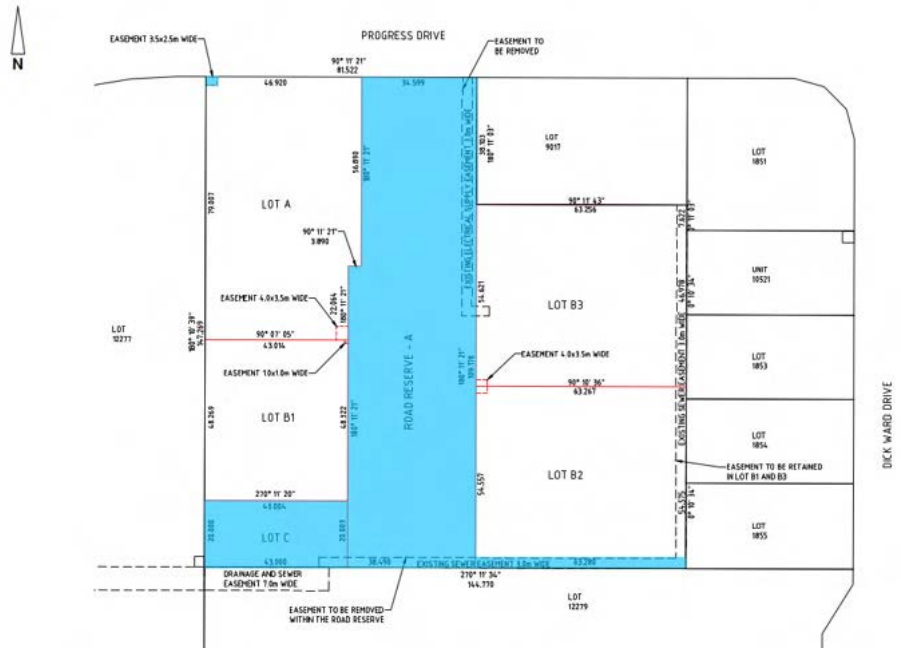
This document is confidential and may contain legally privileged information. If you are not a named or authorised recipient you must not read, copy, distribute or act in reliance on it. If you have received this document in error, please telephone our operator immediately and return the document by mail.

SLR Consulting Australia Pty Ltd (SLR) have been engaged to provide environmental consulting services to support the development works at John Stokes Square in Nightcliff of the Northern Territory. This technical memorandum is intended to provide the Contaminated Lands Auditor (CLA) with a proposed remediation strategy for review prior to commencement of works.

1 Background

John Stokes Square is a recently subdivided parcel of land in the suburb of Nightcliff. The location and subdivided land parcels are shown in **Figure 1.**

Figure 1 Layout and location of John Stokes Square (drawing provided by client)



Following subdivision, SLR understands that John Stokes Square will be subject to multiple future land uses, as described in **Table 1**. Investigation Levels (ILs) and remediation criteria will be applied as required for each area with consideration of these varying land uses.

Table 1 Proposed future land uses of John Stokes Square

Lots or Parcels as described in Figure 1	Proposed future landuse
Lot A	Commercial Industrial (Police Station)
Lots B1, B2, B3	High Density Residential
Road Reserve A, Lot C & blue easements	Land to be gifted to various Authorities unencumbered

Several previous environmental investigations have been undertaken at John Stokes Square, which SLR have reviewed to inform the development of this strategy, including:

- Limited Soil Investigation – Greencap, July 2019
- Detailed Soil Investigation – Greencap, September 2019
- Additional Soil Investigation – Greencap, October 2019
- Detailed Site Investigation – Agon, February 2020
- Detailed Site Investigation revision – Agon, April 2020

SLR understands that Agon Environmental (Agon) carried out remediation works across John Stokes Square, details of which are included within the Detailed Site Investigation report/s. SLR also understands that these works have been reviewed by CLA Jean-Paul Pearce and are considered reliable "with the exception of a minor issue regarding crushed concrete stockpile sampling, reuse and disposal" which is currently being resolved.

2 Scope

The strategy described in this technical memorandum is intended to support the development of Lots B1, B2, B3, , as shown in **Figure 1** (The Site).

3 Objectives

SLR understands the key objectives of this strategy are as follows:

- Ensure all remedial and development works are undertaken in a manner that does not present an unacceptable risk to human health or the environment.
- Ensure the remedial and development works adhere to all applicable legislative requirements, guidelines, and standards.
- Effectively remediate and manage all identified soil impacts within Lots B1, B2, B3, enabling The Site to be utilised for its proposed future land use.

4 Legislative Framework

This site-specific remediation strategy was developed in general accordance with the following guidelines and standards.

- ASC NEPM 2013, "National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended in 2013". National Environment Protection Council.
- WA Department of Health 2009, "Guidelines for the assessment, Remediation and management of Asbestos-contaminated sites in Western Australia"
- AS 4482.1-2005 "Guide to the Sampling and Investigation of Potentially Contaminated Soil. Part 1: Non-volatile and semi-volatile compounds"
- VIC EPA 2009, "Industrial Waste Resource Guidelines – Soil Sampling"
- NSW EPA 2014, "Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 – The excavated natural material order 2014."
- NT EPA 2017, "Northern Territory Contaminated Land Guideline"
- NT EPA 2016, "Waste Management and Pollution Control Act."
- NT EPA 2013, "Guidelines for Consultants Reporting on Environmental Issues"

5 Remediation Strategy – Lots B1, B2 and B3

5.1 Earthworks

Following the successful implementation of a remediation strategy across Lot A, the project team proposes to apply the same remediation strategy across Lots B1, B2 and B3 to remove uncontrolled fill material to apparent natural material (either weathered rock or rock) from onsite and characterise the resultant screened soils materials for potential reuse onsite.

The contractor intends to screen construction and demolition rubble from the uncontrolled fill material which may then be suitable for beneficial reuse onsite, pending characterisation sampling and analysis. SLR notes there is an increased risk of ACM in this material.

SLR will be inspecting material while onsite for visual evidence of ACM impact including fresh excavations, screened soil and screened bulk waste.

SLR recommend that any screened material should be further segregated into small, manageable stockpile volumes and not mixed together until laboratory results are received and the material is classified and advice is provided on appropriate reuse or disposal options. The intent of this segregation is to minimise the amount of material which is deemed unsuitable for reuse onsite (or offsite) which may need to be disposed of as waste.

Stockpiles will be segregated and sampled with information recorded within a soil tracking spreadsheet including:

- Stockpile ID label
- Stockpile location
- Estimated volume
- Material description based on visual assessment
- Number of samples collected / sampling frequency achieved
- SLR will document and report tracking of all material on site related to this remediation project.

Further to this, all material excavated that is required to remain on site for either segregation processing, characterisation, or beneficial reuse must be transferred to the contractor proposed stockpile laydown areas. The location of the stockpile laydown area should reduce the need for double handling of the material and not impede upon the later construction/development works on site.

Further stockpile management requirements stipulated within the *Northern Territory Contaminated Land Guidelines* (NTEPA, 2017) includes the following.

- Maintain a log of stockpile locations, the origin of the material, locations of all characterisation and validation sample locations and corresponding sample results;
- Use of an effective liner (such as high-density polyethylene (HDPE) liner) or a sealed surface underneath each stockpile in combination with bunding to prevent run-off, soil erosion, or leaching of contaminants to the underlying strata. Additional to this, where stockpiled material is unavoidably placed on an unsealed portion of the site, interpretation of laboratory analytical results when classifying the stockpile will also consider potential for incidental cross contamination of the stockpile footprint and potential remediation/validation requirements.
- Restrict the maximum height of each stockpile to be no more than three (3) metres, or lower than boundary fence/hoarding heights when within five (5) metres of the boundary;
- Avoiding locating stockpiles:
    - adjacent to, or in close proximity to, site boundaries; and
    - in close proximity to sensitive receptors.
- Ensure stockpiles remain on site for the shortest amount of time;
- Maintain an effective dust and/or odour mitigation cover; and
- Maintain appropriate soil moisture content to reduce dust emissions (particularly during handling).

It is further recommended that, given the previous identification of ACM and asbestos fines, management measures to mitigate potential health risks associated with aerial dispersion of asbestos fibres/fines be implemented including stockpiles securely covered using a geofabric liner or sprinklers installed above stockpiles to keep material sufficiently wet.

5.2 Earthworks program

The proposed earthworks program for the implementation of the remediation strategy is as follows –

- Lot B1 – proposed start date to be confirmed, with excavation, stockpiling and screening works estimated to take 2- 3weeks
- Lot B2 – proposed start date to be confirmed, with excavation, stockpiling and screening works estimated to take 2 – 3 weeks
- Lot B3 - proposed start date to be confirmed, with excavation, stockpiling and screening works estimated to take 2 – 3 weeks

Uncontrolled fill material will be excavated and stockpiled on the adjacent land area within the Road Reserve A (as shown in **Figure 2**). Following stockpiling, the material will be screened to remove the anthropogenic waste materials and screened stockpiles will then be sampled for chemical characterisation and beneficial reuse assessment.

Upon completion of the beneficial reuse assessment, materials deemed suitable will be reinstated within Lots B1, B2 and B3 where the material is deemed geotechnically suitable for further construction activities.

5.3 Supervision onsite

SLR will supervise stripping, excavation and stockpiling works of Lots B1, B2 and B3, similar to the remediation strategy implemented for Lot A. Intermittent visual inspections will be carried out to assess material for potential Asbestos Containing Material.

SLR staff supervising works are deemed to be suitably experienced and competent for asbestos works as per WA DoH (2009) asbestos guidelines.

All lead field staff involved in this project have successfully carried out similar assessments and remediations that have been successfully completed, reviewed and signed off by previous Contaminated Land Auditors (Mark Stuckey, Anthony Lane).

The objectives of this remediation project include the expectation that the remedial and development works will adhere to all applicable legislative requirements, guidelines, and standards. This includes remediation of ACM to the residential (minimal soil access) standards within the WA DoH guidelines (2009) including:

- <0.001% w/w FA/AF
- < 0.04% w/w ACM

To facilitate this, supervision carried out by SLR will include:

- Supervision of excavation works including visual inspection for signs of ACM impact. An SLR representative will be on site at all times during excavation remediation works.
- Detailed visual inspection of excavations at least every hour
- Discussions with civil contractors about the agreed remediation objectives prior to commencement of works and requests that operators call SLR via UHF when pockets of uncontrolled fill are encountered
- Visual inspection of material during and following screening
- Visual inspection of replacement and compaction of any material which is deemed suitable for beneficial reuse on Site. SLR understands that material will be reinstated in lifts, each of which is to be inspected by SLR and an ACM clearance certificate provided.

5.4 Soil sampling

Samples will be collected in accordance with the methodology outlined in **Table 2**.

Table 2 Soil sampling methodology

Activity	Comment / Details
Soil sampling frequencies	• Spoil characterisation samples will collected from the excavated, stockpiled material at a frequency of 1 sample every 70 m^3 with a minimum of three samples per stockpile. Asbestos samples will be sieved and analysed in accordance with WA DOH guidelines for stockpiled material. • Validation samples will be collected from the base of each excavation at a minimum rate of one sample per 25 m^2 of excavation base, with a minimum of one sample collected from each excavation base. Given the low risk of ACM within natural material, asbestos analysis of validation samples will be presence/absence only. • Duplicate samples will be collected at a rate of 1:20 for soil samples. • One equipment rinsate (taken from re-useable equipment) will be collected and analysed for each day of sampling. • Where practicable, coordinates of sample locations will be recorded with a handheld GPS.
Sample collection	• Sample collection will be undertaken in general accordance with AS4482.1-2005 and SLR SOPs. Dedicated disposable nitrile gloves and laboratory supplied sample containers will be used for sample collection.
Sample preservation	• Samples will be placed in laboratory supplied jars and stored as close to 4°C as practicable, in insulated chilled containers while on site and in transit to the laboratory.
Sample submission	• Chain of custody (COC) documentation will be completed at the time of sample collection and will accompany the samples to the nominated laboratory. • All samples will be submitted to a National Association of Testing Authorities (NATA) accredited laboratory for analysis. • 50% of spoil characterisation samples will be submitted for analysis, with the rest held by the laboratory for further analysis if required should substantial variability[#1] in analytical results require further statistical assessment. • 50% of validation samples will be submitted for analysis, with the rest held by the laboratory for further analysis if required should substantial variability in analytical results require further statistical assessment.

#1 Substantial variability will be assessed via a coefficient of variation (CV) assessment as per the NSW EPA Sampling Design Guidelines (1995) with stockpiles with a CV value >1 considered to have substantial variability.

5.5 Analytical assessment

Spoil characterisation and validation samples will be submitted to a NATA accredited laboratory for analysis.

Scheduled soil samples will be analysed for:

- Total Recoverable Hydrocarbons (TRH)
- Benzene, toluene, ethylbenzene and xylene (BTEX)
- OCP/OPP
- Asbestos (WA DoH/NEPM samples)
- Asbestos presence/absence
- 8 priority metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc)
- Representative samples will be analysed for soil characterisation as per the ASC NEPM

All non-scheduled samples will be placed on hold at the laboratory should further analysis be required as part of the characterisation and validation process.

SLR believe that the proposed analytical suite will be suitable for waste classification and offsite disposal and beneficial reuse assessment (when combined with the NEPM soil classification data).

5.6 Screening criteria

The nominated screening criteria will be selected to assess the potential risks posed to current and future users of the Site and sites at which material may be reused. The nominated screening criteria will be selected from the following:

ASC NEPM[1]:

- Health based Investigation Levels (HIL) for residential B sites
- Soil Health Screening Levels (HSL) for vapour intrusion – residential B sites
- Ecological Investigation Level (EIL) for Urban residential sites
- Ecological Screening Level (ESL) for Urban residential sites

Management limits for Total Petroleum Hydrocarbon (TPH) fractions in soil, Urban residential sites

WA DoH[2]:

General Contamination Criteria for protecting the public from asbestos-contaminated sites. For clarity, screening criteria for asbestos will be high density residential (Residential B) as per **Table 7** of the NEPM (ASC) 2013 Schedule B1 - Guideline on Investigation Levels for Soil and Groundwater (copied below)–

Table 7. Health screening levels for asbestos contamination in soil

	Health Screening Level (w/w)			
Form of asbestos	Residential A[1]	Residential B[2]	Recreational C[3]	Commercial/ Industrial D[4]
Bonded ACM	0.01%	0.04%	0.02%	0.05%
FA and AF[5] (friable asbestos)	0.001%			
All forms of asbestos	No visible asbestos for surface soil			

Upon receipt of lab samples, a beneficial reuse assessment in accordance with the ASC NEPM (2013) will be undertaken. A letter report will be provided outlining findings, recommendations and suitable reuse options for material.

[1] National Environment Protection Council MAY 2013, "*National Environment Protection (Assessment of Site Contamination) Measure 1999*".
[2] Western Australian Department of Health (WA DOH) MAY 2009, "*Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia*".

Due to current COVID-19 travel restrictions, photographic records of work will be included in reports.

If unexpected contamination is identified, the CLA will be contacted to discuss management options.

5.7 Air monitoring

Air monitoring will be conducted for the duration of the stripping, stockpiling and characterisation works as a precautionary measure.

Airborne asbestos monitoring will be conducted at the boundaries of the site (north, south, east and west) and are static locations.

Monitors will be up at the commencement of the shift (approximately 0700) and collected at the completion of site works (ranges from 1600 – 1700).

Each monitor will be calibrated as per SLRs internal NATA accredited procedure and set at a flow rate of 1 L/minute Monday to Friday and 2 L/min on Saturday – as the work shift is shorter (0700 – 1300), so the flow rate is increased to ensure an appropriate sampling volume is achieved over the shorter shift.

SLR is NATA accredited in our Darwin laboratory to conduct all sampling and analysis of filters. Our accreditation number is 3130 and I have attached a copy of our scope of accreditation to this memorandum. Air monitoring will be conducted in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust, 2nd Edition [NOHSC: 3003 (2005)].

All air monitoring results will be compared to the public health exposure standard of 0.01 fibres/mL.

Consideration will be given to the asbestos air-quality limit for protecting the public around contaminated sites of 0.01 fibres/mL, as endorsed by the enHealth Council in Management of asbestos in the non-occupational environment 2005 document (enHealth 2005).

Where the results of the airborne asbestos monitoring show that respirable asbestos fibre levels exceed the action levels outlined in **Table 3**, action must be taken immediately.

Table 3 Air monitoring action levels

Action Level	Control	Action
Less than 0.01 fibres/ml	No new control measures are necessary	• Continue with current control measures
At 0.01 fibres/ml or more than 0.01 fibres/ml but less than or equal to 0.02 fibres/ml	1. Review	• Review control measures
	2. Investigate	• Investigate the cause
	3. Implement	• Implement additional or alternative controls to eliminate or minimise exposure and prevent further release • Communicate any additional controls during daily pre-start meeting
More than 0.02 fibres/ml	4. Stop removal work	• Cease excavation / transport of material
	5. Notify Regulator	• Notify the Head Contractor, followed by the regulator (NT WorkSafe) both verbally and in written communication

Action Level	Control	Action
	6. Investigate the cause	• Conduct a thorough assessment across the Site to determine the cause. • Consult with all personnel involved in the works • Determine ongoing mitigation measures • Continue to carry out air-monitoring to ensure further controls have mitigated the problem

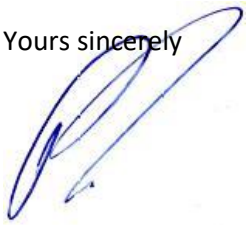
Table adapted from the Code of Practice: *How to Safely Remove Asbestos*

6 Closure

We trust the above remediation strategy is adequate for the next phase of works at the John Stokes Square redevelopment project.

If you have any further queries or would like to discuss any of the above in detail, please do not hesitate in contacting either myself to discuss.

Yours sincerely



PAUL TURYN
Principal Environmental Engineer
0428665405

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C3 27 May 2020

Ms Sinead Redmond
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics

Email: sinead.redmond@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Sinead,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I have been requested to review the proposed remediation strategy for the management of the remediation and construction works on Lot B1, B2 and B3 (the residential sites). Following discussions with DIPL we understand that due to the identification of geotechnically unsuitable material during excavations on the commercial lot (Lot A), and with the aim of further reducing the level of residual contamination, the original strategy was changed. I am supportive of undertaking additional works which will result in a lower level of long-term risk to the community.

The following documents were reviewed:

- SLR (14 May 2020) Memorandum: Remediation Strategy, John Stokes Square – Residential Lots (Lots B1, B2 and B3) (ref. Appendix J - DRAFT Remediation Strategy.docx); and
- Halikos Construction (May 2020) Construction Environmental Management Plan Revision 2.0, John Stokes Square, Broad Scale Site Remediation and Construction Preparation Works (ref. Broad Scale Remediation).

I provide the following comments:

Remediation Strategy

1. Section 1, last paragraph. The Agon reports have been reviewed and considered reliable with a note that we are resolving a minor issue regarding the crushed concrete stockpile sampling, reuse and disposal
2. Section 4. Please include NT EPA publications
3. Section 5.1,
   a) Paragraph 2. It should be noted that there is an increased risk of ACM in this material.
   b) Will SLR be inspecting the oversize screened material for ACM?
   c) Tracking of material should be documented and reported by SLR.
   d) Final paragraph. Given the previous identification of ACM and asbestos fines, these controls should be implemented from the start unless additional justification is provided.

4. Section 5.3. As per previous advice, please provide additional detail on the proposed site supervision and how this ties into the objectives of the works. For example, if the objective is to ensure the fill is as completely free of asbestos as possible, then a higher level of supervision would be necessary than if the objective is to remove geotechnically unsuitable material and any asbestos observed with risks from any residual asbestos observed managed via capping, etc.
5. Section 5.7. Air monitoring criteria should be public health (<0.01 f/mL) as monitoring is proposed on the site boundary, the occupational criteria (<0.1 f/mL) is only appropriate for workers.
6. The reuse of soil onsite is understood to be placed down in layers for compaction purposes and each lift is to be inspected for ACM by SLR with a clearance certificate issued for each lift. If ACM is observed, it will need to be removed and validated. Please note that this was the agreed approach for the commercial area, but we understand that this was not undertaken. This process provides an important extra check for ACM and needs to be undertaken for the residential allotments.
7. How will the decision regarding material reuse on-site/reuse off-site/disposal be reported?
8. Due to current COVID-19 travel restrictions, please include photographic record of the works.
9. If unexpected contamination is identified, please call to discuss the management strategy.

Construction Environmental Management Plan (CEMP)

The CEMP details the objectives, key performance indicators and targets, and environmental management measures to be implemented during the remediation and construction works. This includes erosion and sedimentation, dust and air quality, soil, waste, and asbestos management amongst other things. It also details training, including induction training for workers.

1. Due to the presence of asbestos please ensure the site is fenced if this is not already done.
2. Please include an unexpected finds protocol.
3. Appendix I.
    a. The investigations to date have identified asbestos in soil which is understood to remain onsite. The AMP should be revised to reflect this and any other associated implications.
    b. Section 8 proposes a weekly 2 hours inspection for asbestos, this is not consistent with the remediation strategy.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

APPENDIX C

Clearance Certificate

ASBESTOS CLEARANCE CERTIFICATE

Job Number:	680.10679.00100	**Document Ref:**	680.10679_.001.00-R01-v1.0-CLR.docx
Date of Issue:	16 February 2021	**Signatures:**	
Clearance Inspection Undertaken by:	Robin Birua		

1	**CLIENT DETAILS**	
1.1	Client Name:	HK Solutions on Behalf of Department of Infrastructure, Planning and Logistics
1.2	Client Contact Name:	Sinead Redmond
1.3	Client Address:	Building 2, Level 1, 631 Stuart Hwy, Berrimah NT 0828 Building 2, Level 1, 631 Stuart Highway, Berrimah, NT 0828
1.4	Client Telephone Number:	0427 544 775

2	**ASBESTOS REMOVAL DETAILS**			
2.1	Date of Clearance Inspections:	6 August - 26 September 2020	Time of Clearance Inspections:	Various
2.2	Site Address:	John Stokes Square, 47 Progressive Drive, Nightcliff, NT		
2.3	Asbestos Removal Locations:	This Clearance Certificate is issued in relation to visual inspections conducted on the 200 mm thick lifts of soil material used to reinstate excavations and trenches created during the remediation of Lots B1, B2 and B3 (herein referred to as "the Site"). **Figure 1** shows the extent of the Site. Asbestos Containing Materials (ACM) debris was identified in the fill material present across Lots B1, B2 and B3, and within the fill material surrounding a number of shallow abandoned utility services. Some abandoned services were also found to be constructed out of ACM. Fill material across the Site was removed and screened, with asbestos impacted soils and ACM material being segregated into waste asbestos stockpiles for appropriate offsite disposal. As part of the remediation process, validation samples were collected from the base of the excavations and trenches to confirm that all ACM related impact had been adequately removed. **Figures 2 – 4** show the extent of the excavations and validation sample locations collected. Spoil removed from the excavations were sampled in accordance with the WA DOH 2009 guidelines to determine suitability for Site reuse. Spoil confirmed through analytical results as being suitable for Site reuse were used to reinstate the excavations and trenches created across the Site. As part of the validation process, the surface of each 200mm thick lift of spoil material used to reinstate the excavations and trenches were visually inspected for visible ACM debris. This Clearance Certificate is issued in relation to these inspections.		
2.4	Asbestos Removal Contractor Company & Licence Number:	Northern Trade Solutions NT Pty Ltd (NTS) EPL225		

2	ASBESTOS REMOVAL DETAILS	
2.5	Asbestos Removal Contractor Supervisor & Licence Number:	Tony Karambetis CPCCDE3015A
2.6	Details of Asbestos Removal Activities and Area Inspected:	ACM debris were encountered in fill material present across the Site and within the fill material used to backfill underground services. ACM debris and associated impacted soils were removed in accordance with the Remediation Strategy (*SLR reference: 680.106.00000-M04-v2.0 20200603*) and the details are as follows: - Uncontrolled fill material present across the Site was excavated to apparent natural soil and any ACM debris encountered was segregated and placed into designated waste asbestos stockpiles prior to being disposed offsite to the Shoal Bay Waste Management Facility (SBWMF) as Special Waste (Asbestos). Spoil generated from the excavation of uncontrolled fill material inspected for any evidence of ACM debris and where identified, segregated and disposed of appropriately to the SBWMF accordingly. The bases and walls of the resultant excavations were inspected for the presence of visible ACM. Soil samples were also collected from the base of the resultant excavations to validate that all impacted soil and material had been adequately removed. Analytical results are presented under a separate cover. - Following the excavation of uncontrolled fill material across the Site, the abandoned underground services, including, stormwater pipes, sewer pipes, water distribution pipes, and electrical and communication services were removed successively from each lot. Numerous fragments of ACM debris and services constructed out of ACM (e.g. fire hydrant pipe, conduit pipe used to house electrical cables) were noted during the removal of these abandoned services. Services constructed out of ACM, ACM debris and associated impacted soils were segregated and stockpiled separately as asbestos waste for appropriate offsite disposal. The walls and bases of resultant trenches were inspected for the presence of visible ACM. Soil samples were also collected from the base and walls of the resultant trenches to validate that all impacted soil and material had been adequately removed. Analytical results are presented under a separate cover. - Spoil generated during the excavation of uncontrolled fill material and abandoned underground services were stockpiled and screened to remove anthropogenic waste (e.g., construction debris). During the screening process, the spoil material was visually inspected for any evidence of ACM debris. Soil samples were collected from the stockpiled spoil to determine whether the material was suitable for site reuse. Analytical results are presented under a separate cover. - Stockpiles found to be impacted with ACM, asbestos fines/friable asbestos were removed by a licensed asbestos removalist, Northern Trade Solution (NTS) for appropriate offsite disposal to the SBWMF. - Following the completion of visual inspections and validation soil sampling, the excavations and trenches were backfilled with spoil material characterised (via laboratory analysis) as being suitable for reuse onsite. Visual inspections were conducted during the reinstatement and the final visual clearance of each lot was provided as follows: - **Residential Lot B1** - The surface of Lot B1 was raised by five 200mm thick lifts overall. Each 200 mm lift of reinstated material was visually inspected by the Environmental Consultant for ACM debris by systematically walking over the area in a grid like basis.

2	ASBESTOS REMOVAL DETAILS	
		No visible ACM debris was encountered during the visual inspections for Lot B1 and therefore deemed suitable for future construction works. - **Residential Lot B2** The surface of Lot B2 was raised by four 200mm thick lifts overall. Each 200 mm lift of reinstated material was visually inspected by the Environmental Consultant for ACM debris by systematically walking over the area in a grid like basis. No visible ACM debris was encountered during the visual inspections for Lot B2 and therefore deemed suitable for future construction works. - **Residential Lot B3** The surface of Lot B3 was raised by five 200mm lifts overall. Each 200 mm lift of reinstated material was visually inspected by the Environmental Consultant for ACM debris by systematically walking over the area in a grid like basis. No visible ACM debris was encountered during the visual inspections for Lot B3 and therefore deemed suitable for future construction works.

3	CLEARANCE INSPECTION – VISUAL	
3.1	Method:	Visual inspections were undertaken by a suitably qualified environmental consultant from SLR consulting Pty Ltd (SLR) of the excavated areas and trenches created due to remediation work conducted at the Site, and of the surface of each 200 mm lift of material used to reinstate the excavations and trenches and to raise the surface of the Site to design levels. The base and walls of the excavation and trenches were visually inspected for ACM debris and representative soil samples were also collected from the base of excavation in accordance with the Remediation Strategy developed for the Site. Analytical results are discussed under a separate cover. Asbestos material encountered during the removal of fill material and abandoned underground services were removed in accordance with the Code of Practice How to Safely Remove Asbestos 2011. Refer to **Figures 2 - 4** for the areas where visual clearances for asbestos related impact have been undertaken at the Site.
3.2	Visual Summary:	It is the opinion of Robin Birua of SLR that the excavated area and trenches associated with the removal of abandoned underground services mentioned in Section 2.6 and surfaces of each 200 mm lift of reinstated material, have been visually inspected, as far as reasonably practicable and are free of visible ACM debris at the surfaces inspected (i.e., walls and bases of the excavations/trenches, reinstated surfaces). Refer to **Appendix B** for representative photographs.

3	CLEARANCE INSPECTION – VISUAL	
3.3	Limitations:	It should however be noted that: • The Visual Clearance Inspection and Clearance Certificate are limited to accessible, visible surfaces as detailed Section 2.6 only. • Inspections are conducted in a conscientious and professional manner. The nature of the task and the likely disproportion between any damage or loss which might arise from the work or Clearance Certificate prepared and the cost of our services, is such that SLR cannot guarantee that all asbestos materials/issues of concern have been identified and/or addressed. • Unless specified in this Clearance Certificate, this Clearance Certificate does not guarantee that the dust present in or around those areas mentioned in Section 2.3 and Section 2.6 of this Clearance Certificate are free of asbestos contamination. The inspection is for visible ACM as detailed in Section 2.6 only. • It is possible that ACM are present in areas that were inaccessible/visually obscured during the inspection. It is also possible that ACM may be present beneath the ground surface of areas adjacent to the area excavated, as well as beneath the base of the area excavated. • If any ACM or assumed ACM are encountered on site, access to the materials should be appropriately restricted and advice sought from a suitably qualified and experienced consultant. • The inspection was carried out at the time of the completion of the remediation works and was dependent upon site conditions at that time. • SLR accepts no responsibility or liability for the completeness of the removal by the appointed licensed asbestos removal contractor. The appointed licensed asbestos removal contractor is responsible for ensuring all work is conducted in a safe and competent manner by suitably trained staff, the necessary approvals are obtained from regulatory authorities prior to starting any asbestos removal or maintenance activities (if applicable) and that work methods and procedures comply with the relevant legislation, codes of practice and industry standards, as required.

4	CLEARANCE INSPECTION - ASBESTOS AIRBORNE FIBRE MONITORING	
4.1	Background Monitoring:	Air monitoring for airborne fibres was conducted for each day intrusive works were carried out as part of the remediation works. Control (as required) and background airborne fibre monitoring was conducted, in general accordance with Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust, 2nd Edition [NOHSC: 3003 (2005)].
4.2	Clearance Monitoring:	Clearance airborne fibre monitoring was not requested by the Client. It therefore does not form part of this Clearance Certificate.
4.2	Results:	The analysis of all asbestos airborne fibre monitoring was undertaken by SLR at our NATA accredited laboratory. All airborne asbestos monitoring results showed less than the minimum detection limit of the method used which is 0.01 fibres/mL (refer to the SLR Airborne Asbestos Monitoring Report, Ref: 680.10679.0000-JLF-15 through to 680.10679.0000-JLF-61).

5	RE-OCCUPATION
5.1	**It is the opinion of SLR that the area as detailed in Section 2.3 of this Clearance Certificate is fit for re-occupation and for normal works to proceed**. The asbestos removal work area and the surrounding area have been inspected, as far as reasonably practicable, and are considered to be free of visible assumed or suspected asbestos debris. Within the scope of works, all asbestos has been removed as per **Section 2.6** of this Clearance Certificate (please note the limitations in **Section 3.3**). While SLR carries out the work to the best of our ability, we totally exclude any loss or damages which may arise from services provided to the Client and/or associated parties. This Clearance Certificate and/or information produced by SLR should not be reproduced and/or presented/reviewed except in full.

APPENDIX A

Figures

0 10 20 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:1,000 at A4
Project Number:	680.10679
Date:	01-Dec-2020
Drawn by:	JG

Future Land Use

- Commercial/Industrial
- Public Space
- Residential

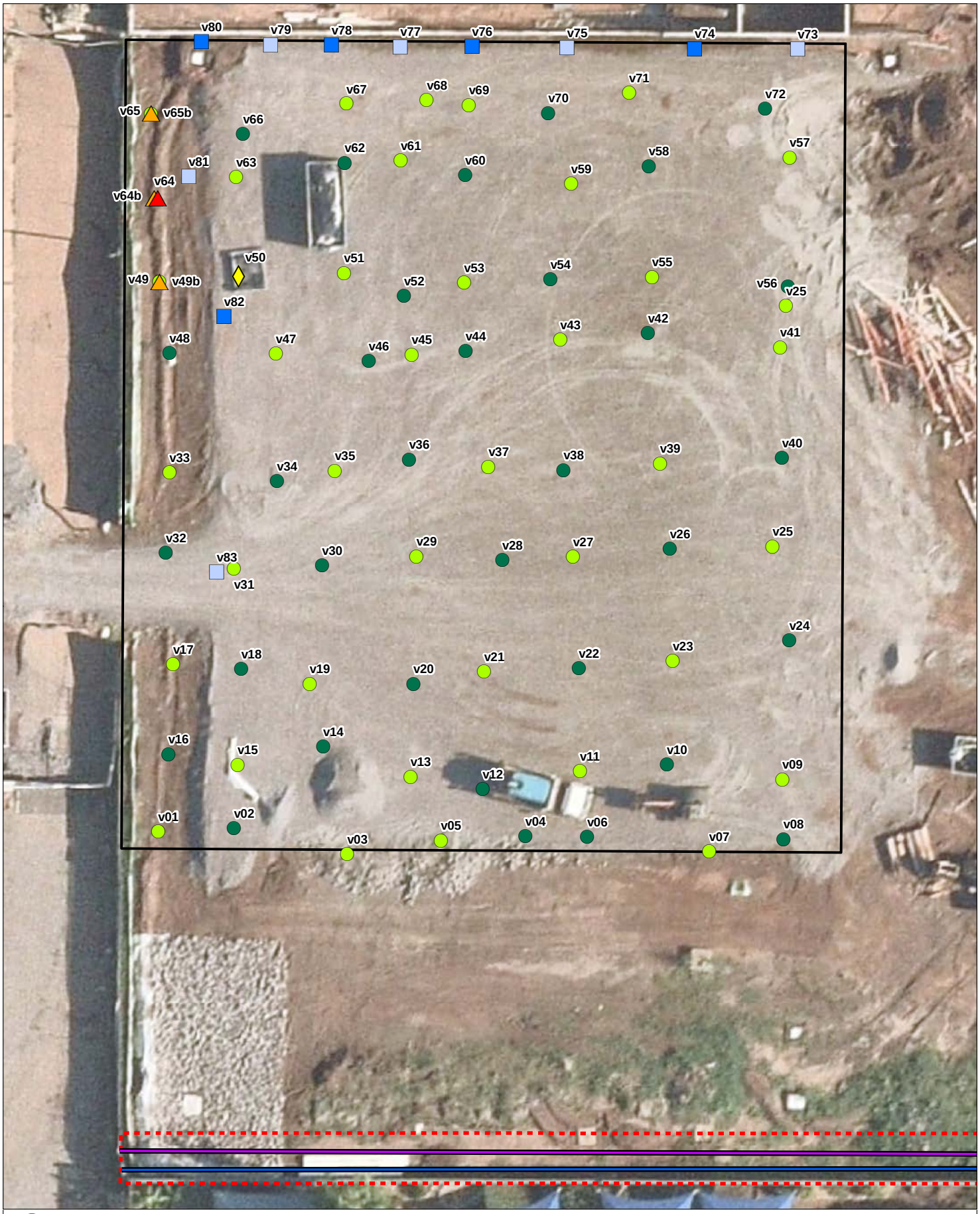
SLR

JOHN STOKES SQUARE

Location of the Site

FIGURE 1

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 Location of the Site.mxd



0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:300 at A4
Project Number:	680.10679
Date:	16-Feb-2021
Drawn by:	JG

SLR

- Hotspot Locations
- Hotspot Validation Samples
- Trench Wall Samples on Hold
- Trench Wall Samples Analysed
- CHAR-Val
- Surface Validation Samples on Hold
- Surface Validation Samples Analysed
- Live Sewer Pipe
- Live Stormwater Pipe
- Service Easement
- Proposed Allotment B1

JOHN STOKES SQUARE

Validation Sample Locations in Lot B1

FIGURE 2

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 F04 Validation Sampling Locations in Lot B1.mxd

0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:350 at A4
Project Number:	680.10679
Date:	16-Feb-2021
Drawn by:	JG

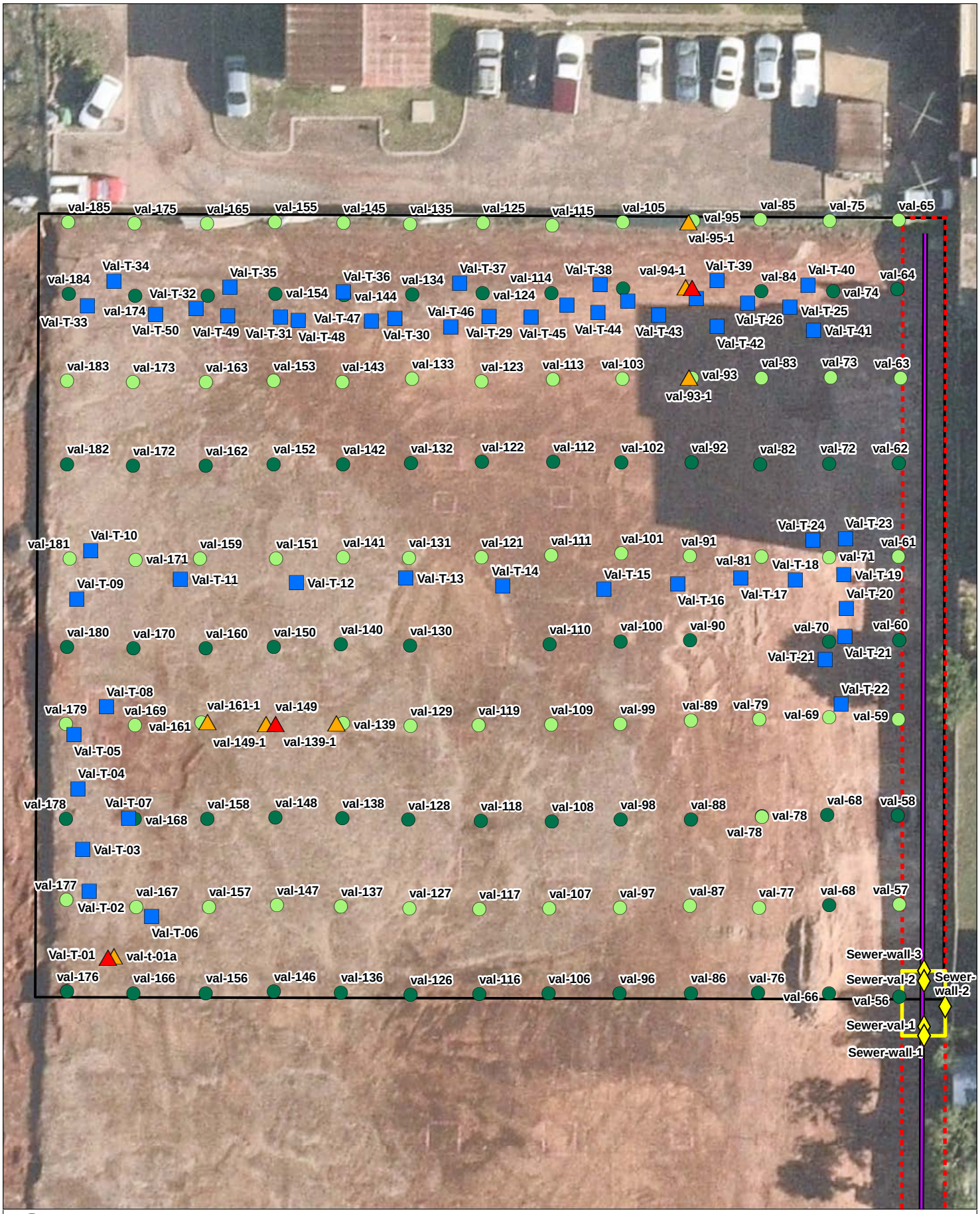
- Hotspot Locations
- Hotspot Validation Samples
- Trench Wall Samples
- Asbestos Pipe Validation Samples
- Surface Samples
- Surface Validation Samples on Hold
- Surface Validation Samples Analysed
- Sewer Riser Sample Locations
- Live Sewer Pipe
- Sewer Riser Area
- Service Easement
- Proposed Allotment B2

JOHN STOKES SQUARE

Validation Sample Locations in Lot B2

FIGURE 3

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680010679 F06 Validation Sampling Locations in Lot B2.mxd



0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:350 at A4
Project Number:	680.10679
Date:	16-Feb-2021
Drawn by:	JG

SLR

- Sewer Riser Sample Locations
- Hotspot Locations
- Hotspot Validation Samples
- Trench Wall Samples
- Surface Validation Samples on Hold
- Surface Validation Samples Analysed
- Live Sewer Pipe
- Sewer Riser Area
- Service Easement
- Proposed Allotment B3

JOHN STOKES SQUARE

Validation Sample Locations in Lot B3

FIGURE 4

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680010679 F08 Validation Sampling Locations in Lot B3.mxd

APPENDIX B

Representative Photographs

Photo 1 Represents the excavation area after the removal of fill material including tree roots, grass/weeds from Lot B1

Photo 2 Represents the excavation area after the removal of fill material including tree roots, weeds/grass from Lot B2

Photo 3 Represents the Lot B1 after the completion of 2nd lift

Photo 4 Represents the view of Lot B3 after the completion of the 5th lift

Photo 5 Represents the view after the completion of final lift in Lot B2

Photo 6 Represents the reinstatement of a trench located at the northern boundary of the Lot B2

Photo 7 Represents the view of a surface during backfilling and compaction in Lot B2

Photo 8 Represents the view of a trench during the validation sampling and visual inspection in Lot B2

Photo 9 Represents the view of a trench during the validation sampling and visual inspection in Lot B1

Photo 10 Represents the view of trenches during the validation sampling and visual inspection in Lot B2

APPENDIX D

Photographic Logs of Lot B1

Table 1 Lot B1 Photo Log

 Grass/weed cover removal works prior to excavating fill material	 Grass/weed cover removal works prior to excavating fill material
 Concrete stockpiles in road reserve for characterisation	 Grass cover was removed prior to excavate fill material
 Fil material spoil was stockpiled in road reserve	 Stockpiles for screening

 Concrete fill removal works	 Bonded ACM identified during fill material removal
 Concrete kerbs were removed prior to excavate the fill material	 Removal of concrete stormwater pipes
 Underground services- concrete stormwater pipes and risers were removed after excaavting the fill material	 Concrete stormwater pipes were removed after excavating the fill material

Excavation of fill material	Trenches after the removal of underground services
Excavation in Lot B1	ACM identified during concrete stockpile removal
Bonded ACM was identified during the excavation	Bonded ACM idenfied during fill material removal

 Broken pieces of ACM during the excavation	 Broken pieces of ACM during the excavation
 Screening of stockpiles	 Screening of stockpiles
 ACM identified during visual inspection	 Lot B1 pad after backfilling

Backfilling and compaction works	Backfilling and compaction works

APPENDIX E

Photographic Logs of Lot B2

Table 1 Lot B2 Photo Log

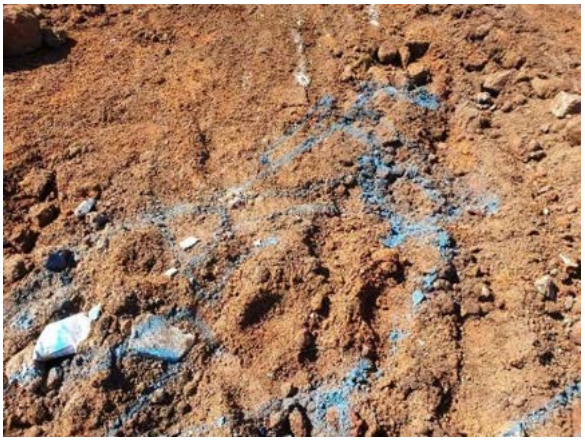
Grass/weeds cover removal prior to excavate fill material	Fill material removal works
Organic waste after the top soil removal	Kerb removal and stockpiles at the road reserve
Cleared area after the grass/weeds removal	ACM in stockpile

Excavation of fill material

Excavation of fill material

Bonded ACM finds during the fill material removal

Form material used in stormwater riser



Bonded ACM during excavation

Bonded ACM during excavation

Bnded ACM during excavation

Bonded ACM during excavation

Removal of Fill material from Lot B1 to Lot B3 and road reserve

Bnded ACM during excavation

Bnded ACM during excavation

Asbestos pipe at the north west corner of Lot B2

Asebstos pipe at south – west corner of Lot B2

Screening of stockpiles

Bonded ACM in stockpiles

Live stormwater pit

Excavated trench in Lot B2 after the removal of underground services

Excavated trench in Lot B2 after the removal of underground services

Live Sewer riser at the north – east corner of Lot B2

Excavated trench post removal of underground services

Removal of electrical pipes

Excavated trench post removal of underground services

Piles of bonded ACM

Bonded ACM

Bonded ACM during the services removal

Bonded ACM during the services removal

Excavated trench post removal of underground services

Excavated trench post removal of underground services

Backfilling of trenches

Asbestos stockpiles being watered for dust control

Backfilling on trenches

Backfilling and compaction of Lot B2

ACM used in stromwater riser as a form material

ACM used in stromwater riser as a form material

Lot B2 pad after the final lift

 Undergroud services stockpiles	 Screened material from stockpiles
 Asbestos stockpiles for offsite disposal	 Screened stockpiles for reused onsite

APPENDIX F

Photographic Logs of Lot B3

Table 1 Lot B3 Photo Log

 Removal of fill material	 Removal of fill material prior to remove underground services
 Removal of fill material prior to remove underground services	 Trenches after the removal of stormwater pipes
 Trenches after the removal of stormwater pipes	 Trenches after the removal of stormwater pipes

Underground services – stormwater pipes and risers, sewer pipes

Stockpile at the road reserve

Underground services stockpiles for offside disposal

Bonded ACM identified during fill material excavation

Bonded ACM identified during fill material excavation

Asbetsos stockpiles for offsite disposal

Asbestos impacted soil stockpiles for offsite disposal

Bonded ACM at the stormwater riser used a foam material

Live stromwater riser at the corner of Lot B2 and B3

Communication cable

Asbestos impacted soil removcal from Live sewer riser area

Glass fibre pit

 Bonded ACM at the sewer riser	 Bonded ACM at the sewer riser
 Bonded ACM at the sewer riser	 Bonded ACM at the sewer riser

APPENDIX G

Analytical Results Table

Table 1
Lot B1- Validation Sample Analytical Results
Remedation and Validation - Residential Allotments

			Asbestos		Inorganics				Metals							
			Weight of sample (Kg)	Asbestos Identified	Moisture Content	pH (Initial)	pH (aqueous extract)	pH (after HCL)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
			g	Presence/	%	pH_Units	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.0004	absence	1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use																
NEPM 2013 Table 1A(1) HILs Res B Soil									**1200**	**500**	**150**	**500^**	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS									**1100**	**100**		**360****	**110**	**15**	**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																
0-1m																
1-2m																
Field_ID	**Samples Type**	**Sampled_Date**	**Lab. Report No.**													
V02	Base surface Soil	23-Jul-2020	ES2025094	68.7	No	9.3	-	-	-	10	5	<1	88	7	<0.1	5	57
V04	Base surface Soil	23-Jul-2020	ES2025094	49.1	No	8.3	-	-	-	10	6	<1	155	<5	<0.1	3	<5
V06	Base surface Soil	23-Jul-2020	ES2025094	57.8	No	10.3	-	-	-	10	5	<1	108	<5	<0.1	4	<5
V08	Base surface Soil	23-Jul-2020	ES2025094	41.2	No	8.2	-	-	-	8	6	<1	109	<5	<0.1	3	11
V10	Base surface Soil	23-Jul-2020	ES2025094	27.2	No	9.7	-	-	-	8	5	<1	84	6	<0.1	4	24
QC2	Field duplicate of V10	23-Jul-2020	ES2025094	-	-	10.4	-	-	-	8	<5	<1	64	<5	<0.1	3	39
V12	Base surface Soil	23-Jul-2020	ES2025094	90.1	No	6.3	-	-	-	8	<5	<1	111	<5	<0.1	5	<5
V14	Base surface Soil	23-Jul-2020	ES2025094	49.3	No	5.4	-	-	-	8	<5	<1	131	<5	<0.1	3	<5
V16	Base surface Soil	23-Jul-2020	ES2025094	44	No	5.3	-	-	-	9	6	<1	85	8	<0.1	4	14
V18	Base surface Soil	23-Jul-2020	ES2025094	39.3	No	5.1	-	-	-	13	6	<1	71	13	<0.1	4	24
V20	Base surface Soil	23-Jul-2020	ES2025094	29	No	8.4	-	-	-	6	<5	<1	132	<5	<0.1	<2	<5
V22	Base surface Soil	23-Jul-2020	ES2025094	37.1	No	4.3	-	-	-	9	6	<1	131	<5	<0.1	2	<5
V24	Base surface Soil	23-Jul-2020	ES2025094	42.9	No	7.4	-	-	-	9	<5	<1	112	5	<0.1	5	<5
V26	Base surface Soil	23-Jul-2020	ES2025094	50.1	No	5.9	-	-	-	8	<5	<1	102	<5	<0.1	2	<5
V28	Base surface Soil	23-Jul-2020	ES2025094	55.1	No	8.7	-	-	-	9	<5	<1	77	<5	<0.1	4	<5
V30	Base surface Soil	23-Jul-2020	ES2025094	52.9	No	4	7.8	4.9	1.4	8	6	<1	102	<5	<0.1	3	9
QC3	Field duplicate of V30	23-Jul-2020	ES2025094	-	-	4.1	-	-	-	8	<5	<1	64	<5	<0.1	2	8
V32	Base surface Soil	23-Jul-2020	ES2025094	93.3	No	2.8	-	-	-	12	9	<1	127	9	<0.1	6	<5
V34	Base surface Soil	23-Jul-2020	ES2025094	45.4	No	2.8	-	-	-	9	6	<1	100	<5	<0.1	5	<5
V36	Base surface Soil	23-Jul-2020	ES2025094	72.9	No	3	-	-	-	10	6	<1	163	<5	<0.1	5	<5
V38	Base surface Soil	23-Jul-2020	ES2025094	76.4	No	7.7	-	-	-	10	<5	<1	120	<5	<0.1	4	<5
V40	Base surface Soil	23-Jul-2020	ES2025094	93.2	No	3.8	-	-	-	11	6	<1	144	6	<0.1	6	<5
V42	Base surface Soil	23-Jul-2020	ES2025094	103	No	2.1	-	-	-	<5	<5	<1	25	<5	<0.1	<2	<5
V44	Base surface Soil	23-Jul-2020	ES2025094	58.5	No	1.7	-	-	-	10	6	<1	145	<5	<0.1	4	<5
V46	Base surface Soil	23-Jul-2020	ES2025094	91	No	3.4	-	-	-	9	<5	<1	128	<5	<0.1	4	<5
V48	Base surface Soil	23-Jul-2020	ES2025094	99.2	No	1.1	-	-	-	15	6	<1	84	12	<0.1	5	51
V50	Base surface Soil	23-Jul-2020	ES2025094	95.6	No	6	-	-	-	9	<5	<1	113	<5	<0.1	3	8
QC4	Field duplicate of V50	23-Jul-2020	ES2025094	-	-	6.4	-	-	-	20	5	<1	28	<5	<0.1	4	14
V52	Base surface Soil	23-Jul-2020	ES2025094	87.6	No	8.4	-	-	-	14	5	<1	122	<5	<0.1	3	28
V54	Base surface Soil	23-Jul-2020	ES2025094	76.5	No	2	-	-	-	10	5	<1	84	6	<0.1	5	10
V56	Base surface Soil	23-Jul-2020	ES2025094	70.2	No	8.2	-	-	-	10	6	<1	92	7	<0.1	4	23
V58	Base surface Soil	23-Jul-2020	ES2025094	83.4	No	2.9	-	-	-	10	<5	<1	84	<5	<0.1	5	6
V60	Base surface Soil	23-Jul-2020	ES2025094	72.9	No	6.2	7.4	4.9	1.4	11	5	<1	90	5	<0.1	6	10
V62	Base surface Soil	23-Jul-2020	ES2025094	79.1	No	4.2	-	-	-	8	<5	<1	93	<5	<0.1	4	<5
V64	Base surface Soil	23-Jul-2020	ES2025094	76.5	**Yes**	1.8	-	-	-	27	5	<1	94	9	<0.1	4	57
Val 49B	Base surface Soil	31-Jul-2020	NT84924	53	No	-	-	-	-	-	-	-	-	-	-	-	-
Val 64B	Base surface Soil	31-Jul-2020	NT84924	60.34	No	-	-	-	-	-	-	-	-	-	-	-	-
Val 65B	Base surface Soil	31-Jul-2020	NT84924	66.2	No	-	-	-	-	-	-	-	-	-	-	-	-
V66	Base surface Soil	23-Jul-2020	ES2025094	91.9	No	4.8	-	-	-	8	<5	<1	90	<5	<0.1	4	14
V68	Base surface Soil	23-Jul-2020	ES2025094	80.9	No	8.1	-	-	-	9	<5	<1	83	5	<0.1	7	6
V70	Base surface Soil	23-Jul-2020	ES2025094	67	No	3.7	-	-	-	11	6	<1	145	7	<0.1	4	15
QC5	Field duplicate of V70	23-Jul-2020	ES2025094	-	-	3.8	-	-	-	8	<5	<1	99	<5	<0.1	<2	13
V72	Base surface Soil	23-Jul-2020	ES2025094	73.9	No	2.6	-	-	-	10	<5	<1	120	<5	<0.1	4	8
V74	Base surface Soil	23-Jul-2020	ES2025094	71.5	No	6.7	-	-	-	9	<5	<1	106	<5	<0.1	4	6
V76	Base surface Soil	23-Jul-2020	ES2025094	75.2	No	9.4	-	-	-	14	6	<1	54	17	<0.1	5	45
V78	Base surface Soil	23-Jul-2020	ES2025094	55.7	No	5.5	-	-	-	11	7	<1	58	22	<0.1	4	26
V80	Base surface Soil	23-Jul-2020	ES2025094	40.2	No	9.4	6.7	4.9	1.4	8	<5	<1	63	5	<0.1	4	6
V82	Base surface Soil	23-Jul-2020	ES2025094	93.7	No	3.3	-	-	-	10	<5	<1	52	<5	<0.1	3	36

SLR

Table 1
Lot B1- Validation Sample Analytical Results
Remedation and Validation - Residential Allotments

				Organochlorine Pesticides																										
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	Methoxychlor
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																													
NEPM 2013 Table 1A(1) HILs Res B Soil							10		90						600		400				20				15	10		500
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS														180															
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																													
0-1m																													
1-2m																													
Field_ID	Samples Type	Sampled_Date	Lab. Report No.																										
V02	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	1.56	<0.05	0.39	0.06	0.33	<0.05	<0.05	<0.2	<0.05	1.56	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.2
V04	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V06	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	0.15	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V08	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.14	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V10	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	0.06	0.16	<0.05	0.14	<0.05	0.14	<0.05	<0.05	<0.2	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.2
QC2	Field duplicate of V10	23-Jul-2020	ES2025094	<0.05	<0.05	0.06	0.15	<0.05	0.36	<0.05	0.36	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	<0.2
V12	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.07	<0.05	0.17	<0.05	0.17	<0.05	<0.05	<0.2	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.2
V14	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V16	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V18	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V20	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V22	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V24	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V26	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V28	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V30	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC3	Field duplicate of V30	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V32	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V34	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V36	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V38	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V40	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V42	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V44	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V46	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V48	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V50	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC4	Field duplicate of V50	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V52	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V54	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	0.54	1.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.56	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V56	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	0.16	0.53	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.37	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V58	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	0.14	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V60	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V62	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V64	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val 49B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val 64B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val 65B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V66	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V68	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V70	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC5	Field duplicate of V70	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V72	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V74	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V76	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V78	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V80	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V82	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2

SLR

Table 1
Lot B1- Validation Sample Analytical Results
Remedation and Validation - Residential Allotments

				Organophosphorous Pesticides																			
				Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil								340														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																						
1-2m																						
Field_ID	Samples Type	Sampled_Date	Lab. Report No.																			
V02	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V04	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V06	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V08	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V10	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC2	Field duplicate of V10	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V12	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V14	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V16	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V18	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V20	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V22	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V24	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V26	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V28	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V30	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC3	Field duplicate of V30	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V32	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V34	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V36	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V38	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V40	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V42	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V44	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V46	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V48	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V50	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC4	Field duplicate of V50	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V52	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V54	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V56	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V58	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V60	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V62	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V64	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val 49B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val 64B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val 65B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V66	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V68	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V70	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC5	Field duplicate of V70	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V72	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V74	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V76	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V78	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V80	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V82	Base surface Soil	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05

SLR

Table 1
Lot B1- Validation Sample Analytical Results
Remedation and Validation - Residential Allotments

				PAHs																	PAH/Phenols (SIM)		
				Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																							
NEPM 2013 Table 1A(1) HILs Res B Soil																		400					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																							
0-1m																	4						
1-2m																							
Field_ID	Samples Type	Sampled_Date	Lab. Report No.																				
V02	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V04	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V06	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V08	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V10	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC2	Field duplicate of V10	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V12	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V14	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V16	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V18	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V20	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V22	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V24	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V26	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V28	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V30	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC3	Field duplicate of V30	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V32	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V34	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V36	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V38	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V40	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V42	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V44	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V46	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V48	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V50	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC4	Field duplicate of V50	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V52	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V54	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V56	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V58	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V60	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V62	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V64	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val 49B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val 64B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val 65B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V66	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V68	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V70	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC5	Field duplicate of V70	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V72	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V74	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V76	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V78	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V80	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V82	Base surface Soil	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5

Table 1
Lot B1- Validation Sample Analytical Results
Remedation and Validation - Residential Allotments

		TPH									TRH - Semivolatile Fraction			BTEX							
		F1 minus BTEX (C6-C10)	F2-Napth (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																				
NEPM 2013 Table 1A(1) HILs Res B Soil																				
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																				
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																				
0-1m		40	230											0.6		390			95	
1-2m		65												0.7					210	
Field_ID	Samples Type	Sampled_Date	Lab. Report No.																	
V02	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V04	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V06	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V08	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V10	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC2	Field duplicate of V10	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V12	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V14	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V16	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V18	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V20	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V22	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V24	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V26	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V28	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V30	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC3	Field duplicate of V30	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V32	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V34	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V36	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V38	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V40	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V42	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V44	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V46	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V48	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V50	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC4	Field duplicate of V50	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V52	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V54	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V56	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V58	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V60	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V62	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V64	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val 49B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val 64B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val 65B	Base surface Soil	31-Jul-2020	NT84924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V66	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V68	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V70	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC5	Field duplicate of V70	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V72	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V74	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V76	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V78	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V80	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
V82	Base surface Soil	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2

SLR

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Asbestos		Inorganics				Metals							
				weight of sample	Asbestos in Soil	Moisture Content	pH (Initial)	pH (aqueous extract)	pH (after HCL)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
				g		%	pH_Units	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.01		1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use																	
NEPM 2013 Table 1A(1) HILs Res B Soil										**1200**	**500**	**150**	**500^**	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS										**1100**	**100**		**360****	**110**	**15**	**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																	
0-1m																	
1-2m																	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**														
V84	Base Surface Soil	05-Aug-2020	ES2026818	81.2	**Yes**	4	-	-	-	12	38	<1	50	18	<0.1	5	26
V84A	Base Surface Soil	11-Aug-2020	ES2027013	78.8	No	-	-	-	-	-	-	-	-	-	-	-	-
V85A	Base Surface Soil	11-Aug-2020	ES2027013	88.6	No	-	-	-	-	-	-	-	-	-	-	-	-
V86	Base Surface Soil	05-Aug-2020	ES2026818	112	No	2.6	-	-	-	10	6	<1	160	<5	<0.1	4	<5
V88	Base Surface Soil	05-Aug-2020	ES2026818	120	No	2.5	-	-	-	10	5	<1	77	6	<0.1	7	<5
V90	Base Surface Soil	05-Aug-2020	ES2026818	95.5	No	3.9	-	-	-	11	7	<1	97	10	<0.1	8	6
QC9	Field duplicate of V90	05-Aug-2020	ES2026818	-	-	2.4	-	-	-	11	6	<1	137	8	<0.01	7	<5
V92	Base Surface Soil	05-Aug-2020	ES2026818	95.1	No		-	-	-	12	7	<1	108	9	<0.1	7	<5
V94	Base Surface Soil	05-Aug-2020	ES2026818	93.8	No	4.7	-	-	-	10	6	<1	85	8	<0.1	8	<5
V96	Base Surface Soil	05-Aug-2020	ES2026818	79.3	No	6.3	-	-	-	23	15	<1	60	15	<0.1	6	39
V98	Base Surface Soil	05-Aug-2020	ES2026818	90.1	No	5.5	-	-	-	9	5	<1	78	7	<0.1	7	<5
V100	Base Surface Soil	05-Aug-2020	ES2026818	80.5	No	3	-	-	-	9	<5	<1	65	9	<0.1	7	11
V102	Base Surface Soil	05-Aug-2020	ES2026818	77.7	No	3.8	-	-	-	11	6	<1	85	6	<0.1	6	<5
V104	Base Surface Soil	05-Aug-2020	ES2026818	89.7	No	5.7	-	-	-	7	<5	<1	46	5	<0.1	5	<5
V106	Base Surface Soil	06-Aug-2020	ES2026823	73	No	9.3	-	-	-	10	<5	<1	101	7	<0.1	6	<5
V108	Base Surface Soil	05-Aug-2020	ES2026818	102	No	3.9	-	-	-	10	5	<1	89	8	<0.1	7	6
V110	Base Surface Soil	05-Aug-2020	ES2026818	103	No	3.4	-	-	-	10	5	<1	66	10	<0.1	8	15
QC10	Field duplicate of V110	05-Aug-2020	ES2026818	-	-	2.9	-	-	-	10	5	<1	81	9	<0.1	7	15
V112	Base Surface Soil	05-Aug-2020	ES2026818	86.6	No	2.9	-	-	-	11	6	<1	82	9	<0.1	7	10
V114	Base Surface Soil	05-Aug-2020	ES2026818	97	No	2.6	-	-	-	10	6	<1	44	10	<0.1	9	9
V116	Base Surface Soil	05-Aug-2020	ES2026818	97.2	No	1.4	-	-	-	11	6	<1	125	9	<0.1	8	6
V118	Base Surface Soil	05-Aug-2020	ES2026818	108	No	2.7	-	-	-	13	7	<1	85	10	<0.1	8	18
V120	Base Surface Soil	05-Aug-2020	ES2026818	98.5	No	<1	-	-	-	9	<5	<1	34	7	<0.1	4	34
V122	Base Surface Soil	05-Aug-2020	ES2026818	95.7	No	3.5	-	-	-	11	6	<1	84	8	<0.1	8	<5
V124	Base Surface Soil	05-Aug-2020	ES2026818	102	No	2.2	-	-	-	12	5	<1	138	8	<0.1	7	12
V126	Base Surface Soil	05-Aug-2020	ES2026818	116	No	1.6	-	-	-	13	9	<1	92	9	<0.1	7	101
V128	Base Surface Soil	05-Aug-2020	ES2026818	77	No	1.4	-	-	-	12	6	<1	90	10	<0.1	8	10
V130	Base Surface Soil	05-Aug-2020	ES2026818	76.6	No	2.4	-	-	-	10	5	<1	71	8	<0.1	7	13
QC11	Field duplicate of V130	05-Aug-2020	ES2026818	-	-	2	-	-	-	9	5	<1	64	8	<0.1	7	16
V132	Base Surface Soil	05-Aug-2020	ES2026818	109	No	<1	-	-	-	11	5	<1	94	8	<0.1	6	8
V134	Base Surface Soil	05-Aug-2020	ES2026818	85.6	No	4.2	-	-	-	11	6	<1	86	8	<0.1	8	<5
V136	Base Surface Soil	05-Aug-2020	ES2026818	84.5	No	4.7	-	-	-	5	<5	<1	21	<5	<0.1	4	8
V138	Base Surface Soil	05-Aug-2020	ES2026818	94.2	No	1.3	-	-	-	8	5	<1	68	6	<0.1	5	88
V140	Base Surface Soil	05-Aug-2020	ES2026818	84.5	No	6.4	-	-	-	13	9	<1	144	7	<0.1	6	23
V142	Base Surface Soil	05-Aug-2020	ES2026818	87.4	No	3.3	-	-	-	9	<5	<1	64	8	<0.1	7	6
V144	Base Surface Soil	06-Aug-2020	ES2026823	76	No	1.8	-	-	-	20	5	<1	53	10	<0.1	6	262
V146	Base Surface Soil	05-Aug-2020	ES2026823	81.3	No	4.4	-	-	-	9	5	<1	48	9	<0.1	6	12
V148	Base Surface Soil	05-Aug-2020	ES2026823	108	No	1.1	-	-	-	8	5	<1	40	7	<0.1	6	16
V150	Base Surface Soil	05-Aug-2020	ES2026823	111	No	1.8	-	-	-	8	<5	<1	39	6	<0.1	5	43
QC12	Field duplicate of V150	05-Aug-2020	ES2026823	-	-	1.4	-	-	-	13	5	<1	85	6	<0.1	6	6
V152	Base Surface Soil	05-Aug-2020	ES2026823	96.7	No	1.3	-	-	-	10	5	<1	53	8	<0.1	7	10
V154	Base Surface Soil	05-Aug-2020	ES2026823	76.3	No	1	-	-	-	12	7	<1	90	8	<0.1	6	25
V156	Base Surface Soil	05-Aug-2020	ES2026823	89.6	No	1.4	-	-	-	10	5	<1	52	8	<0.1	6	20
V158	Base Surface Soil	05-Aug-2020	ES2026823	106	No	1.5	-	-	-	10	6	<1	48	8	<0.1	7	11
V160	Base Surface Soil	05-Aug-2020	ES2026823	101	No	2.7	-	-	-	8	6	<1	43	6	<0.1	6	7
V162	Base Surface Soil	05-Aug-2020	ES2026823	95.2	No	1.9	-	-	-	7	<5	<1	30	7	<0.1	5	16
V164	Base Surface Soil	06-Aug-2020	ES2026823	77.1	No	3.9	-	-	-	9	<5	<1	32	8	<0.1	5	16
V166	Base Surface Soil	06-Aug-2020	ES2026823	93.3	No	4.8	-	-	-	9	<5	<1	82	8	<0.1	7	<5
V168	Base Surface Soil	06-Aug-2020	ES2026823	84.3	No	7.2	-	-	-	10	<5	<1	51	8	<0.1	7	19
V170	Base Surface Soil	06-Aug-2020	ES2026823	88.1	No	3.5	-	-	-	10	<5	<1	42	13	<0.1	6	29
QC13	Field duplicate of V170	06-Aug-2020	ES2026823	-	-	3.5	-	-	-	11	6	<1	47	13	<0.1	6	32

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Asbestos		Inorganics				Metals							
				weight of sample	Asbestos in Soil	Moisture Content	pH (Initial)	pH (aqueous extract)	pH (after HCL)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
				g		%	pH_Units	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.01		1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use																	
NEPM 2013 Table 1A(1) HILs Res B Soil										**1200**	**500**	**150**	**500^**	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS										**1100**	**100**		**360****	**110**	**15**	**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																	
0-1m																	
1-2m																	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**														
V172	Base Surface Soil	06-Aug-2020	ES2026823	78.6	No	5.8	-	-	-	11	6	<1	91	8	<0.1	6	14
V174	Base Surface Soil	06-Aug-2020	ES2026823	34.4	**Yes**	1.2	-	-	-	10	6	<1	53	7	<0.1	6	17
V161A	Base Surface Soil	11-Aug-2020	ES2028010	71.3	No	-	-	-	-	-	-	-	-	-	-	-	-
V173A	Base Surface Soil	11-Aug-2020	ES2028010	65.3	No	-	-	-	-	-	-	-	-	-	-	-	-
V174A	Base Surface Soil	11-Aug-2020	ES2028010	61.5	No	-	-	-	-	-	-	-	-	-	-	-	-
V175A	Base Surface Soil	11-Aug-2020	ES2028010	72.6	No	-	-	-	-	-	-	-	-	-	-	-	-
V176	Base Surface Soil	12-Aug-2020	ES2028010	90.5	No	2.4	-	-	-	11	7	<1	91	8	<0.1	7	9
V178	Base Surface Soil	12-Aug-2020	ES2028010	85.3	No	4.4	-	-	-	10	6	<1	81	9	<0.1	7	7
V180	Base Surface Soil	12-Aug-2020	ES2028010	71.1	No	8.2	-	-	-	11	7	<1	88	7	<0.1	7	<5
V182	Base Surface Soil	12-Aug-2020	ES2028010	96.2	No	2.2	-	-	-	13	7	<1	117	8	<0.1	9	5
V184	Base Surface Soil	12-Aug-2020	ES2028010	95.2	No	1.7	-	-	-	14	9	<1	123	9	<0.1	7	22
V186	Base Surface Soil	12-Aug-2020	ES2028010	100	No	2	-	-	-	12	7	<1	94	10	<0.1	7	20
V188	Base Surface Soil	12-Aug-2020	ES2028010	113	No	3.3	-	-	-	12	7	<1	69	9	<0.1	7	38
V190	Base Surface Soil	12-Aug-2020	ES2028010	82.4	No	1.8	-	-	-	11	6	<1	104	7	<0.1	6	7
QC15	Field duplicate of V190	12-Aug-2020	ES2028010	-	-	1.4	-	-	-	9	<5	<1	111	8	<0.1	6	8
V192	Base Surface Soil	12-Aug-2020	ES2028010	79.6	**Yes**	3.1	-	-	-	36	7	<1	72	19	<0.1	8	97
V192a	Base Surface Soil	18-Dec-2020	NT84930	-	No	-	-	-	-	-	-	-	-	-	-	-	-
V194	Base Surface Soil	12-Aug-2020	ES2028010	109	No	2.1	-	-	-	14	7	<1	121	10	<0.1	7	31
V196	Base Surface Soil	12-Aug-2020	ES2028010	57.9	No	1.9	-	-	-	12	<5	<1	41	8	<0.1	7	25
V198	Base Surface Soil	12-Aug-2020	ES2028010	90.2	No	1.6	-	-	-	10	6	<1	42	8	<0.1	6	50
V200	Base Surface Soil	12-Aug-2020	ES2028010	121	No	2.4	-	-	-	9	5	<1	47	7	<0.1	6	9
V202	Base Surface Soil	12-Aug-2020	ES2028010	73.7	No	2.1	-	-	-	10	7	<1	57	10	<0.1	6	<5
V204	Base Surface Soil	12-Aug-2020	ES2028010	81.3	No	2.6	-	-	-	10	6	<1	82	12	<0.1	10	6
V206	Base Surface Soil	12-Aug-2020	ES2028010	94.5	No	2	-	-	-	11	7	<1	75	10	<0.1	9	8
V208	Base Surface Soil	12-Aug-2020	ES2028010	100	No	10.6	-	-	-	12	7	<1	160	6	<0.1	6	<5
V210	Base Surface Soil	12-Aug-2020	ES2028010	73.2	No	7	-	-	-	10	6	<1	106	7	<0.1	7	<5
QC16	Field duplicate of V210	12-Aug-2020	ES2028010	-	-	7	-	-	-	10	6	<1	66	8	<0.1	8	<5
V212	Base Surface Soil	12-Aug-2020	ES2028010	81.5	No	1.4	-	-	-	9	6	<1	90	11	<0.1	5	7
V214	Base Surface Soil	12-Aug-2020	ES2028010	83.7	No	3.6	-	-	-	9	6	<1	80	9	<0.1	8	5
VP01	Base Surface Soil	12-Aug-2020	ES2028010	67.6	No	-	-	-	-	-	-	-	-	-	-	-	-
VP03	Base Surface Soil	12-Aug-2020	ES2028010	76.4	No	-	-	-	-	-	-	-	-	-	-	-	-
VP05	Base Surface Soil	12-Aug-2020	ES2028010	74.6	No	-	-	-	-	-	-	-	-	-	-	-	-
VP07	Base Surface Soil	12-Aug-2020	ES2028010	67	No	-	-	-	-	-	-	-	-	-	-	-	-
Valp-100	Base Surface Soil	18-Aug-2020	NT84930	-	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-1	Trench Sample	18-Aug-2020	NT84930	78.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-2	Trench Sample	18-Aug-2020	NT84930	85.1	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-3	Trench Sample	18-Aug-2020	NT84930	82.4	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-4	Trench Sample	18-Aug-2020	NT84930	85.2	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-5	Trench Sample	18-Aug-2020	NT84930	92.7	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-6	Trench Sample	18-Aug-2020	NT84930	75.9	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-7	Trench Sample	18-Aug-2020	NT84930	80.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-8	Trench Sample	18-Aug-2020	NT84930	102	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-9	Trench Sample	18-Aug-2020	NT84930	82.8	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-10	Trench Sample	18-Aug-2020	NT84930	84.8	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-11	Trench Sample	18-Aug-2020	NT84930	95.6	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-12	Trench Sample	18-Aug-2020	NT84930	96.1	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-13	Trench Sample	18-Aug-2020	NT84930	117	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-14	Trench Sample	18-Aug-2020	NT84930	95.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-15	Trench Sample	18-Aug-2020	NT84930	82.6	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-16	Trench Sample	18-Aug-2020	NT84930	84.8	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-17	Trench Sample	18-Aug-2020	NT84930	95.5	No	-	-	-	-	-	-	-	-	-	-	-	-

SLR

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Asbestos		Inorganics				Metals							
				weight of sample	Asbestos in Soil	Moisture Content	pH (Initial)	pH (aqueous extract)	pH (after HCL)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
				g		%	pH_Units	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.01		1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use																	
NEPM 2013 Table 1A(1) HILs Res B Soil										**1200**	**500**	**150**	**500^**	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS										**1100**	**100**		**360****	**110**	**15**	**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																	
0-1m																	
1-2m																	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**														
Val-t-18	Trench Sample	18-Aug-2020	NT84930	74.2	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-19	Trench Sample	18-Aug-2020	NT84930	90.8	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-20	Trench Sample	18-Aug-2020	NT84930	98.9	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-21	Trench Sample	18-Aug-2020	NT84930	88.2	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-22	Trench Sample	18-Aug-2020	NT84930	88.8	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-23	Trench Sample	18-Aug-2020	NT84930	79	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-24	Trench Sample	18-Aug-2020	NT84930	69.2	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-25	Trench Sample	18-Aug-2020	NT84930	92.5	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-26	Trench Sample	18-Aug-2020	NT84930	88	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27	Trench Sample	18-Aug-2020	NT84930	71.9	**Yes**	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27a	Trench Sample	21-Aug-2020	NT84930b	84.2	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-28	Trench Sample	18-Aug-2020	NT84930	88.1	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-29	Trench Sample	18-Aug-2020	NT84930	87.1	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-30	Trench Sample	18-Aug-2020	NT84930	82.8	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-31	Trench Sample	18-Aug-2020	NT84930	72.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-32	Trench Sample	18-Aug-2020	NT84930	88.7	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-33	Trench Sample	18-Aug-2020	NT84930	104	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-34	Trench Sample	18-Aug-2020	NT84930	79	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-35	Trench Sample	18-Aug-2020	NT84930	60.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-36	Trench Sample	18-Aug-2020	NT84930	79.5	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-37	Trench Sample	18-Aug-2020	NT84930	84.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-38	Trench Sample	18-Aug-2020	NT84930	76.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-39	Trench Sample	18-Aug-2020	NT84930	85.6	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-40	Trench Sample	18-Aug-2020	NT84930	70.6	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-41	Trench Sample	18-Aug-2020	NT84930	80.8	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-42	Trench Sample	18-Aug-2020	NT84930	84.1	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-43	Trench Sample	18-Aug-2020	NT84930	84.5	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-44	Trench Sample	18-Aug-2020	NT84930	75.4	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-45	Trench Sample	18-Aug-2020	NT84930	80.7	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-46	Trench Sample	18-Aug-2020	NT84930	87.4	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-47	Trench Sample	18-Aug-2020	NT84930	50.7	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-48	Trench Sample	18-Aug-2020	NT84930	85.2	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-49	Trench Sample	18-Aug-2020	NT84930	61.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-50	Trench Sample	18-Aug-2020	NT84930	67.9	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-51	Trench Sample	18-Aug-2020	NT84930	67.9	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-52	Trench Sample	18-Aug-2020	NT84930	76.6	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-53	Trench Sample	18-Aug-2020	NT84930	96.8	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-54	Trench Sample	18-Aug-2020	NT84930	77.4	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-55	Trench Sample	18-Aug-2020	NT84930	71.1	No	-	-	-	-	-	-	-	-	-	-	-	-

SLR

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Organochlorine Pesticides																									
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	Methoxychlor
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																													
NEPM 2013 Table 1A(1) HILs Res B Soil							10		90						600		400				20				15	10		500
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS														180															
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																													
0-1m																													
1-2m																													
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																										
V84	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V84A	Base Surface Soil	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V85A	Base Surface Soil	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V86	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V88	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V90	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC9	Field duplicate of V90	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V92	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V94	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V96	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V98	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V100	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V102	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V104	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V106	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V108	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V110	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.26	<0.05	0.15	<0.05	0.15	<0.05	<0.05	<0.2	<0.05	0.26	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC10	Field duplicate of V110	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.17	<0.05	0.11	<0.05	0.11	<0.05	<0.05	<0.2	<0.05	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V112	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.5	<0.05	0.35	<0.05	0.35	<0.05	<0.05	<0.2	<0.05	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V114	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V116	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.09	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V118	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V120	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V122	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V124	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V126	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V128	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.06	<0.05	0.21	<0.05	0.21	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V130	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC11	Field duplicate of V130	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V132	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V134	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V136	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V138	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V140	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V142	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V144	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V146	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V148	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V150	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC12	Field duplicate of V150	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V152	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V154	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V156	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V158	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.26	<0.05	0.14	<0.05	0.14	<0.05	<0.05	<0.2	<0.05	0.26	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V160	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V162	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	0.05	0.95	<0.05	0.18	<0.05	0.18	<0.05	<0.05	<0.2	<0.05	0.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V164	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.47	<0.05	0.2	<0.05	0.2	<0.05	<0.05	<0.2	<0.05	0.47	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V166	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V168	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V170	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.6	<0.05	0.3	<0.05	0.3	<0.05	<0.05	<0.2	<0.05	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.2
QC13	Field duplicate of V170	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.6	<0.05	0.3	<0.05	0.3	<0.05	<0.05	<0.2	<0.05	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.2

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Organochlorine Pesticides																								
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	Methoxychlor
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																												
NEPM 2013 Table 1A(1) HILs Res B Soil							10		90						600		400				20				15	10		500
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS														180														
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																												
0-1m																												
1-2m																												
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																									
V172	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.18	<0.05	0.16	<0.05	0.16	<0.05	<0.05	<0.2	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V174	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.07	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V161A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V173A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V174A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V175A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V176	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	0.06	0.22	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V178	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V180	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V182	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V184	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V186	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V188	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V190	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC15	Field duplicate of V190	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V192	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V192a	Base Surface Soil	18-Dec-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V194	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V196	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V198	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V200	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V202	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V204	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V206	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V208	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V210	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC16	Field duplicate of V210	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V212	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
V214	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
VP01	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP03	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP05	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP07	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Valp-100	Base Surface Soil	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-1	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-2	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-3	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-4	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-5	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-6	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-7	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-8	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-9	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-10	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-11	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-12	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-13	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-14	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-15	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-16	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-17	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SLR

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Organochlorine Pesticides																								
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	Methoxychlor
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																												
NEPM 2013 Table 1A(1) HILs Res B Soil							10		90						600		400				20				15	10		500
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS														180														
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																												
0-1m																												
1-2m																												
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																									
Val-t-18	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-19	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-20	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-21	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-22	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-23	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-24	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-25	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-26	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27a	Trench Sample	21-Aug-2020	NT84930b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-28	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-29	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-30	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-31	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-32	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-33	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-34	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-35	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-36	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-37	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-38	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-39	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-40	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-41	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-42	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-43	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-44	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-45	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-46	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-47	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-48	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-49	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-50	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-51	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-52	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-53	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-54	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-55	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Organophosphorous Pesticides																		
				Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil								340														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																						
1-2m																						
Field_ID	Sample Type	Sampled_Date	Lab_Report_Number																			
V84	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V84A	Base Surface Soil	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V85A	Base Surface Soil	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V86	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V88	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V90	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC9	Field duplicate of V90	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V92	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V94	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V96	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V98	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V100	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V102	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V104	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V106	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V108	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V110	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC10	Field duplicate of V110	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V112	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V114	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V116	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V118	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V120	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V122	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V124	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V126	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V128	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V130	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC11	Field duplicate of V130	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V132	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V134	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V136	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V138	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V140	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V142	Base Surface Soil	05-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V144	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V146	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V148	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V150	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC12	Field duplicate of V150	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V152	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V154	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V156	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V158	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V160	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V162	Base Surface Soil	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V164	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V166	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V168	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V170	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC13	Field duplicate of V170	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05

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Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Organophosphorous Pesticides																		
				Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil								**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																						
1-2m																						
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
V172	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V174	Base Surface Soil	06-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V161A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V173A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V174A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V175A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V176	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V178	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V180	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V182	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V184	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V186	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V188	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V190	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC15	Field duplicate of V190	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V192	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V192a	Base Surface Soil	18-Dec-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V194	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V196	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V198	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V200	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V202	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V204	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V206	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V208	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V210	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC16	Field duplicate of V210	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V212	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
V214	Base Surface Soil	12-Aug-2020	ES2028010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
VP01	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP03	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP05	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP07	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Valp-100	Base Surface Soil	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-1	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-2	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-3	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-4	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-5	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-6	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-7	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-8	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-9	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-10	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-11	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-12	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-13	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-14	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-15	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-16	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-17	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				Organophosphorous Pesticides																			
				Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil								**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																						
1-2m																						
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
Val-t-18	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-19	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-20	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-21	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-22	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-23	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-24	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-25	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-26	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27a	Trench Sample	21-Aug-2020	NT84930b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-28	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-29	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-30	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-31	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-32	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-33	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-34	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-35	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-36	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-37	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-38	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-39	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-40	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-41	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-42	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-43	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-44	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-45	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-46	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-47	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-48	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-49	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-50	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-51	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-52	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-53	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-54	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-55	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				PAH/Phenols																	PAH/(SIM)		
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																							
NEPM 2013 Table 1A(1) HILs Res B Soil																		**400**					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																							
0-1m																	**4**						
1-2m																							
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																				
V84	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V84A	Base Surface Soil	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V85A	Base Surface Soil	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V86	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V88	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V90	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC9	Field duplicate of V90	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V92	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V94	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V96	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V98	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V100	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V102	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V104	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V106	Base Surface Soil	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V108	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V110	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC10	Field duplicate of V110	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V112	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V114	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V116	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V118	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V120	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V122	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V124	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V126	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V128	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V130	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC11	Field duplicate of V130	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V132	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V134	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V136	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V138	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V140	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V142	Base Surface Soil	05-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V144	Base Surface Soil	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V146	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V148	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V150	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC12	Field duplicate of V150	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0	1.2	<0.5
V152	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V154	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V156	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V158	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V160	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V162	Base Surface Soil	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V164	Base Surface Soil	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V166	Base Surface Soil	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V168	Base Surface Soil	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V170	Base Surface Soil	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC13	Field duplicate of V170	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				PAH/Phenols																	PAH/(SIM)		
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																							
NEPM 2013 Table 1A(1) HILs Res B Soil																		400					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																							
0-1m																	4						
1-2m																							
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																				
V172	Base Surface Soil	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V174	Base Surface Soil	06-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V161A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V173A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V174A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V175A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V176	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V178	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V180	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V182	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V184	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V186	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V188	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V190	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC15	Field duplicate of V190	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V192	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V192a	Base Surface Soil	18-Dec-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V194	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V196	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V198	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V200	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V202	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V204	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V206	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V208	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V210	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC16	Field duplicate of V210	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V212	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
V214	Base Surface Soil	12-Aug-2020	ES2028010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
VP01	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP03	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP05	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP07	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Valp-100	Base Surface Soil	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-1	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-2	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-3	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-4	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-5	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-6	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-7	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-8	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-9	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-10	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-11	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-12	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-13	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-14	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-15	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-16	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-17	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				PAH/Phenols																		PAH/(SIM)		
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																							
NEPM 2013 Table 1A(1) HILs Res B Soil																		**400**					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																							
0-1m																	**4**						
1-2m																							
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																				
Val-t-18	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-19	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-20	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-21	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-22	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-23	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-24	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-25	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-26	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27a	Trench Sample	21-Aug-2020	NT84930b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-28	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-29	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-30	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-31	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-32	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-33	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-34	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-35	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-36	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-37	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-38	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-39	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-40	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-41	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-42	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-43	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-44	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-45	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-46	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-47	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-48	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-49	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-50	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-51	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-52	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-53	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-54	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-55	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				TPH										TRH - Semivolatile Fraction			BTEX					
				F1 minus BTEX (C6-C10)	F2-Napth (C10-C16)	Total BTEX	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				10	50	0.2	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																						
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m				**40**	**230**											**0.6**		**390**			**95**	
1-2m				**65**												**0.7**					**210**	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
V84	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V84A	Base Surface Soil	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V85A	Base Surface Soil	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V86	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V88	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V90	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
QC9	Field duplicate of V90	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V92	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V94	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V96	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V98	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V100	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V102	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V104	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V106	Base Surface Soil	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V108	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V110	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
QC10	Field duplicate of V110	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V112	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V114	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V116	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V118	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V120	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V122	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V124	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V126	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V128	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V130	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
QC11	Field duplicate of V130	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V132	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V134	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V136	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V138	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V140	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V142	Base Surface Soil	05-Aug-2020	ES2026818	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V144	Base Surface Soil	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V146	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V148	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V150	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
QC12	Field duplicate of V150	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V152	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V154	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V156	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V158	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V160	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V162	Base Surface Soil	05-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V164	Base Surface Soil	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V166	Base Surface Soil	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V168	Base Surface Soil	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V170	Base Surface Soil	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
QC13	Field duplicate of V170	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				TPH										TRH - Semivolatile Fraction			BTEX					
				F1 minus BTEX (C6-C10)	F2-Napth (C10-C16)	Total BTEX	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				10	50	0.2	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																						
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m				**40**	**230**											**0.6**		**390**			**95**	
1-2m				**65**												**0.7**					**210**	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
V172	Base Surface Soil	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V174	Base Surface Soil	06-Aug-2020	ES2026823	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V161A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V173A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V174A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V175A	Base Surface Soil	11-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V176	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V178	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V180	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V182	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V184	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V186	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V188	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V190	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
QC15	Field duplicate of V190	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V192	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V192a	Base Surface Soil	18-Dec-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V194	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V196	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V198	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V200	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V202	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V204	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V206	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V208	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V210	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
QC16	Field duplicate of V210	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V212	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
V214	Base Surface Soil	12-Aug-2020	ES2028010	<10	<50	<0.2	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
VP01	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP03	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP05	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VP07	Base Surface Soil	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Valp-100	Base Surface Soil	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-1	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-2	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-3	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-4	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-5	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-6	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-7	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-8	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-9	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-10	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-11	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-12	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-13	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-14	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-15	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-16	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-17	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Lot B2- Validation Samples Analytical Results
Remediation and Valiation - Residential Allotments

				TPH										TRH - Semivolatile Fraction			BTEX					
				F1 minus BTEX (C6-C10)	F2-Napth (C10-C16)	Total BTEX	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				10	50	0.2	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																						
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m				**40**	**230**											**0.6**		**390**			**95**	
1-2m				**65**												**0.7**					**210**	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
Val-t-18	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-19	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-20	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-21	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-22	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-23	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-24	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-25	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-26	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-27a	Trench Sample	21-Aug-2020	NT84930b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-28	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-29	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-30	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-31	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-32	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-33	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-34	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-35	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-36	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-37	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-38	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-39	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-40	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-41	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-42	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-43	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-44	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-45	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-46	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-47	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-48	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-49	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-50	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-51	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-52	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-53	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-54	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-t-55	Trench Sample	18-Aug-2020	NT84930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Asbestos		Inorganics				Metals							
				weight of sample	Asebestos in Soil	Moisture Content	pH (initial)	pH (aqueous extract)	pH (after HCL)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
				g		%	pH_Units	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.01		1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use																	
NEPM 2013 Table 1A(1) HILs Res B Soil										**1200**	**500**	**150**	**500^**	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS										**1100**	**100**		**360****	**110**	**15**	**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																	
0-1m																	
1-2m																	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**														
Val-56	Base Surface Soil	10-Sep-2020	ES2032260	84.2	No	6.5	-	-	-	8	5	<1	67	6	<0.1	5	13
Val-58	Base Surface Soil	10-Sep-2020	ES2032260	96.6	No	8.6	-	-	-	8	5	<1	126	6	<0.1	4	<5
Val-60	Base Surface Soil	10-Sep-2020	ES2032260	81.7	No	8.6	-	-	-	7	6	<1	64	7	<0.1	5	<5
Val-62	Base Surface Soil	10-Sep-2020	ES2032260	81.8	No	7.3	-	-	-	9	5	<1	44	9	<0.1	7	6
Val-64	Base Surface Soil	10-Sep-2020	ES2032260	98.6	No	4.8	-	-	-	7	5	<1	51	8	<0.1	6	<5
Val-66	Base Surface Soil	10-Sep-2020	ES2032260	91.9	No	4.9	-	-	-	10	6	<1	92	10	<0.1	7	7
Val-68	Base Surface Soil	10-Sep-2020	ES2032260	76.1	No	12.3	-	-	-	10	6	<1	170	5	<0.1	4	<5
Val-70	Base Surface Soil	10-Sep-2020	ES2032260	71.2	No	11.2	-	-	-	10	6	<1	62	10	<0.1	7	10
Val-72	Base Surface Soil	10-Sep-2020	ES2032260	75.8	No	6.6	-	-	-	9	<5	<1	97	7	<0.1	5	<5
Val-74	Base Surface Soil	10-Sep-2020	ES2032260	89.6	No	7.9	-	-	-	8	5	<1	86	6	<0.1	6	<5
Val-76	Base Surface Soil	10-Sep-2020	ES2032260	80	No	9.4	-	-	-	11	8	<1	147	7	<0.1	6	9
Val-79	Base Surface Soil	10-Sep-2020	ES2032260	84.5	No	13.8	-	-	-	9	8	<1	128	6	<0.1	6	<5
Val-81	Base Surface Soil	10-Sep-2020	ES2032260	72.2	No	12.4	-	-	-	9	6	<1	108	8	<0.1	6	9
Val-83	Base Surface Soil	10-Sep-2020	ES2032260	81.5	No	6.5	-	-	-	8	6	<1	63	8	<0.1	7	<5
Val-85	Base Surface Soil	10-Sep-2020	ES2032260	77.2	No	8.8	-	-	-	8	5	<1	64	8	<0.1	5	<5
Val-87	Base Surface Soil	10-Sep-2020	ES2032260	84.7	No	10.4	-	-	-	10	7	<1	157	6	<0.1	5	7
Val-90	Base Surface Soil	10-Sep-2020	ES2032260	81.4	No	9.1	-	-	-	10	7	<1	77	10	<0.1	8	<5
Val-92	Base Surface Soil	10-Sep-2020	ES2032260	67.3	No	8.8	-	-	-	8	6	<1	53	10	<0.1	9	8
Val-93	Base Surface Soil	10-Sep-2020	ES2032260	80.4	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-94	Base Surface Soil	10-Sep-2020	ES2032260	81.2	**Yes**	7.6	-	-	-	8	5	<1	87	8	<0.1	6	12
Val-94-1	Val	18-Sep-2020	ES2032556	55.4	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-2	Val	18-Sep-2020	ES2032556	47.5	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-3	Val	18-Sep-2020	ES2032556	64.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-95	Base Surface Soil	10-Sep-2020	ES2032260	75.6	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-96	Base Surface Soil	10-Sep-2020	ES2032260	90.6	No	9.1	-	-	-	7	5	<1	46	8	<0.1	8	<5
Val-98	Base Surface Soil	10-Sep-2020	ES2032260	66.1	No	9.1	-	-	-	11	7	<1	117	10	<0.1	8	58
Val-100	Base Surface Soil	10-Sep-2020	ES2032260	78.8	No	5.6	-	-	-	15	15	<1	252	6	<0.1	6	<5
Val-102	Base Surface Soil	10-Sep-2020	ES2032260	72.7	No	10.2	-	-	-	11	6	<1	132	8	<0.1	8	6
Val-104	Base Surface Soil	10-Sep-2020	ES2032260	72.7	No	6.1	-	-	-	8	5	<1	58	10	<0.1	11	6
Val-106	Base Surface Soil	10-Sep-2020	ES2032260	81.6	No	9.1	-	-	-	6	<5	<1	38	6	<0.1	5	7
Val-108	Base Surface Soil	10-Sep-2020	ES2032260	72.8	No	6.9	-	-	-	10	15	<1	84	17	<0.1	8	9
Val-110	Base Surface Soil	10-Sep-2020	ES2032260	87.2	No	5.5	-	-	-	11	6	<1	71	9	<0.1	7	24
Val-112	Base Surface Soil	10-Sep-2020	ES2032260	84	No	9.2	-	-	-	11	7	<1	177	6	<0.1	6	<5
Val-114	Base Surface Soil	10-Sep-2020	ES2032260	67.6	No	9.9	-	-	-	9	5	<1	109	7	<0.1	8	<5
Val-116	Base Surface Soil	10-Sep-2020	ES2032260	103	No	5	-	-	-	9	5	<1	96	8	<0.1	8	19
Val-118	Base Surface Soil	10-Sep-2020	ES2032260	68.4	No	7	-	-	-	9	6	<1	106	7	<0.1	7	28
Val-120	Base Surface Soil	10-Sep-2020	ES2032260	93.1	No	7.8	-	-	-	12	8	<1	122	10	<0.1	6	25
Val-122	Base Surface Soil	10-Sep-2020	ES2032260	98.8	No	5.3	-	-	-	9	6	<1	64	12	<0.1	10	7
Val-124	Base Surface Soil	10-Sep-2020	ES2032260	70.9	No	5	-	-	-	13	7	<1	152	8	<0.1	8	6
Val-126	Base Surface Soil	10-Sep-2020	ES2032260	71.9	No	7.9	-	-	-	8	5	<1	55	9	<0.1	8	13
Val-128	Base Surface Soil	10-Sep-2020	ES2032260	78.6	No	7.4	-	-	-	8	6	<1	53	7	<0.1	7	6
Val-130	Base Surface Soil	10-Sep-2020	ES2032260	72.8	No	5.6	-	-	-	9	5	<1	55	10	<0.1	10	51
Val-133	Base Surface Soil	10-Sep-2020	ES2032454	85.3	No	6	-	-	-	11	6	<1	149	7	<0.1	4	15
Val-135	Base Surface Soil	10-Sep-2020	ES2032454	81.5	No	4.4	-	-	-	11	6	<1	146	6	<0.1	6	<5
Val-137	Base Surface Soil	10-Sep-2020	ES2032454	76.9	No	5.3	-	-	-	12	6	<1	110	8	<0.1	7	24
Val-139	Base Surface Soil	10-Sep-2020	ES2032454	70.3	No	6	-	-	-	8	6	<1	112	7	<0.1	6	<5
Val-141	Base Surface Soil	10-Sep-2020	ES2032454	76.2	No	5.6	-	-	-	9	5	<1	142	8	<0.1	9	30
Val-143	Base Surface Soil	10-Sep-2020	ES2032454	65.9	No	7.8	-	-	-	12	7	<1	147	5	<0.1	5	8
Val-145	Base Surface Soil	10-Sep-2020	ES2032454	78.6	No	10.4	-	-	-	9	6	<1	130	6	<0.1	4	6
Val-147	Base Surface Soil	10-Sep-2020	ES2032454	69.8	No	8.9	-	-	-	11	6	<1	115	8	<0.1	8	8
Val-149	Base Surface Soil	10-Sep-2020	ES2032454	63.1	**Yes**	11.6	-	-	-	10	7	<1	139	7	<0.1	8	<5

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Asbestos		Inorganics				Metals							
				weight of sample	Asebestos in Soil	Moisture Content	pH (Initial)	pH (aqueous extract)	pH (after HCL)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
				g		%	pH_Units	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.01		1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use																	
NEPM 2013 Table 1A(1) HILs Res B Soil										**1200**	**500**	**150**	**500^**	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS										**1100**	**100**		**360****	**110**	**15**	**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																	
0-1m																	
1-2m																	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**														
Val-149-1	Base Surface Soil	18-Sep-2020	EN2006388	61.4	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-2	Base Surface Soil	18-Sep-2020	EN2006388	63.3	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-3	Base Surface Soil	18-Sep-2020	EN2006388	42.2	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-151	Base Surface Soil	10-Sep-2020	ES2032454	70.9	No	6.9	-	-	-	11	8	<1	159	7	<0.1	6	30
Val-153	Base Surface Soil	10-Sep-2020	ES2032454	69.5	No	6	-	-	-	8	7	<1	163	5	<0.1	6	<5
Val-155	Base Surface Soil	10-Sep-2020	ES2032454	74.7	No	5.8	-	-	-	14	8	<1	165	8	<0.1	6	22
Val-157	Base Surface Soil	10-Sep-2020	ES2032454	88.7	No	6	-	-	-	14	6	<1	125	7	<0.1	6	23
Val-159	Base Surface Soil	10-Sep-2020	ES2032454	53	No	7.6	-	-	-	12	8	<1	97	6	<0.1	6	7
QC19	Field duplicate of Val-159	10-Sep-2020	ES2032454	-	-	5.3	-	-	-	8	<5	<1	82	<5	<0.1	4	11
Val-161	Base Surface Soil	10-Sep-2020	ES2032454	91.7	No	8	-	-	-	11	6	<1	137	7	<0.1	8	15
Val-163	Base Surface Soil	10-Sep-2020	ES2032454	52.3	No	7.6	-	-	-	12	<5	<1	155	5	<0.1	4	5
Val-165	Base Surface Soil	10-Sep-2020	ES2032454	64.6	No	7.9	-	-	-	11	6	<1	134	7	<0.1	7	<5
Val-167	Base Surface Soil	10-Sep-2020	ES2032454	84.4	No	10.1	-	-	-	10	8	<1	161	6	<0.1	6	<5
Val-169	Base Surface Soil	10-Sep-2020	ES2032454	84.7	No	-	-	-	-	-	-	-	-	-	-	-	-
Val-171	Base Surface Soil	10-Sep-2020	ES2032454	64.6	No	6.1	-	-	-	8	6	<1	158	<5	<0.1	4	<5
QC20	Field duplicate of Val-171	10-Sep-2020	ES2032454	-	-	21.7	-	-	-	8	<5	<1	78	<5	<0.1	4	11
Val-173	Base Surface Soil	10-Sep-2020	ES2032454	68.3	No	5.1	-	-	-	10	8	<1	173	<5	<0.1	4	22
Val-175	Base Surface Soil	10-Sep-2020	ES2032454	76.4	No	5.1	-	-	-	10	6	<1	122	5	<0.1	4	16
Val-177	Base Surface Soil	10-Sep-2020	ES2032454	64.4	No	4.1	-	-	-	16	8	<1	215	6	<0.1	6	10
Val-179	Base Surface Soil	10-Sep-2020	ES2032454	60.1	No	5.9	-	-	-	11	6	<1	145	5	<0.1	5	12
QC21	Field duplicate of Val-179	10-Sep-2020	ES2032454	-	-	12	-	-	-	7	<5	<1	137	<5	<0.1	7	<5
Val-181	Base Surface Soil	10-Sep-2020	ES2032454	61.5	No	9.2	-	-	-	13	9	<1	158	6	<0.1	6	<5
QC22	Field duplicate of Val-181	10-Sep-2020	ES2032454	-	-	9.9	-	-	-	8	<5	<1	72	6	<0.1	7	<5
Val-183	Base Surface Soil	10-Sep-2020	ES2032454	80	No	1.5	-	-	-	10	6	<1	171	6	<0.1	6	8
Val-185	Base Surface Soil	10-Sep-2020	ES2032454	69.9	No	<1	-	-	-	9	7	<1	110	8	<0.1	7	6
QC23	Field duplicate of Val-185	10-Sep-2020	ES2032454	-	-	6.2	-	-	-	9	<5	<1	114	<5	<0.1	5	<5
Val-T-01	Trench Sample	11-Sep-2020	ES2032486	76.9	**Yes**	14.9	-	-	-	11	6	<1	62	<5	<0.1	4	<5
Val-T-01a	Trench Sample	18-Sep-2020	EN2006388		No	-	-	-	-	-	-	-	-	-	-	-	-
Val-T-02	Trench Sample	11-Sep-2020	ES2032486	62.8	No	15.3	-	-	-	8	<5	<1	60	5	<0.1	5	<5
Val-T-03	Trench Sample	11-Sep-2020	ES2032486	61.7	No	12.9	-	-	-	10	5	<1	140	<5	<0.1	5	<5
Val-T-04	Trench Sample	11-Sep-2020	ES2032486	48.3	No	7.9	-	-	-	9	6	<1	74	5	<0.1	6	<5
Val-T-05	Trench Sample	11-Sep-2020	ES2032486	53.8	No	11.6	-	-	-	9	5	<1	80	5	<0.1	5	<5
Val-T-06	Trench Sample	11-Sep-2020	ES2032486	60.3	No	3.2	-	-	-	8	<5	<1	68	6	<0.1	7	<5
Val-T-07	Trench Sample	11-Sep-2020	ES2032486	52.6	No	7.5	-	-	-	8	<5	<1	67	6	<0.1	7	<5
Val-T-08	Trench Sample	11-Sep-2020	ES2032486	49.4	No	8.8	-	-	-	9	6	<1	63	6	<0.1	7	7
Val-T-09	Trench Sample	11-Sep-2020	ES2032486	51.6	No	9.7	-	-	-	8	5	<1	66	6	<0.1	6	6
Val-T-10	Trench Sample	11-Sep-2020	ES2032486	31.7	No	12.7	-	-	-	8	<5	<1	127	<5	<0.1	3	<5
Val-T-11	Trench Sample	11-Sep-2020	ES2032486	56.6	No	9	-	-	-	7	<5	<1	25	6	<0.1	6	11
Val-T-12	Trench Sample	11-Sep-2020	ES2032486	61.7	No	8.5	-	-	-	6	<5	<1	36	<5	<0.1	4	<5
Val-T-13	Trench Sample	11-Sep-2020	ES2032486	70.3	No	9.1	-	-	-	<5	<5	<1	28	<5	<0.1	3	<5
Val-T-14	Trench Sample	11-Sep-2020	ES2032486	42.8	No	14.3	-	-	-	6	<5	<1	79	<5	<0.1	4	<5
Val-T-15	Trench Sample	11-Sep-2020	ES2032486	50	No	9.9	-	-	-	7	<5	<1	75	6	<0.1	6	<5
Val-T-16	Trench Sample	11-Sep-2020	ES2032486	59.8	No	10.8	-	-	-	7	<5	<1	43	5	<0.1	5	<5
Val-T-17	Trench Sample	11-Sep-2020	ES2032486	62.3	No	5	-	-	-	8	<5	<1	122	6	<0.1	5	<5
Val-T-18	Trench Sample	11-Sep-2020	ES2032486	53.4	No	9	-	-	-	9	5	<1	80	7	<0.1	5	17
Val-T-19	Trench Sample	11-Sep-2020	ES2032486	47.3	No	6.3	-	-	-	8	<5	<1	95	7	<0.1	4	<5
Val-T-20	Trench Sample	11-Sep-2020	ES2032486	60.3	No	5.1	-	-	-	6	<5	<1	9	6	<0.1	3	16
Val-T-21	Trench Sample	11-Sep-2020	ES2032486	72	No	6.4	-	-	-	9	<5	<1	73	9	<0.1	7	<5
Val-T-22	Trench Sample	11-Sep-2020	ES2032486	62.9	No	4.8	-	-	-	8	<5	<1	35	6	<0.1	5	5
Val-T-23	Trench Sample	14-Sep-2020	ES2032486	57.6	No	4.6	-	-	-	6	<5	<1	43	<5	<0.1	4	<5
Val-T-24	Trench Sample	14-Sep-2020	ES2032486	62.1	No	5.6	-	-	-	8	5	<1	57	<5	<0.1	4	<5

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Asbestos		Inorganics				Metals							
				weight of sample	Asebestos in Soil	Moisture Content	pH (Initial)	pH (aqueous extract)	pH (after HCL)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
				g		%	pH_Units	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.01		1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use																	
NEPM 2013 Table 1A(1) HILs Res B Soil										**1200**	**500**	**150**	**500^**	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS										**1100**	**100**		**360****	**110**	**15**	**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																	
0-1m																	
1-2m																	
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**														
Val-T-25	Trench Sample	14-Sep-2020	ES2032486	71.5	No	7.2	-	-	-	5	<5	<1	36	10	<0.1	4	5
Val-T-26	Trench Sample	14-Sep-2020	ES2032486	63.2	No	5.9	-	-	-	6	<5	<1	41	26	<0.1	4	<5
Val-T-27	Trench Sample	14-Sep-2020	ES2032486	53.2	No	9.4	-	-	-	<5	<5	<1	35	<5	<0.1	2	<5
Val-T-28	Trench Sample	14-Sep-2020	ES2032486	71.4	No	8.5	-	-	-	9	<5	<1	60	5	<0.1	4	12
Val-T-29	Trench Sample	14-Sep-2020	ES2032486	89.5	No	9.4	-	-	-	6	<5	<1	56	5	<0.1	5	<5
Val-T-30	Trench Sample	14-Sep-2020	ES2032486	60.9	No	7.6	-	-	-	7	<5	<1	63	6	<0.1	4	<5
Val-T-31	Trench Sample	14-Sep-2020	ES2032486	83	No	3.9	-	-	-	5	<5	<1	20	5	<0.1	5	10
Val-T-32	Trench Sample	14-Sep-2020	ES2032486	77.4	No	8.3	-	-	-	<5	<5	<1	23	<5	<0.1	2	126
Val-T-33	Trench Sample	14-Sep-2020	ES2032486	61.4	No	8.4	-	-	-	5	<5	<1	43	<5	<0.1	3	8
Val-T-34	Trench Sample	14-Sep-2020	ES2032486	41.2	No	14.4	-	-	-	7	6	<1	88	5	<0.1	3	<5
Val-T-35	Trench Sample	14-Sep-2020	ES2032486	65.4	No	12.6	-	-	-	7	6	<1	103	5	<0.1	4	58
Val-T-36	Trench Sample	14-Sep-2020	ES2032486	67.7	No	8.4	-	-	-	8	<5	<1	78	6	<0.1	6	<5
Val-T-37	Trench Sample	14-Sep-2020	ES2032486	41.3	No	8.4	-	-	-	7	<5	<1	48	6	<0.1	6	51
Val-T-38	Trench Sample	14-Sep-2020	ES2032486	88	No	20.8	-	-	-	6	<5	<1	80	<5	<0.1	4	7
Val-T-39	Trench Sample	14-Sep-2020	ES2032486	55.1	No	8.8	-	-	-	<5	<5	<1	27	<5	<0.1	2	5
Val-T-40	Trench Sample	14-Sep-2020	ES2032486	62.1	No	6.5	-	-	-	6	<5	<1	41	6	<0.1	5	14
Val-T-41	Trench Sample	14-Sep-2020	ES2032486	81	No	8.6	-	-	-	7	6	<1	69	9	<0.1	8	19
Val-T-42	Trench Sample	14-Sep-2020	ES2032486	72.9	No	6.9	-	-	-	8	6	<1	70	8	<0.1	6	15
Val-T-43	Trench Sample	14-Sep-2020	ES2032486	92	No	3	-	-	-	6	<5	<1	43	5	<0.1	6	<5
Val-T-44	Trench Sample	14-Sep-2020	ES2032486	84.1	No	3.9	-	-	-	6	6	<1	55	9	<0.1	6	<5
Val-T-45	Trench Sample	14-Sep-2020	ES2032486	72.5	No	5.8	-	-	-	7	6	<1	51	8	<0.1	8	<5
Val-T-46	Trench Sample	14-Sep-2020	ES2032486	69.1	No	4.9	-	-	-	7	6	<1	66	7	<0.1	8	<5
Val-T-47	Trench Sample	14-Sep-2020	ES2032486	67.5	No	4.1	-	-	-	6	6	<1	40	6	<0.1	7	<5
Val-T-48	Trench Sample	14-Sep-2020	ES2032486	73.4	No	2.7	-	-	-	6	6	<1	42	6	<0.1	5	<5
Val-T-49	Trench Sample	14-Sep-2020	ES2032486	64.2	No	6	-	-	-	6	<5	<1	40	7	<0.1	6	<5
Val-T-50	Trench Sample	14-Sep-2020	ES2032486	73.3	No	5.4	-	-	-	7	<5	<1	51	113	<0.1	8	6
Sewer-wall-1	Validation sample	02-Dec-2020	EN2008222	622	No	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-2	Validation sample	02-Dec-2020	EN2008222	733	No	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-3	Validation sample	02-Dec-2020	EN2008222	769	**Yes**	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-1	Validation sample	02-Dec-2020	EN2008222	53.2	No	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-3	Validation sample	02-Dec-2020	EN2008222	69.8	No	-	-	-	-	-	-	-	-	-	-	-	-

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Organochlorine Pesticides																									
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	Methoxychlor
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																													
NEPM 2013 Table 1A(1) HILs Res B Soil							10		90						600		400				20				15	10		500
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS														180															
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																													
0-1m																													
1-2m																													
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																										
Val-56	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-58	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-60	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-62	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-64	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-66	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-68	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-70	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-72	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-74	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-76	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-79	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-81	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-83	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-85	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-87	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-90	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-92	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-93	Base Surface Soil	10-Sep-2020	ES2032260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-94-1	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-2	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-3	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-95	Base Surface Soil	10-Sep-2020	ES2032260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-96	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-98	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-100	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-102	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-104	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-106	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	0.28	<0.05	0.28	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-108	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-110	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	0.39	<0.05	0.13	<0.05	0.13	<0.05	<0.05	<0.2	<0.05	0.39	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-112	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-114	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-116	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	0.59	<0.05	0.59	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-118	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-120	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-122	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-124	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-126	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-128	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	0.11	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-130	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-133	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-135	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-137	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-139	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-141	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-143	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-145	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-147	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-149	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Organochlorine Pesticides																									
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	Methoxychlor
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																													
NEPM 2013 Table 1A(1) HILs Res B Soil							**10**		**90**						**600**		**400**				**20**				**15**	**10**		**500**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS														**180**														
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																													
0-1m																													
1-2m																													
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																										
Val-149-1	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-2	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-3	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-151	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-153	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-155	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-157	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-159	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC19	Field duplicate of Val-159	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-161	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-163	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-165	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-167	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-169	Base Surface Soil	10-Sep-2020	ES2032454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-171	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC20	Field duplicate of Val-171	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	0.4	<0.05	0.19	<0.05	0.19	<0.05	<0.05	<0.2	<0.05	0.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-173	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-175	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	0.18	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-177	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-179	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC21	Field duplicate of Val-179	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	0.27	<0.05	0.27	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-181	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC22	Field duplicate of Val-181	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-183	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-185	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC23	Field duplicate of Val-185	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-01	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-01a	Trench Sample	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-T-02	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-03	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-04	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-05	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-06	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-07	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-08	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-09	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-10	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-11	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-12	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-13	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-14	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-15	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-16	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-17	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-18	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-19	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-20	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-21	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-22	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-23	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-24	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Organochlorine Pesticides																								
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	Methoxychlor
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																												
NEPM 2013 Table 1A(1) HILs Res B Soil							10		90						600		400				20				15	10		500
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS														180														
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																												
0-1m																												
1-2m																												
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																									
Val-T-25	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-26	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-27	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-28	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-29	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-30	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-31	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-32	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-33	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-34	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-35	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-36	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-37	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-38	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-39	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-40	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-41	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-42	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-43	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-44	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-45	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-46	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-47	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-48	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-49	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Val-T-50	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
Sewer-wall-1	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-2	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-3	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-1	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-3	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Organophosphorous Pesticides																			
				Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil								**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																						
1-2m																						
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
Val-56	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-58	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-60	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-62	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-64	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-66	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-68	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-70	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-72	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-74	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-76	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-79	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-81	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-83	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-85	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-87	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-90	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-92	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-93	Base Surface Soil	10-Sep-2020	ES2032260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-94-1	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-2	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-3	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-95	Base Surface Soil	10-Sep-2020	ES2032260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-96	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-98	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-100	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-102	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-104	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-106	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-108	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-110	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-112	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-114	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-116	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-118	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-120	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-122	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-124	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-126	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-128	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-130	Base Surface Soil	10-Sep-2020	ES2032260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-133	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-135	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-137	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-139	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-141	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-143	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-145	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-147	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-149	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Organophosphorous Pesticides																			
				Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil								**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																						
1-2m																						
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
Val-149-1	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-2	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-3	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-151	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-153	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-155	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-157	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-159	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC19	Field duplicate of Val-159	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-161	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-163	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-165	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-167	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-169	Base Surface Soil	10-Sep-2020	ES2032454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-171	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC20	Field duplicate of Val-171	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-173	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-175	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-177	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-179	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC21	Field duplicate of Val-179	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-181	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC22	Field duplicate of Val-181	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-183	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-185	Base Surface Soil	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC23	Field duplicate of Val-185	10-Sep-2020	ES2032454	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-01	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-01a	Trench Sample	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-T-02	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-03	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-04	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-05	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-06	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-07	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-08	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-09	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-10	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-11	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-12	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-13	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-14	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-15	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-16	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-17	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-18	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-19	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-20	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-21	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-22	Trench Sample	11-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-23	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-24	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				Organophosphorous Pesticides																			
				Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil								**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																						
1-2m																						
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
Val-T-25	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-26	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-27	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-28	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-29	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-30	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-31	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-32	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-33	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-34	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-35	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-36	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-37	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-38	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-39	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-40	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-41	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-42	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-43	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-44	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-45	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-46	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-47	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-48	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-49	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Val-T-50	Trench Sample	14-Sep-2020	ES2032486	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
Sewer-wall-1	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-2	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-3	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-1	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-3	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				PAHs																	PAH (SIM)		
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																							
NEPM 2013 Table 1A(1) HILs Res B Soil																		400					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																							
0-1m																	4						
1-2m																							
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																				
Val-56	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-58	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-60	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-62	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-64	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-66	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-68	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-70	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-72	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-74	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-76	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-79	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-81	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-83	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-85	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-87	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-90	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-92	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-93	Base Surface Soil	10-Sep-2020	ES2032260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-94-1	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-2	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-3	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-95	Base Surface Soil	10-Sep-2020	ES2032260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-96	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-98	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-100	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-102	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-104	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-106	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-108	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-110	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-112	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-114	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-116	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-118	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-120	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-122	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-124	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-126	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-128	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-130	Base Surface Soil	10-Sep-2020	ES2032260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-133	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-135	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-137	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-139	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-141	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-143	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-145	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-147	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-149	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				PAHs																	PAH (SIM)		
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																							
NEPM 2013 Table 1A(1) HILs Res B Soil																		400					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																							
0-1m																	4						
1-2m																							
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																				
Val-149-1	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-2	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-3	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-151	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-153	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-155	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-157	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-159	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC19	Field duplicate of Val-159	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-161	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-163	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-165	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-167	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-169	Base Surface Soil	10-Sep-2020	ES2032454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-171	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC20	Field duplicate of Val-171	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-173	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-175	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-177	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-179	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC21	Field duplicate of Val-179	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-181	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC22	Field duplicate of Val-181	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-183	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-185	Base Surface Soil	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC23	Field duplicate of Val-185	10-Sep-2020	ES2032454	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-01	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-01a	Trench Sample	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-T-02	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-03	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-04	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-05	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-06	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-07	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-08	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-09	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-10	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-11	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-12	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-13	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-14	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-15	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-16	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-17	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-18	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-19	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-20	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-21	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-22	Trench Sample	11-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-23	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-24	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				PAHs																	PAH (SIM)		
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																							
NEPM 2013 Table 1A(1) HILs Res B Soil																		400					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																							
0-1m																	4						
1-2m																							
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																				
Val-T-25	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-26	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-27	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-28	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-29	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-30	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-31	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-32	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-33	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-34	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-35	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-36	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-37	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-38	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-39	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-40	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-41	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-42	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-43	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-44	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-45	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-46	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-47	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-48	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-49	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Val-T-50	Trench Sample	14-Sep-2020	ES2032486	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
Sewer-wall-1	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-2	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-3	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-1	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-3	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SLR

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				TPH									TRH - Semivolatile Fraction			BTEX						
				F1 minus BTEX (C6-C10)	F2-Napth (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																						
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m				**40**	**230**										**0.6**		**390**			**95**		
1-2m				**65**											**0.7**					**210**		
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
Val-56	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-58	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-60	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-62	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-64	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-66	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-68	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-70	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-72	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-74	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-76	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-79	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-81	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-83	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-85	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-87	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-90	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-92	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-93	Base Surface Soil	10-Sep-2020	ES2032260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-94-1	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-2	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-94-3	Val	18-Sep-2020	ES2032556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-95	Base Surface Soil	10-Sep-2020	ES2032260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-96	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-98	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-100	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-102	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-104	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-106	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-108	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-110	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-112	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-114	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-116	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-118	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-120	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-122	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-124	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-126	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-128	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-130	Base Surface Soil	10-Sep-2020	ES2032260	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-133	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-135	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-137	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-139	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-141	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-143	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-145	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-147	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-149	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				TPH									TRH - Semivolatile Fraction			BTEX						
				F1 minus BTEX (C6-C10)	F2-Napth (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																						
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m				**40**	**230**										**0.6**		**390**			**95**		
1-2m				**65**											**0.7**					**210**		
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
Val-149-1	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-2	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-149-3	Base Surface Soil	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-151	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-153	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-155	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-157	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-159	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC19	Field duplicate of Val-159	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-161	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-163	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-165	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-167	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-169	Base Surface Soil	10-Sep-2020	ES2032454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-171	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC20	Field duplicate of Val-171	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-173	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-175	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-177	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-179	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC21	Field duplicate of Val-179	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-181	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC22	Field duplicate of Val-181	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-183	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-185	Base Surface Soil	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC23	Field duplicate of Val-185	10-Sep-2020	ES2032454	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-01	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-01a	Trench Sample	18-Sep-2020	EN2006388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Val-T-02	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-03	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-04	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-05	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-06	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-07	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-08	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-09	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-10	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-11	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-12	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-13	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-14	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-15	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-16	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-17	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-18	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-19	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-20	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-21	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-22	Trench Sample	11-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-23	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-24	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2

Table 3
Lot B3- Validation Samples Analytical Results
Remediation and Validation - Residential Allotments

				TPH									TRH - Semivolatile Fraction			BTEX						
				F1 minus BTEX (C6-C10)	F2-Napth (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																						
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m				**40**	**230**										**0.6**		**390**			**95**		
1-2m				**65**											**0.7**					**210**		
Field_ID	**Sample Type**	**Sampled_Date**	**Lab_Report_Number**																			
Val-T-25	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-26	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-27	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-28	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-29	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-30	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-31	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-32	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-33	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-34	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-35	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-36	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-37	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-38	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-39	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-40	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-41	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-42	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-43	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-44	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-45	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-46	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-47	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-48	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-49	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Val-T-50	Trench Sample	14-Sep-2020	ES2032486	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Sewer-wall-1	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-2	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-wall-3	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-1	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer-val-3	Validation sample	02-Dec-2020	EN2008222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Asbestos Classification							Organic Matter		Inorganics						Metals							
			weight of sample	Asbestos (Fines and Fibrous <7mm)	Asbestos (Fines and Fibrous FA+AF)	Fibrous Asbestos >7mm	Asbestos detected in soil	Asbestos detected in bulk sample	Type	Organic Matter	Total Organic Matter	Moisture Content	Partical Size Distribution - Clay (<2 µm)	pH (Initial)	pH (CaCl2)	pH (after HCL)	pH (Lab)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
			g	g	% (w/w)	g				%	%	%	%	pH_Units	pH Unit	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.01	0.0004	0.001	0.0004				0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use					**0.001**																				
NEPM 2013 Table 1A(1) HILs Res B Soil																		**1200**	**500**	**150**	**500***	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																		**1100**	**100**		**360****	**110**		**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																									
0-1m																									
1-2m																									
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																		**100**	**100**	**20**	**100***		**4**	**40**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																							
CHAR-STP	27-Jul-2020	ES2025256	-	-	-	-				1.5	0.9	10	10	-	7.7	-	8.2	-	-	-	-	-	-	-	-
STP ORG-1-1	21-Jul-2020	ES2024787	632	<0.0004	<0.001	<0.0004	No			-	-	6.7	-	-	-	-	-	12	13	<1	63	12	<0.1	4	83
STP ORG-1-2	21-Jul-2020	ES2024787	654	<0.0004	<0.001	<0.0004	No			-	-	9.8	-	-	-	-	-	13	13	<1	54	13	<0.1	4	66
STP ORG-1-3	21-Jul-2020	ES2024787	691	<0.0004	<0.001	<0.0004	No			-	-	4.9	-	-	-	-	-	11	13	<1	55	11	<0.1	3	73
STP-ORG2-1	27-Jul-2020	ES2025256	564	<0.0004	<0.001	<0.0004	No			-	-	12.2	-	-	-	-	-	12	11	<1	62	13	<0.1	4	54
STP-ORG2-2	27-Jul-2020	ES2025256	543	<0.0004	<0.001	<0.0004	No			-	-	12.3	-	-	-	-	-	11	9	<1	41	13	<0.1	4	44
QC7	27-Jul-2020	ES2025256	-	-	-	-	-			-	-	13.2	-	-	-	-	-	11	9	<1	55	13	<0.1	4	56
STP-ORG2-3	28-Jul-2020	ES2025256	600	<0.0004	<0.001	<0.0004	No	No	-	-	-	8.9	-	-	-	-	-	13	11	<1	45	15	<0.1	4	38
STP-ORG2-4	28-Jul-2020	ES2025256	494	<0.0004	<0.001	<0.0004	No			-	-	9.6	-	-	-	-	-	17	23	<1	67	24	<0.1	5	93
STP-ORG2-5	28-Jul-2020	ES2025256	607	<0.0004	<0.001	<0.0004	No			-	-	9.6	-	-	-	-	-	17	25	<1	63	22	<0.1	5	58
STP-ORG2-6	28-Jul-2020	ES2025256	59.9	-	-	-	No			-	-	10.1	-	-	-	-	-	11	10	<1	65	13	<0.1	4	53
STP-ORG2-7	28-Jul-2020	ES2025256	70.9	-	-	-	No			-	-	7	-	-	-	-	-	11	13	<1	46	12	<0.1	4	43
STP-ORG2-8	28-Jul-2020	ES2025256	62	-	-	-	No			-	-	15.3	-	-	-	-	-	11	9	<1	33	12	<0.1	4	54
STP-ORG2-9	28-Jul-2020	ES2025256	60.2	-	-	-	No			-	-	9.7	-	-	-	-	-	16	14	<1	58	19	<0.1	4	56
STP-ORG2-10	28-Jul-2020	ES2025256	65.2	-	-	-	No			-	-	10.9	-	-	-	-	-	17	10	<1	71	16	<0.1	5	92
STP1-1	21-Jul-2020	ES2024787	677	<0.0004	<0.001	<0.0004	No			-	-	7.1	-	-	-	-	-	11	9	<1	42	12	<0.1	3	33
STP1-2	21-Jul-2020	ES2024787	743	<0.0004	<0.001	<0.0004	No			-	-	7.7	-	-	-	-	-	12	10	<1	26	15	<0.1	3	40
STP1-3	21-Jul-2020	ES2024787	581	<0.0004	<0.001	<0.0004	No			-	-	7.8	-	-	-	-	-	19	14	<1	36	14	<0.1	4	56
STP2-1	21-Jul-2020	ES2024787	719	<0.0004	<0.001	<0.0004	No			-	-	9.7	-	-	-	-	-	11	11	<1	41	14	<0.1	5	72
STP2-2	21-Jul-2020	ES2024787	810	<0.0004	<0.001	<0.0004	No			-	-	8.1	-	-	-	-	-	12	18	<1	55	16	<0.1	4	66
STP2-3	21-Jul-2020	ES2024787	611	<0.0004	<0.001	<0.0004	No			-	-	10.1	-	-	-	-	-	12	13	<1	37	17	<0.1	5	52
STP2-4	21-Jul-2020	ES2024787	572	<0.0004	<0.001	<0.0004	No			-	-	11.1	-	-	-	-	-	12	15	<1	28	17	<0.1	5	59
QU1-DUP	21-Jul-2020	ES2024787	-	-	-	-	-			-	-	10.8	-	-	-	-	-	9	9	<1	24	10	<0.1	3	37
STP2-5	21-Jul-2020	ES2024787	698	<0.0004	<0.001	<0.0004	No			-	-	7.3	-	-	-	-	-	12	15	<1	29	14	<0.1	4	58
STP2-6	21-Jul-2020	ES2024787	659	<0.0004	<0.001	<0.0004	No			-	-	8.6	-	-	-	-	-	12	9	<1	31	14	<0.1	4	36
STP2-7	21-Jul-2020	ES2024787	594	<0.0004	<0.001	<0.0004	No			-	-	8.8	-	-	-	-	-	11	14	<1	29	16	<0.1	5	53
STP2-8	21-Jul-2020	ES2024787	638	<0.0004	<0.001	<0.0004	No			-	-	7.8	-	-	-	-	-	11	11	<1	42	14	<0.1	4	33
STP3-1	22-Jul-2020	ES2025094	607	<0.0004	<0.001	<0.0004	No			-	-	19.9	-	-	-	-	-	7	<5	<1	67	<5	<0.1	2	10
STP3-2	22-Jul-2020	ES2025094	671	<0.0004	<0.001	<0.0004	No			-	-	18.4	-	-	-	-	-	8	<5	<1	73	6	<0.1	3	11
STP3-3	22-Jul-2020	ES2025094	573	<0.0004	<0.001	<0.0004	No			-	-	20.4	-	-	-	-	-	6	<5	<1	80	<5	<0.1	<2	7
STP4-1	22-Jul-2020	ES2025094	764	<0.0004	<0.001	<0.0004	No			-	-	18.7	-	-	-	-	-	9	5	<1	86	6	<0.1	3	15
STP4-2	22-Jul-2020	ES2025094	562	<0.0004	<0.001	<0.0004	No			-	-	16.8	-	-	-	-	-	12	6	<1	52	11	<0.1	3	127
STP4-3	22-Jul-2020	ES2025094	688	0.034	**0.005**	0.0005	**Yes**		**Ch**	-	-	19.1	-	-	-	-	-	6	<5	<1	70	<5	<0.1	<2	12
STP5-1	22-Jul-2020	ES2025094	688	0.0015	<0.001	<0.0004	No	Yes	**Ch**	-	-	18.6	-	-	-	-	-	14	<5	<1	77	8	<0.1	3	35
STP5-2	22-Jul-2020	ES2025094	646	<0.0004	<0.001	<0.0004	No			-	-	16.3	-	-	-	-	-	33	5	<1	82	44	<0.1	4	84
STP5-3	22-Jul-2020	ES2025094	506	<0.0004	<0.001	<0.0004	No			-	-	17.8	-	-	-	-	-	16	<5	<1	86	8	<0.1	3	114
STP5-INSO	22-Jul-2020	ES2025094	-	-	-	-	-	No		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP6-1	23-Jul-2020	ES2025094	702	<0.0004	<0.001	<0.0004	No	No		-	-	9.2	-	-	-	-	-	9	8	<1	82	6	<0.1	3	18
STP6-2	23-Jul-2020	ES2025094	699	<0.0004	<0.001	<0.0004	No			-	-	9.7	-	-	-	-	-	9	<5	<1	35	<5	<0.1	2	14
STP6-3	23-Jul-2020	ES2025094	597	<0.0004	<0.001	<0.0004	No			-	-	9.4	-	-	-	-	-	10	6	<1	68	7	<0.1	4	24
STP6-4	23-Jul-2020	ES2025094	550	<0.0004	<0.001	<0.0004	No			-	-	9.5	-	-	-	-	-	11	5	<1	49	10	<0.1	5	34
STP6-5	23-Jul-2020	ES2025094	699	<0.0004	<0.001	<0.0004	No			-	-	8.6	-	-	-	-	-	15	22	<1	44	9	<0.1	4	32
STP6-6	23-Jul-2020	ES2025094	650	<0.0004	<0.001	<0.0004	No			-	-	9.5	-	-	-	-	-	10	<5	<1	61	7	<0.1	4	21
STP7-1	27-Jul-2020	ES2025253	726	<0.0004	<0.001	<0.0004	No	Yes	Ch	-	-	8.3	-	-	-	-	-	10	6	<1	111	7	<0.1	5	25
STP7-2	27-Jul-2020	ES2025253	621	<0.0004	<0.001	<0.0004	No			-	-	7.6	-	-	-	-	-	11	6	<1	97	7	<0.1	6	19
STP7-3	27-Jul-2020	ES2025253	594	<0.0004	<0.001	<0.0004	No			-	-	8.6	-	-	-	-	-	11	6	<1	148	6	<0.1	7	33
STP7-4	27-Jul-2020	ES2025253	666	<0.0004	<0.001	<0.0004	No			-	-	21.1	-	-	-	-	-	10	5	<1	116	7	<0.1	5	18
STP7-5	27-Jul-2020	ES2025253	604	<0.0004	<0.001	<0.0004	No			-	-	19.7	-	-	-	-	-	9	7	<1	92	5	<0.1	4	15

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Asbestos Classification							Organic Matter		Inorganics						Metals							
			weight of sample	Asbestos (Fines and Fibrous <7mm)	Asbestos (Fines and Fibrous FA+AF)	Fibrous Asbestos >7mm	Asbestos detected in soil	Asbestos detected in bulk sample	Type	Organic Matter	Total Organic Matter	Moisture Content	Partical Size Distribution - Clay (<2 µm)	pH (Initial)	pH (CaCl2)	pH (after HCL)	pH (Lab)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
			g	g	% (w/w)	g				%	%	%	%	pH_Units	pH Unit	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.01	0.0004	0.001	0.0004				0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use					**0.001**																				
NEPM 2013 Table 1A(1) HILs Res B Soil																		**1200**	**500**	**150**	**500***	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																		**1100**	**100**		**360****	**110**		**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																									
0-1m																									
1-2m																									
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																		**100**	**100**	**20**	**100***		**4**	**40**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																							
STP7-6	27-Jul-2020	ES2025253	654	<0.0004	<0.001	<0.0004	No	No		-	-	11.1	-	-	-	-	-	11	6	<1	124	5	<0.1	4	15
STP7-11	06-Aug-2020	NT84925	520.52	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP7-7	27-Jul-2020	ES2025253	701	<0.0004	<0.001	<0.0004	No			-	-	8.5	-	6.3	-	1.5	-	10	8	<1	121	6	<0.1	5	13
STP8-1	27-Jul-2020	ES2025253	-	-	-	-	-			-	-	9	-	-	-	-	-	13	7	<1	60	10	<0.1	6	46
QC6	27-Jul-2020	ES2025253	-	-	-	-	-			-	-	7.2	-	-	-	-	-	11	10	<1	70	9	<0.1	6	36
STP8-2	27-Jul-2020	ES2025256	73.4	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-2	27-Jul-2020	ES2025253	-	-	-	-	-			-	-	5.5	-	-	-	-	-	11	8	<1	31	10	<0.1	6	40
STP8-3	27-Jul-2020	ES2025256	67.2	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-3	27-Jul-2020	ES2025253	-	-	-	-	-			-	-	7	-	-	-	-	-	9	5	<1	72	7	<0.1	5	18
STP8-4	27-Jul-2020	ES2025256	61.8	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-4	27-Jul-2020	ES2025253	-	-	-	-	-			-	-	11.4	-	-	-	-	-	10	7	<1	109	7	<0.1	5	17
STP9-1	28-Jul-2020	ES2025256	50.9	-	-	-	No			-	-	10.1	-	-	-	-	-	10	8	<1	45	10	<0.1	3	31
STP9-2	28-Jul-2020	ES2025256	71.5	-	-	-	No			-	-	11.9	-	-	-	-	-	9	9	<1	29	8	<0.1	4	33
STP9-3	28-Jul-2020	ES2025256	57.9	-	-	-	No			-	-	11.3	-	-	-	-	-	9	6	<1	73	8	<0.1	6	11
STP9-4	28-Jul-2020	ES2025256	75	-	-	-	No			-	-	13.2	-	-	-	-	-	9	8	<1	28	10	<0.1	3	49
STP9-5	28-Jul-2020	ES2025256	65.9	-	-	-	No			-	-	8.5	-	-	-	-	-	10	9	<1	81	6	<0.1	2	25
STP10-1	28-Jul-2020	ES2025256	636	<0.0004	<0.001	<0.0004	No			-	-	5.6	-	-	-	-	-	10	8	<1	116	6	<0.1	3	24
QC8	28-Jul-2020	ES2025256	-	-	-	-	-			-	-	6	-	-	-	-	-	8	6	<1	138	6	<0.1	3	8
STP10-2	28-Jul-2020	ES2025256	674	<0.0004	<0.001	<0.0004	No			-	-	7.9	-	-	-	-	-	9	9	<1	101	11	<0.1	5	18
STP10-3	28-Jul-2020	ES2025256	690	<0.0004	<0.001	<0.0004	No	Yes	Ch+Am	-	-	6.8	-	-	-	-	-	78	7	<1	103	7	<0.1	4	14
STP10-4	28-Jul-2020	ES2025256	742	<0.0004	<0.001	<0.0004	No	Yes	Ch+Am	-	-	6.9	-	-	-	-	-	12	8	<1	112	<5	<0.1	4	9
STP10-5	28-Jul-2020	ES2025256	628	<0.0004	<0.001	<0.0004	No			-	-	7.4	-	-	-	-	-	10	7	<1	117	6	<0.1	4	11
STP10-6	28-Jul-2020	ES2025256	619	<0.0004	<0.001	<0.0004	No	Yes	Ch+Am	-	-	6.6	-	-	-	-	-	10	8	<1	85	8	<0.1	4	18
STP10-7	06-Aug-2020	NT84925	588.73	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-8	06-Aug-2020	NT84925	530.59	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-9	06-Aug-2020	NT84925	592.62	-	-	-	**Yes**	**Yes**	**Ch**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-10	06-Aug-2020	NT84925	585.3	-	-	-	**Yes**	**No**	**Ch+Am**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-11	06-Aug-2020	NT84925	586.5	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-12	06-Aug-2020	NT84925	555.72	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-1	11-Aug-2020	ES2027013	815	<0.0004	<0.001	<0.0004	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-2	11-Aug-2020	ES2027013	822	<0.0004	<0.001	<0.0004	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-3	11-Aug-2020	ES2027013	807	<0.0004	<0.001	<0.0004	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-4	11-Aug-2020	ES2027013	853	<0.0004	<0.001	<0.0004	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-5	11-Aug-2020	ES2027013	804	<0.0004	<0.001	<0.0004	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-6	11-Aug-2020	ES2027013	873	<0.0004	<0.001	<0.0004	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP11-1	29-Jul-2020	ES2025648	582	<0.0004	<0.001	<0.0004	No			-	-	8.7	-	-	-	-	-	10	6	<1	66	7	<0.1	6	33
STP11-2	29-Jul-2020	ES2025648	746	<0.0004	<0.001	<0.0004	No			-	-	9.9	-	-	-	-	-	11	7	<1	93	8	<0.1	5	20
STP11-3	29-Jul-2020	ES2025648	728	<0.0004	<0.001	<0.0004	No			-	-	9.4	-	-	-	-	-	12	10	<1	92	9	<0.1	5	27
STP11-4	29-Jul-2020	ES2025648	680	<0.0004	<0.001	<0.0004	No			-	-	8	-	-	-	-	-	11	7	<1	74	8	<0.1	5	22
STP11-5	29-Jul-2020	ES2025648	558	<0.0004	<0.001	<0.0004	No			-	-	9.5	-	-	-	-	-	11	7	<1	106	8	<0.1	5	25
STP11-6	29-Jul-2020	ES2025648	823	<0.0004	<0.001	<0.0004	No			-	-	8.5	-	-	-	-	-	12	8	<1	98	10	<0.1	6	27
STP12-1	28-Jul-2020	ES2025648	60.2	-	-	-	No			-	-	6.9	-	-	-	-	-	11	6	<1	74	<5	<0.1	2	8
STP12-2	28-Jul-2020	ES2025648	68.2	-	-	-	No			-	-	7.6	-	-	-	-	-	10	7	<1	124	6	<0.1	4	14
STP12-3	28-Jul-2020	ES2025648	70.6	-	-	-	No			-	-	8.3	-	-	-	-	-	11	7	<1	86	<5	<0.1	3	10
STP12-4	28-Jul-2020	ES2025648	93.7	-	-	-	No			-	-	7.3	-	-	-	-	-	8	<5	<1	64	<5	<0.1	<2	9
STP13-1	29-Jul-2020	ES2025648	678	<0.0004	<0.001	<0.0004	No			-	-	9.2	-	-	-	-	-	12	9	<1	84	10	<0.1	6	30
STP13-2	29-Jul-2020	ES2025648	656	<0.0004	<0.001	<0.0004	No			-	-	8.8	-	-	-	-	-	12	11	<1	94	9	<0.1	5	26
STP13-3	29-Jul-2020	ES2025648	826	<0.0004	<0.001	<0.0004	No			-	-	7.7	-	-	-	-	-	11	7	<1	69	8	<0.1	6	30

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Asbestos Classification							Organic Matter		Inorganics						Metals							
			weight of sample	Asbestos (Fines and Fibrous <7mm)	Asbestos (Fines and Fibrous FA+AF)	Fibrous Asbestos >7mm	Asbestos detected in soil	Asbestos detected in bulk sample	Type	Organic Matter	Total Organic Matter	Moisture Content	Partical Size Distribution - Clay (<2 µm)	pH (Initial)	pH (CaCl2)	pH (after HCL)	pH (Lab)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
			g	g	% (w/w)	g				%	%	%	%	pH_Units	pH Unit	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.01	0.0004	0.001	0.0004				0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use					**0.001**																				
NEPM 2013 Table 1A(1) HILs Res B Soil																		**1200**	**500**	**150**	**500***	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																		**1100**	**100**		**360****	**110**		**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																									
0-1m																									
1-2m																									
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																		**100**	**100**	**20**	**100***		**4**	**40**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																							
STP13-4	06-Aug-2020	NT84925	581.93	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-5	06-Aug-2020	NT84925	545.19	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-6	06-Aug-2020	NT84925	572.33	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP14-1	29-Jul-2020	ES2025648	577	<0.0004	<0.001	<0.0004	No			-	-	11.2	-	-	-	-	-	17	7	<1	67	14	<0.1	6	52
STP14-2	29-Jul-2020	ES2025648	646	<0.0004	<0.001	<0.0004	No			-	-	13.2	-	-	-	-	-	14	8	<1	59	14	<0.1	5	48
STP14-3	29-Jul-2020	ES2025648	684	<0.0004	<0.001	<0.0004	No			-	-	11.2	-	-	-	-	-	14	8	<1	60	12	<0.1	5	49
STP15-1	04-Aug-2020	ES2026818	836	<0.0004	<0.001	<0.0004	No			-	-	8	-	-	-	-	-	11	5	<1	99	7	<0.1	5	16
QC17	04-Aug-2020	ES2026818	-	-	-	-	-			-	-	8	-	-	-	-	-	15	6	<1	123	8	<0.1	5	19
STP15-2	04-Aug-2020	ES2026818	742	<0.0004	<0.001	<0.0004	No			-	-	9	-	-	-	-	-	11	5	<1	144	6	<0.1	6	14
STP15-3	04-Aug-2020	ES2026818	784	<0.0004	<0.001	<0.0004	No	Yes	Ch	-	-	7	-	-	-	-	-	10	5	<1	125	7	<0.1	5	26
STP15-4	04-Aug-2020	ES2026818	760	<0.0004	<0.001	<0.0004	No			-	-	6	-	-	-	-	-	12	<5	<1	76	9	<0.1	6	44
STP15-5	04-Aug-2020	ES2026818	571	<0.0004	<0.001	<0.0004	No	Yes	Ch+Am	-	-	6.9	-	-	-	-	-	12	5	<1	136	7	<0.1	5	15
STP15-6	04-Aug-2020	ES2026818	783	0.0197	0.002	<0.0004	No	-	Ch+Am	-	-	5.9	-	-	-	-	-	11	6	<1	96	8	<0.1	5	16
STP15-1a	17-Aug-2020	ES2028221	832	<0.0004	<0.001	<0.0004	No			-	-	7	-	-	-	-	-	11	6	<1	115	7	<0.1	4	17
STP15-2a	17-Aug-2020	ES2028221	957	<0.0004	<0.001	<0.0004	No			-	-	10.1	-	-	-	-	-	12	6	<1	121	9	<0.1	5	22
STP15-3a	17-Aug-2020	ES2028221	952	<0.0004	<0.001	<0.0004	No			-	-	8.5	-	-	-	-	-	11	7	<1	107	21	<0.1	4	38
STP15-4a	17-Aug-2020	ES2028221	885	<0.0004	<0.001	<0.0004	No			-	-	6	-	-	-	-	-	9	6	<1	84	8	<0.1	4	34
STP15-5a	17-Aug-2020	ES2028221	950	<0.0004	<0.001	<0.0004	No			-	-	6	-	-	-	-	-	11	5	<1	96	7	<0.1	5	34
STP15-6a	17-Aug-2020	ES2028221	758	<0.0004	<0.001	<0.0004	No			-	-	6.1	-	-	-	-	-	10	<5	<1	49	8	<0.1	4	27
STP16-1	05-Aug-2020	ES2026823	698	<0.0004	<0.001	<0.0004	No			-	-	8.6	-	-	-	-	-	11	7	<1	54	10	<0.1	5	41
STP16-2	05-Aug-2020	ES2026823	792	0.0088	**0.001**	<0.0004	No		Ch+Am	-	-	6	-	-	-	-	-	10	6	<1	35	14	<0.1	5	37
STP16-3	05-Aug-2020	ES2026823	672	<0.0004	<0.001	<0.0004	No			-	-	9.3	-	-	-	-	-	11	6	<1	70	9	<0.1	4	44
STP16A-1a	19-Aug-2020	NT84930a	559.73	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16A-2a	19-Aug-2020	NT84930a	564.31	-	-	-	**Yes**		**Ch+Am**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-1b	24-Aug-2020	NT84933	598.62	-	-	-	**Yes**		**Ch+Am**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-2b	24-Aug-2020	NT84933	617.7	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-3b	24-Aug-2020	NT84933	578.33	-	-	-	**Yes**		**Ch+Am**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-4b	24-Aug-2020	NT84933	617.66	-	-	-	**Yes**		**Ch**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-5b	24-Aug-2020	NT84933	589.83	-	-	-	**Yes**		**Ch**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-6b	24-Aug-2020	NT84933	595.53	-	-	-	**Yes**		**Ch**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP17-1	05-Aug-2020	ES2026823	835	<0.0004	<0.001	<0.0004	No			-	-	7.9	-	-	-	-	-	11	6	<1	76	9	<0.1	4	32
STP17-2	05-Aug-2020	ES2026823	773	<0.004	<0.001	<0.0004	No			-	-	8.3	-	-		-	-	11	7	<1	69	9	<0.1	4	42
STP17-3	05-Aug-2020	ES2026823	723	0.0004	<0.001	<0.0004	No^		Ch+Am	-	-	8.6	-	-		-	-	12	6	<1	84	8	<0.1	5	31
STP17-4	05-Aug-2020	ES2026823	749	<0.0004	<0.001	<0.0004	No			-	-	10	-	-		-	-	10	5	<1	107	7	<0.1	5	24
STP17-5	05-Aug-2020	ES2026823	741	<0.004	<0.001	<0.0004	No	No		-	-	9.1	-	-		-	-	12	7	<1	50	11	<0.1	5	52
STP18-1	10-Aug-2020	ES2027007	925	<0.0004	<0.001	<0.0004	No			-	-	6.5	-	-	-	-	-	12	7	<1	75	6	<0.1	5	12
STP18-2	10-Aug-2020	ES2027007	826	<0.0004	<0.001	<0.0004	No			-	-	7.2	-	-	-	-	-	10	5	<1	85	7	<0.1	5	11
STP18-3	10-Aug-2020	ES2027007	817	<0.0004	<0.001	<0.0004	No			-	-	8	-	-	-	-	-	11	6	<1	134	8	<0.1	5	11
STP18-4	10-Aug-2020	ES2027007	719	<0.0004	<0.001	<0.0004	No			-	-	8.6	-	-	-	-	-	10	7	<1	124	6	<0.1	5	13
STP18-5	10-Aug-2020	ES2027007	852	<0.0004	<0.001	<0.0004	No			-	-	8.6	-	-	-	-	-	11	7	<1	112	6	<0.1	5	6
STP18-6	10-Aug-2020	ES2027007	838	<0.0004	<0.001	<0.0004	No			-	-	8.6	-	-	-	-	-	11	7	<1	110	6	<0.1	6	8
STP19-1	13-Aug-2020	ES2028218	576	<0.0004	<0.001	<0.0004	No			-	-	8.8	-	-	-	-	-	10	6	<1	100	8	<0.1	6	28
STP19-2	13-Aug-2020	ES2028218	612	0.0004	<0.001	<0.0004	No^		Ch	-	-	7.7	-	-	-	-	-	8	6	<1	133	6	<0.1	4	21
STP19-3	13-Aug-2020	ES2028218	592	<0.0004	<0.001	<0.0004	No			-	-	7.9	-	-	-	-	-	12	7	<1	97	9	<0.1	6	28
STP20-1	17-Aug-2020	ES2028221	786	<0.0004	<0.001	<0.0004	No			-	-	9	-	-	-	-	-	10	6	<1	110	7	<0.1	4	11
STP20-2	17-Aug-2020	ES2028221	931	<0.0004	<0.001	<0.0004	No			-	-	8.3	-	-	-	-	-	14	7	<1	102	10	<0.1	5	41
STP20-3	17-Aug-2020	ES2028221	913	<0.0004	<0.001	<0.0004	No			-	-	8.1	-	-	-	-	-	11	6	<1	101	8	<0.1	5	16
STP20-4	17-Aug-2020	ES2028221	904	<0.0004	<0.001	<0.0004	No			-	-	7.7	-	-	-	-	-	12	6	<1	100	9	<0.1	5	18

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Asbestos Classification							Organic Matter		Inorganics						Metals							
			weight of sample	Asbestos (Fines and Fibrous <7mm)	Asbestos (Fines and Fibrous FA+AF)	Fibrous Asbestos >7mm	Asbestos detected in soil	Asbestos detected in bulk sample	Type	Organic Matter	Total Organic Matter	Moisture Content	Partical Size Distribution - Clay (<2 µm)	pH (Initial)	pH (CaCl2)	pH (after HCL)	pH (Lab)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
			g	g	% (w/w)	g				%	%	%	%	pH_Units	pH Unit	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.01	0.0004	0.001	0.0004				0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use					**0.001**																				
NEPM 2013 Table 1A(1) HILs Res B Soil																		**1200**	**500**	**150**	**500***	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																		**1100**	**100**		**360****	**110**		**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																									
0-1m																									
1-2m																									
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																		**100**	**100**	**20**	**100***		**4**	**40**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																							
STP20-5	17-Aug-2020	ES2028221	831	<0.0004	<0.001	<0.0004	No			-	-	9	-	-	-	-	-	10	<5	<1	104	8	<0.1	4	17
STP20-6	17-Aug-2020	ES2028221	879	<0.0004	<0.001	<0.0004	No			-	-	6.5	-	-	-	-	-	11	6	<1	59	10	<0.1	5	17
STP20-7	17-Aug-2020	ES2028221	762	<0.0004	<0.001	<0.0004	No			-	-	8.1	-	-	-	-	-	8	6	<1	75	5	<0.1	4	7
STP20-8	17-Aug-2020	ES2028221	760	<0.0004	<0.001	<0.0004	No			-	-	8.9	-	-	-	-	-	10	<5	<1	116	7	<0.1	5	10
STP21-1	17-Aug-2020	ES2028221	587	0.0103	**0.354**	2.07	**Yes**		**Ch+Am**	-	-	6.8	-	-	-	-	-	11	6	<1	64	7	<0.1	5	8
STP21-2	17-Aug-2020	ES2028221	541	<0.0004	<0.001	<0.0004	No			-	-	8	-	-	-	-	-	10	5	<1	41	8	<0.1	5	9
STP21-3	17-Aug-2020	ES2028221	516	<0.0004	<0.001	<0.0004	No			-	-	9.2	-	-	-	-	-	10	6	<1	57	7	<0.1	4	23
STP21-1a	19-Aug-2020	NT84930a	561.9	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-2a	19-Aug-2020	NT84930a	527.9	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-3a	19-Aug-2020	NT84930a	540.74	-	-	-	**Yes**		**Ch+Am**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-1b	05-Aug-2020	NT84933-V2	583.41	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-2b	05-Aug-2020	NT84933-V2	531.78	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-3b	05-Aug-2020	NT84933-V2	522.03	-	-	-	**Yes**		**Ch**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-4b	05-Aug-2020	NT84933-V2	600.32	-	-	-	**Yes**		**Ch**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-5b	05-Aug-2020	NT84933-V2	588.07	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-6b	05-Aug-2020	NT84933-V2	601.14	-	-	-	**Yes**		**Ch**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-1	18-Aug-2020	NT84930a	591.61	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-2	18-Aug-2020	NT84930a	541.11	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-3	18-Aug-2020	NT84930a	579.44	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-4	18-Aug-2020	NT84930a	604.93	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-5	18-Aug-2020	NT84930a	590.81	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-6	18-Aug-2020	NT84930a	571.65	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-7	18-Aug-2020	NT84930a	566.57	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP24-1	03-Sep-2020	ES2030598	777	<0.0004	<0.001	<0.0004	No			-	-	9.8	-	-	-	-	-	11	8	<1	109	7	<0.1	6	12
STP24-2	02-Sep-2020	ES2030598	834	<0.0004	<0.001	<0.0004	No			-	-	7.1	-	-	-	-	-	10	6	<1	84	8	<0.1	7	18
STP24-3	02-Sep-2020	ES2030598	900	<0.0004	<0.001	<0.0004	No			-	-	9.2	-	-	-	-	-	13	9	<1	97	10	<0.1	7	42
STP24-4	02-Sep-2020	ES2030598	900	<0.0004	<0.001	<0.0004	No			-	-	2.4	-	-	-	-	-	11	8	<1	78	8	<0.1	6	30
STP24-5	02-Sep-2020	ES2030598	811	<0.0004	<0.001	<0.0004	No			-	-	8.3	-	-	-	-	-	11	10	<1	147	8	<0.1	6	22
QC18	02-Sep-2020	ES2030598	744	<0.0004	<0.001	<0.0004	No			-	-	10.3	-	-	-	-	-	12	8	<1	143	7	<0.1	6	14
STP24-6	02-Sep-2020	ES2030598	872	<0.0004	<0.001	<0.0004	No			-	-	6.2	-	-	-	-	-	12	9	<1	155	8	<0.1	7	16
STP25-01	14-Sep-2020	ES2032265	735	<0.0004	<0.001	<0.0004	No			-	-	7.9	-	-	-	-	-	12	9	<1	51	8	<0.1	7	18
STP25-02	14-Sep-2020	ES2032265	797	<0.0004	<0.001	<0.0004	No			-	-	6.1	-	-	-	-	-	10	6	<1	40	9	<0.1	8	18
STP25-03	14-Sep-2020	ES2032265	646	<0.0004	<0.001	<0.0004	No			-	-	8.7	-	-	-	-	-	9	5	<1	44	9	<0.1	9	14
STP25-04	14-Sep-2020	ES2032265	815	<0.0004	<0.001	<0.0004	No			-	-	4.2	-	-	-	-	-	13	6	<1	32	9	<0.1	8	22
STP26-01	14-Sep-2020	ES2032265	798	<0.0004	<0.001	<0.0004	No			-	-	7.8	-	-	-	-	-	12	8	<1	41	14	<0.1	8	40
STP26-02	14-Sep-2020	ES2032265	764	<0.0004	<0.001	<0.0004	No			-	-	7.8	-	-	-	-	-	11	7	<1	73	10	<0.1	7	34
STP26-03	14-Sep-2020	ES2032265	745	<0.0004	<0.001	<0.0004	No			-	-	6.4	-	-	-	-	-	10	7	<1	42	12	<0.1	9	41
STP26-04	14-Sep-2020	ES2032265	847	<0.0004	<0.001	<0.0004	No			-	-	4.3	-	-	-	-	-	10	7	<1	42	12	<0.1	8	38
STP26-05	14-Sep-2020	ES2032265	808	<0.0004	<0.001	<0.0004	No			-	-	6.4	-	-	-	-	-	10	7	<1	35	16	<0.1	8	30
STP26-06	14-Sep-2020	ES2032265	808	<0.0004	<0.001	<0.0004	No			-	-	4.1	-	-	-	-	-	11	7	<1	42	11	<0.1	8	57
STP26-07	14-Sep-2020	ES2032265	771	<0.0004	<0.001	<0.0004	No			-	-	6.5	-	-	-	-	-	10	6	<1	32	13	<0.1	7	41
STP27-01	14-Sep-2020	ES2032265	748	<0.0004	<0.001	<0.0004	No			-	-	5.9	-	-	-	-	-	8	5	<1	31	8	<0.1	8	22
STP27-02	14-Sep-2020	ES2032265	664	<0.0004	<0.001	<0.0004	No			-	-	8.9	-	-	-	-	-	7	<5	<1	22	7	<0.1	6	24
STP27-03	14-Sep-2020	ES2032265	696	<0.0004	<0.001	<0.0004	No			-	-	8.7	-	-	-	-	-	8	5	<1	38	8	<0.1	8	17
STP27-04	14-Sep-2020	ES2032265	604	<0.0004	<0.001	<0.0004	No			-	-	6.8	-	-	-	-	-	10	6	<1	65	10	<0.1	9	32
STP27-05	14-Sep-2020	ES2032265	731	<0.0004	<0.001	<0.0004	No			-	-	6.1	-	-	-	-	-	8	5	<1	31	9	<0.1	8	22
STP28-01	14-Sep-2020	ES2032265	798	<0.0004	<0.001	<0.0004	No			-	-	4.9	-	-	-	-	-	10	6	<1	30	10	<0.1	8	27
STP28-02	14-Sep-2020	ES2032265	720	<0.0004	<0.001	<0.0004	No			-	-	4.6	-	-	-	-	-	10	7	<1	32	12	<0.1	8	39

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Asbestos Classification							Organic Matter		Inorganics						Metals							
			weight of sample	Asbestos (Fines and Fibrous <7mm)	Asbestos (Fines and Fibrous FA+AF)	Fibrous Asbestos >7mm	Asbestos detected in soil	Asbestos detected in bulk sample	Type	Organic Matter	Total Organic Matter	Moisture Content	Partical Size Distribution - Clay (<2 µm)	pH (Initial)	pH (CaCl2)	pH (after HCL)	pH (Lab)	Lead	Arsenic	Cadmium	Chromium (III+VI)	Copper	Mercury	Nickel	Zinc
			g	g	% (w/w)	g				%	%	%	%	pH_Units	pH Unit	pH_Units	pH_Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.01	0.0004	0.001	0.0004				0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	5	5	1	2	5	0.1	2	5
WA DOH 2009 Asbestos Management for Residential use					**0.001**																				
NEPM 2013 Table 1A(1) HILs Res B Soil																		**1200**	**500**	**150**	**500***	**30,000**	**120**	**1200**	**60,000**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																		**1100**	**100**		**360****	**110**		**35**	**260**
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																									
0-1m																									
1-2m																									
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																		**100**	**100**	**20**	**100***		**4**	**40**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																							
STP28-03	14-Sep-2020	ES2032265	793	<0.0004	<0.001	<0.0004	No			-	-	4.8	-	-	-	-	-	11	7	<1	60	10	<0.1	8	33
STP28-04	14-Sep-2020	ES2032265	709	<0.0004	<0.001	<0.0004	No			-	-	6.2	-	-	-	-	-	10	8	<1	73	10	<0.1	7	36
STP28-05	14-Sep-2020	ES2032265	670	<0.0004	<0.001	<0.0004	No			-	-	5.7	-	-	-	-	-	9	7	<1	45	11	<0.1	8	41
STP28-06	14-Sep-2020	ES2032265	793	<0.0004	<0.001	<0.0004	No			-	-	4.1	-	-	-	-	-	11	7	<1	63	10	<0.1	7	24
STP29-01	14-Sep-2020	ES2032265	584	<0.0004	<0.001	<0.0004	No			-	-	8.4	-	-	-	-	-	10	6	<1	79	8	<0.1	9	127
STP29-02	14-Sep-2020	ES2032265	787	<0.0004	<0.001	<0.0004	No			-	-	6.7	-	-	-	-	-	9	5	<1	24	7	<0.1	6	31
STP29-03	14-Sep-2020	ES2032265	574	<0.0004	<0.001	<0.0004	No			-	-	10	-	-	-	-	-	10	8	<1	72	8	<0.1	9	8
STP30-01	14-Sep-2020	ES2032265	459	<0.0004	<0.001	<0.0004	No			-	-	9.3	-	-	-	-	-	8	6	<1	58	8	<0.1	7	18
STP30-02	14-Sep-2020	ES2032265	629	<0.0004	<0.001	<0.0004	No			-	-	6.7	-	-	-	-	-	10	6	<1	69	11	<0.1	8	101
STP30-03	14-Sep-2020	ES2032265	686	0.0007	<0.001	<0.0004	No^		Ch	-	-	6.4	-	-	-	-	-	10	6	<1	39	11	<0.1	9	62
STP30-04	14-Sep-2020	ES2032265	643	<0.0004	<0.001	<0.0004	No			-	-	6.6	-	-	-	-	-	10	7	<1	37	11	<0.1	8	68
STP30-05	14-Sep-2020	ES2032265	672	<0.0004	<0.001	<0.0004	No			-	-	6.9	-	-	-	-	-	9	6	<1	58	9	<0.1	8	20
STP30-06	22-Sep-2020	745824-S	730	-	<0.001	-	No			-	-	11	-	-	-	-	-	17	18	< 0.4	210	9.5	< 0.1	12	15
STP31-01	14-Sep-2020	ES2032265	603	<0.0004	<0.001	<0.0004	No			-	-	4.1	-	-	-	-	-	10	7	<1	67	14	<0.1	10	59
STP31-02	14-Sep-2020	ES2032265	686	<0.0004	<0.001	<0.0004	No			-	-	8.9	-	-	-	-	-	10	6	<1	66	10	<0.1	8	11
STP31-03	14-Sep-2020	ES2032265	604	<0.0004	<0.001	<0.0004	No			-	-	9.1	-	-	-	-	-	10	5	<1	114	7	<0.1	7	25
STP32-01	18-Sep-2020	ES2033114	712	<0.0004	<0.001	<0.0004	No			-	-	6.7	-	-	-	-	-	9	6	<1	96	5	<0.1	4	9
STP32-02	18-Sep-2020	ES2033114	744	<0.0004	<0.001	<0.0004	No			-	-	8.5	-	-	-	-	-	7	<5	<1	57	6	<0.1	4	11
STP32-03	18-Sep-2020	ES2033114	669	<0.0004	<0.001	<0.0004	No			-	-	7.9	-	-	-	-	-	9	<5	<1	77	<5	<0.1	4	9
QC29	18-Sep-2020	ES2033114	-	-	-	-	-			-	-	8.2	-	-	-	-	-	8	<5	<1	77	<5	<0.1	4	9
STP33-01	18-Sep-2020	ES2033114	742	<0.0004	<0.001	<0.0004	No			-	-	7.3	-	-	-	-	-	15	6	<1	75	10	<0.1	6	58
STP33-02	18-Sep-2020	ES2033114	751	<0.0004	<0.001	<0.0004	No			-	-	6.2	-	-	-	-	-	11	7	<1	80	9	<0.1	6	51
STP33-03	18-Sep-2020	ES2033114	749	0.0083	**0.001***	<0.0004	No			-	-	8.3	-	-	-	-	-	12	6	<1	52	12	<0.1	6	64
VS01	12-Aug-2020	ES2028010	83.8	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS02	12-Aug-2020	ES2028010	82.4	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS03	12-Aug-2020	ES2028010	101	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS04	12-Aug-2020	ES2028010	84.4	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS05	12-Aug-2020	ES2028010	99.2	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS06	12-Aug-2020	ES2028010	94.3	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS07	12-Aug-2020	ES2028010	102	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS08	12-Aug-2020	ES2028010	89.9	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-01	07-Sep-2020	ES2033117	82.9	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-02	07-Sep-2020	ES2033117	92.9	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-03	07-Sep-2020	ES2033117	84.1	-	-	-	No			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP34-VAL-1	22-Sep-2020	745824-AID	51	-	<0.001	-	No			-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
STP35-VAL-1	22-Sep-2020	745824-AID	39	-	<0.001	-	No			-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
STP36-VAL-1	22-Sep-2020	745824-AID	44	-	<0.001	-	No			-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
STP37-VAL-1	22-Sep-2020	745824-AID	34	-	<0.001	-	No			-	-	-	-		-	-	-	-	-	-	-	-	-	-	-

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organochlorine Pesticides																									
			4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene, HCB)	Heptachlor	Heptachlor epoxide	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																											
NEPM 2013 Table 1A(1) HILs Res B Soil						**10**		**90**						**600**		**400**				**20**				**15**	**10**		**500**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS													**180**														
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																											
0-1m																											
1-2m																											
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																**60**											
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																									
CHAR-STP	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP ORG-1-1	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP ORG-1-2	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.58	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.58	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP ORG-1-3	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-1	27-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-2	27-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.24	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC7	27-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-3	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-4	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-5	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-6	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-7	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-8	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-9	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP-ORG2-10	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP1-1	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP1-2	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP1-3	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP2-1	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.29	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.29	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP2-2	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.16	<0.05	0.1	<0.05	0.1	<0.05	<0.05	<0.2	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP2-3	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.31	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.2	<0.05	0.31	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP2-4	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.31	<0.05	0.13	<0.05	0.13	<0.05	<0.05	<0.2	<0.05	0.31	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QU1-DUP	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.18	<0.05	0.11	<0.05	0.11	<0.05	<0.05	<0.2	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP2-5	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.33	<0.05	0.08	<0.05	0.08	<0.05	<0.05	<0.2	<0.05	0.33	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP2-6	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.19	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.2	<0.05	0.19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP2-7	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	0.31	<0.05	0.08	<0.05	0.08	<0.05	<0.05	<0.2	<0.05	0.31	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP2-8	21-Jul-2020	ES2024787	<0.05	<0.05	0.05	0.46	<0.05	0.12	<0.05	0.12	<0.05	<0.05	<0.2	<0.05	0.41	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.2
STP3-1	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP3-2	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.2
STP3-3	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP4-1	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP4-2	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP4-3	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP5-1	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP5-2	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP5-3	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP5-INSO	22-Jul-2020	ES2025094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP6-1	23-Jul-2020	ES2025094	<0.05	<0.05	0.06	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP6-2	23-Jul-2020	ES2025094	<0.05	<0.05	0.08	0.36	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.2	<0.05	0.28	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP6-3	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP6-4	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP6-5	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.21	<0.05	0.08	<0.05	0.08	<0.05	<0.05	<0.2	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP6-6	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP7-1	27-Jul-2020	ES2025253	<0.05	<0.05	0.09	0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP7-2	27-Jul-2020	ES2025253	<0.05	<0.05	0.08	0.33	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP7-3	27-Jul-2020	ES2025253	<0.05	<0.05	0.12	0.28	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP7-4	27-Jul-2020	ES2025253	<0.05	<0.05	0.08	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP7-5	27-Jul-2020	ES2025253	<0.05	<0.05	0.09	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organochlorine Pesticides																									
			4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene, HCB)	Heptachlor	Heptachlor epoxide	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																											
NEPM 2013 Table 1A(1) HILs Res B Soil						**10**		**90**						**600**		**400**				**20**				**15**	**10**		**500**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS													**180**														
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																											
0-1m																											
1-2m																											
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																**60**											
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																									
STP7-6	27-Jul-2020	ES2025253	<0.05	<0.05	0.1	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP7-11	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP7-7	27-Jul-2020	ES2025253	<0.05	<0.05	0.05	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP8-1	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC6	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP8-2	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-2	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	0.18	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.2	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP8-3	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-3	27-Jul-2020	ES2025253	<0.05	<0.05	0.06	0.42	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.36	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP8-4	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-4	27-Jul-2020	ES2025253	<0.05	<0.05	0.08	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP9-1	28-Jul-2020	ES2025256	<0.05	<0.05	0.41	2.98	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	2.57	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP9-2	28-Jul-2020	ES2025256	<0.05	<0.05	0.97	2.98	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	2.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP9-3	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP9-4	28-Jul-2020	ES2025256	<0.05	<0.05	0.28	2.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	1.93	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP9-5	28-Jul-2020	ES2025256	<0.05	<0.05	0.3	1.75	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	1.45	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP10-1	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC8	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP10-2	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP10-3	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP10-4	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP10-5	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP10-6	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP10-7	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-8	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-9	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-10	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-11	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-12	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-1	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-2	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-3	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-4	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-5	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-6	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP11-1	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	0.06	<0.05	0.08	<0.05	0.08	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP11-2	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP11-3	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP11-4	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP11-5	29-Jul-2020	ES2025648	<0.05	<0.05	0.06	0.17	<0.05	0.11	<0.05	0.11	<0.05	<0.05	<0.2	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP11-6	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP12-1	28-Jul-2020	ES2025648	<0.05	<0.05	0.4	0.81	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.41	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP12-2	28-Jul-2020	ES2025648	<0.05	<0.05	0.26	0.72	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.46	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP12-3	28-Jul-2020	ES2025648	<0.05	<0.05	0.34	0.67	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.33	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP12-4	28-Jul-2020	ES2025648	<0.05	<0.05	0.26	0.52	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.26	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP13-1	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP13-2	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP13-3	29-Jul-2020	ES2025648	<0.05	<0.05	0.13	0.23	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organochlorine Pesticides																									
			4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene, HCB)	Heptachlor	Heptachlor epoxide	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																												
NEPM 2013 Table 1A(1) HILs Res B Soil						**10**		**90**						**600**		**400**				**20**				**15**	**10**		**500**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS													**180**															
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																												
0-1m																												
1-2m																												
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																**60**												
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																										
STP13-4	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-5	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-6	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP14-1	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP14-2	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP14-3	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-1	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC17	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.2	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.2	<0.05	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-2	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.33	<0.05	0.19	<0.05	0.19	<0.05	<0.05	<0.2	<0.05	0.33	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-3	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.21	<0.05	0.52	0.07	0.45	<0.05	<0.05	<0.2	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.2
STP15-4	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.13	<0.05	0.37	0.05	0.32	<0.05	<0.05	<0.2	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-5	04-Aug-2020	ES2026818	<0.05	<0.05	0.06	0.47	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	0.41	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-6	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	0.31	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	0.31	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-1a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.21	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-2a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.43	<0.05	0.2	<0.05	0.2	<0.05	<0.05	<0.2	<0.05	0.43	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-3a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.19	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-4a	17-Aug-2020	ES2028221	<0.05	<0.05	0.08	0.91	<0.05	0.85	0.08	0.77	<0.05	<0.05	<0.2	<0.05	0.83	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.2
STP15-5a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.13	<0.05	0.17	<0.05	0.17	<0.05	<0.05	<0.2	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP15-6a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.31	<0.05	0.15	<0.05	0.15	<0.05	<0.05	<0.2	<0.05	0.31	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP16-1	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.47	<0.05	0.22	<0.05	0.22	<0.05	<0.05	<0.2	<0.05	0.47	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP16-2	05-Aug-2020	ES2026823	<0.05	<0.05	0.06	0.74	<0.05	0.35	<0.05	0.35	<0.05	<0.05	<0.2	<0.05	0.68	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP16-3	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.43	<0.05	0.21	<0.05	0.21	<0.05	<0.05	<0.2	<0.05	0.43	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP16A-1a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16A-2a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-1b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-2b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-3b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-4b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-5b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-6b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP17-1	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.42	<0.05	0.21	<0.05	0.21	<0.05	<0.05	<0.2	<0.05	0.42	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP17-2	05-Aug-2020	ES2026823	<0.05	<0.05	0.05	0.51	<0.05	0.35	0.05	0.3	<0.05	<0.05	<0.2	<0.05	0.46	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP17-3	05-Aug-2020	ES2026823	<0.05	<0.05	0.05	0.37	<0.05	0.17	<0.05	0.17	<0.05	<0.05	<0.2	<0.05	0.32	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP17-4	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	0.13	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.2	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP17-5	05-Aug-2020	ES2026823	<0.05	<0.05	0.05	0.59	<0.05	0.2	<0.05	0.2	<0.05	<0.05	<0.2	<0.05	0.54	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP18-1	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP18-2	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	0.11	<0.05	0.08	<0.05	0.08	<0.05	<0.05	<0.2	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP18-3	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	0.15	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP18-4	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP18-5	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP18-6	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP19-1	13-Aug-2020	ES2028218	<0.05	<0.05	<0.05	0.14	<0.05	0.1	<0.05	0.1	<0.05	<0.05	<0.2	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP19-2	13-Aug-2020	ES2028218	<0.05	<0.05	<0.05	0.14	<0.05	0.11	<0.05	0.11	<0.05	<0.05	<0.2	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP19-3	13-Aug-2020	ES2028218	<0.05	<0.05	<0.05	0.2	<0.05	0.15	<0.05	0.15	<0.05	<0.05	<0.2	<0.05	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP20-1	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.22	<0.05	0.08	<0.05	0.08	<0.05	<0.05	<0.2	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP20-2	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.38	<0.05	0.1	<0.05	0.1	<0.05	<0.05	<0.2	<0.05	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP20-3	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.17	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP20-4	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.11	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organochlorine Pesticides																									
			4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene, HCB)	Heptachlor	Heptachlor epoxide	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																												
NEPM 2013 Table 1A(1) HILs Res B Soil						**10**		**90**						**600**		**400**				**20**				**15**	**10**		**500**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS													**180**															
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																												
0-1m																												
1-2m																												
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																**60**												
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																										
STP20-5	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.18	<0.05	0.2	<0.05	0.2	<0.05	<0.05	<0.2	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP20-6	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.15	<0.05	0.17	<0.05	0.17	<0.05	<0.05	<0.2	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP20-7	17-Aug-2020	ES2028221	<0.05	<0.05	0.09	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP20-8	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP21-1	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP21-2	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP21-3	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP21-1a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-2a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-3a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-1b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-2b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-3b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-4b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-5b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-6b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-1	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-2	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-3	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-4	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-5	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-6	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-7	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP24-1	03-Sep-2020	ES2030598	<0.05	<0.05	<0.05	0.38	<0.05	0.08	<0.05	0.08	<0.05	<0.05	<0.2	<0.05	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP24-2	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	0.47	<0.05	0.11	<0.05	0.11	<0.05	<0.05	<0.2	<0.05	0.47	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP24-3	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	0.17	<0.05	0.11	<0.05	0.11	<0.05	<0.05	<0.2	<0.05	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP24-4	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	0.1	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP24-5	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	0.22	<0.05	0.16	<0.05	0.16	<0.05	<0.05	<0.2	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC18	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	0.35	<0.05	0.08	<0.05	0.08	<0.05	<0.05	<0.2	<0.05	0.35	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP24-6	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	0.55	<0.05	0.12	<0.05	0.12	<0.05	<0.05	<0.2	<0.05	0.55	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP25-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.09	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP25-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP25-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP25-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.08	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP26-01	14-Sep-2020	ES2032265	<0.05	<0.05	0.05	0.15	<0.05	0.13	<0.05	0.13	<0.05	<0.05	<0.2	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP26-02	14-Sep-2020	ES2032265	<0.05	<0.05	0.1	0.18	<0.05	0.45	0.06	0.39	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.2
STP26-03	14-Sep-2020	ES2032265	<0.05	<0.05	0.08	0.13	<0.05	0.27	<0.05	0.27	<0.05	<0.05	<0.2	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP26-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	0.24	<0.05	0.24	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP26-05	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.12	<0.05	0.13	<0.05	0.13	<0.05	<0.05	<0.2	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP26-06	14-Sep-2020	ES2032265	<0.05	<0.05	0.07	0.22	<0.05	0.32	<0.05	0.32	<0.05	<0.05	<0.2	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP26-07	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	0.29	<0.05	0.29	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP27-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP27-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP27-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP27-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP27-05	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP28-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.22	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.2	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP28-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	0.16	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organochlorine Pesticides																									
			4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Hexachlorobenzene, HCB)	Heptachlor	Heptachlor epoxide	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2
WA DOH 2009 Asbestos Management for Residential use																												
NEPM 2013 Table 1A(1) HILs Res B Soil						**10**		**90**						**600**		**400**				**20**				**15**	**10**		**500**
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS													**180**															
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																												
0-1m																												
1-2m																												
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																**60**												
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																										
STP28-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP28-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	0.14	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP28-05	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.08	<0.05	0.22	<0.05	0.22	<0.05	<0.05	<0.2	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP28-06	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP29-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP29-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP29-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP30-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP30-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP30-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP30-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	0.07	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.2	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP30-05	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP30-06	22-Sep-2020	745824-S	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
STP31-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP31-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP31-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP32-01	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP32-02	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP32-03	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
QC29	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP33-01	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	0.38	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.2	<0.05	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP33-02	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
STP33-03	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2
VS01	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS02	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS03	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS04	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS05	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS06	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS07	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS08	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-01	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-02	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-03	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP34-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP35-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP36-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP37-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organophosphorous Pesticides																		
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil							**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m																					
1-2m																					
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
CHAR-STP	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP ORG-1-1	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP ORG-1-2	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP ORG-1-3	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-1	27-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-2	27-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC7	27-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-3	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-4	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-5	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-6	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-7	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-8	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-9	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP-ORG2-10	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP1-1	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP1-2	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP1-3	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP2-1	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP2-2	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP2-3	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP2-4	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QU1-DUP	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP2-5	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP2-6	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP2-7	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP2-8	21-Jul-2020	ES2024787	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP3-1	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP3-2	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP3-3	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP4-1	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP4-2	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP4-3	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP5-1	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP5-2	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP5-3	22-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP5-INSO	22-Jul-2020	ES2025094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP6-1	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP6-2	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP6-3	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP6-4	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP6-5	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP6-6	23-Jul-2020	ES2025094	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP7-1	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP7-2	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP7-3	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP7-4	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP7-5	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organophosphorous Pesticides																		
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil							**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m																					
1-2m																					
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
STP7-6	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP7-11	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP7-7	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP8-1	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC6	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP8-2	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-2	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP8-3	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-3	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP8-4	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-4	27-Jul-2020	ES2025253	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP9-1	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP9-2	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP9-3	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP9-4	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP9-5	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP10-1	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC8	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP10-2	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP10-3	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP10-4	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP10-5	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP10-6	28-Jul-2020	ES2025256	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP10-7	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-8	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-9	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-10	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-11	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-12	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-1	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-2	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-3	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-4	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-5	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-6	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP11-1	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP11-2	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP11-3	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP11-4	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP11-5	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP11-6	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP12-1	28-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP12-2	28-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP12-3	28-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP12-4	28-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP13-1	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP13-2	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP13-3	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organophosphorous Pesticides																		
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil							**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m																					
1-2m																					
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
STP13-4	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-5	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-6	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP14-1	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP14-2	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP14-3	29-Jul-2020	ES2025648	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-1	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC17	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-2	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-3	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-4	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-5	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-6	04-Aug-2020	ES2026818	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-1a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-2a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-3a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-4a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-5a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP15-6a	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP16-1	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP16-2	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP16-3	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP16A-1a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16A-2a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-1b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-2b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-3b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-4b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-5b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-6b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP17-1	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP17-2	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP17-3	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP17-4	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP17-5	05-Aug-2020	ES2026823	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP18-1	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP18-2	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP18-3	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP18-4	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP18-5	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP18-6	10-Aug-2020	ES2027007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP19-1	13-Aug-2020	ES2028218	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP19-2	13-Aug-2020	ES2028218	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP19-3	13-Aug-2020	ES2028218	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP20-1	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP20-2	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP20-3	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP20-4	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organophosphorous Pesticides																		
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil							**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m																					
1-2m																					
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
STP20-5	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP20-6	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP20-7	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP20-8	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP21-1	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP21-2	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP21-3	17-Aug-2020	ES2028221	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP21-1a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-2a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-3a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-1b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-2b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-3b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-4b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-5b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-6b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-1	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-2	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-3	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-4	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-5	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-6	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-7	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP24-1	03-Sep-2020	ES2030598	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP24-2	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP24-3	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP24-4	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP24-5	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC18	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP24-6	02-Sep-2020	ES2030598	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP25-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP25-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP25-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP25-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP26-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP26-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP26-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP26-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP26-05	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP26-06	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP26-07	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP27-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP27-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP27-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP27-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP27-05	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP28-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP28-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			Organophosphorous Pesticides																		
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.05	0.05	0.2	0.05
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil							**340**														
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m																					
1-2m																					
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)																					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
STP28-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP28-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP28-05	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP28-06	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP29-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP29-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP29-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP30-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP30-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP30-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP30-04	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP30-05	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP30-06	22-Sep-2020	745824-S	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-	-	-
STP31-01	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP31-02	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP31-03	14-Sep-2020	ES2032265	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP32-01	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP32-02	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP32-03	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
QC29	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP33-01	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP33-02	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
STP33-03	18-Sep-2020	ES2033114	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.05	<0.05	<0.2	<0.05
VS01	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS02	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS03	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS04	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS05	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS06	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS07	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS08	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-01	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-02	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-03	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP34-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP35-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP36-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP37-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			PAHs																	PAH		
			Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																	**400**					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																**4**						
1-2m																						
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)							**0.8**										**200**					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																				
CHAR-STP	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP ORG-1-1	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP ORG-1-2	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP ORG-1-3	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-1	27-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-2	27-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC7	27-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-3	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-4	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-5	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-6	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-7	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-8	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-9	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP-ORG2-10	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP1-1	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP1-2	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP1-3	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP2-1	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP2-2	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP2-3	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP2-4	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QU1-DUP	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP2-5	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP2-6	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP2-7	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP2-8	21-Jul-2020	ES2024787	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP3-1	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP3-2	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP3-3	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP4-1	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP4-2	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP4-3	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP5-1	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP5-2	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP5-3	22-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP5-INSO	22-Jul-2020	ES2025094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP6-1	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP6-2	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP6-3	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP6-4	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP6-5	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP6-6	23-Jul-2020	ES2025094	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP7-1	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP7-2	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP7-3	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP7-4	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP7-5	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			PAHs																	PAH		
			Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																	**400**					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																**4**						
1-2m																						
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)							**0.8**										**200**					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																				
STP7-6	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP7-11	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP7-7	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP8-1	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC6	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP8-2	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-2	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP8-3	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-3	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP8-4	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-4	27-Jul-2020	ES2025253	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP9-1	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP9-2	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP9-3	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP9-4	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP9-5	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP10-1	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC8	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP10-2	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP10-3	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP10-4	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP10-5	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP10-6	28-Jul-2020	ES2025256	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP10-7	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-8	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-9	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-10	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-11	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-12	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-1	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-2	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-3	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-4	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-5	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-6	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP11-1	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP11-2	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP11-3	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP11-4	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP11-5	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP11-6	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP12-1	28-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP12-2	28-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP12-3	28-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP12-4	28-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP13-1	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP13-2	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP13-3	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			PAHs																	PAH		
			Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																	**400**					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																**4**						
1-2m																						
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)							**0.8**										**200**					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																				
STP13-4	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-5	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-6	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP14-1	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP14-2	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP14-3	29-Jul-2020	ES2025648	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-1	04-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC17	04-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-2	04-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-3	04-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-4	04-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-5	04-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-6	04-Aug-2020	ES2026818	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-1a	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-2a	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-3a	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-4a	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-5a	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP15-6a	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP16-1	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP16-2	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP16-3	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP16A-1a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16A-2a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-1b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-2b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-3b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-4b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-5b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-6b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP17-1	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP17-2	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP17-3	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP17-4	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP17-5	05-Aug-2020	ES2026823	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP18-1	10-Aug-2020	ES2027007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP18-2	10-Aug-2020	ES2027007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP18-3	10-Aug-2020	ES2027007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP18-4	10-Aug-2020	ES2027007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP18-5	10-Aug-2020	ES2027007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP18-6	10-Aug-2020	ES2027007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP19-1	13-Aug-2020	ES2028218	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP19-2	13-Aug-2020	ES2028218	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP19-3	13-Aug-2020	ES2028218	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP20-1	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP20-2	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP20-3	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP20-4	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			PAHs																	PAH		
			Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																	**400**					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																**4**						
1-2m																						
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)							**0.8**										**200**					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																				
STP20-5	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP20-6	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP20-7	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP20-8	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP21-1	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP21-2	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP21-3	17-Aug-2020	ES2028221	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP21-1a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-2a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-3a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-1b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-2b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-3b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-4b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-5b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-6b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-1	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-2	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-3	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-4	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-5	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-6	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-7	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP24-1	03-Sep-2020	ES2030598	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP24-2	02-Sep-2020	ES2030598	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP24-3	02-Sep-2020	ES2030598	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP24-4	02-Sep-2020	ES2030598	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP24-5	02-Sep-2020	ES2030598	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC18	02-Sep-2020	ES2030598	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP24-6	02-Sep-2020	ES2030598	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP25-01	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP25-02	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP25-03	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP25-04	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP26-01	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP26-02	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP26-03	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP26-04	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP26-05	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP26-06	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP26-07	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP27-01	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP27-02	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP27-03	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP27-04	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP27-05	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP28-01	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP28-02	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			PAHs																	PAH		
			Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo[b+j]fluoranthene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
WA DOH 2009 Asbestos Management for Residential use																						
NEPM 2013 Table 1A(1) HILs Res B Soil																	**400**					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																						
0-1m																**4**						
1-2m																						
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)							**0.8**										**200**					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																				
STP28-03	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP28-04	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP28-05	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP28-06	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP29-01	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP29-02	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP29-03	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP30-01	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP30-02	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP30-03	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP30-04	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP30-05	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP30-06	22-Sep-2020	745824-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP31-01	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP31-02	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP31-03	14-Sep-2020	ES2032265	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP32-01	18-Sep-2020	ES2033114	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP32-02	18-Sep-2020	ES2033114	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP32-03	18-Sep-2020	ES2033114	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
QC29	18-Sep-2020	ES2033114	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP33-01	18-Sep-2020	ES2033114	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP33-02	18-Sep-2020	ES2033114	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
STP33-03	18-Sep-2020	ES2033114	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5
VS01	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS02	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS03	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS04	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS05	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS06	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS07	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS08	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-01	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-02	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-03	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP34-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP35-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP36-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP37-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			TPH									TRH - Semivolatile Fraction			BTEX						
			F1 minus BTEX (C6-C10)	F2-Napthalene (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil																					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m			**40**	**230**											**0.6**		**390**			**95**	
1-2m			**65**												**0.7**					**210**	
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)					**650**			**10,000**							**10**	**600**	**288**			**1000**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
CHAR-STP	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP ORG-1-1	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP ORG-1-2	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP ORG-1-3	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-1	27-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-2	27-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC7	27-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-3	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-4	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-5	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-6	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-7	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-8	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-9	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP-ORG2-10	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP1-1	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP1-2	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP1-3	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP2-1	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP2-2	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP2-3	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP2-4	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QU1-DUP	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP2-5	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP2-6	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP2-7	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP2-8	21-Jul-2020	ES2024787	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP3-1	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP3-2	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP3-3	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP4-1	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP4-2	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP4-3	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP5-1	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP5-2	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP5-3	22-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP5-INSO	22-Jul-2020	ES2025094	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
STP6-1	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP6-2	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP6-3	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP6-4	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP6-5	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP6-6	23-Jul-2020	ES2025094	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP7-1	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP7-2	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP7-3	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP7-4	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP7-5	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			TPH									TRH - Semivolatile Fraction			BTEX						
			F1 minus BTEX (C6-C10)	F2-Napthalene (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil																					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m			**40**	**230**											**0.6**		**390**			**95**	
1-2m			**65**												**0.7**					**210**	
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)					**650**			**10,000**							**10**	**600**	**288**			**1000**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
STP7-6	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP7-11	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP7-7	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP8-1	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC6	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP8-2	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-2	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP8-3	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-3	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP8-4	27-Jul-2020	ES2025256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP8-4	27-Jul-2020	ES2025253	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP9-1	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP9-2	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP9-3	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP9-4	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP9-5	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP10-1	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC8	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP10-2	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP10-3	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP10-4	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP10-5	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP10-6	28-Jul-2020	ES2025256	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP10-7	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-8	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-9	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-10	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-11	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10-12	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-1	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-2	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-3	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-4	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-5	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP10A-6	11-Aug-2020	ES2027013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP11-1	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP11-2	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP11-3	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP11-4	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP11-5	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP11-6	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP12-1	28-Jul-2020	ES2025648	<10	<50	<10	<50	<100	100	100	130	<10	<50	130	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP12-2	28-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	100	<10	<50	100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP12-3	28-Jul-2020	ES2025648	<10	<50	<10	<50	<100	160	160	380	<10	<50	200	180	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP12-4	28-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	230	<10	<50	120	110	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP13-1	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP13-2	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP13-3	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			TPH									TRH - Semivolatile Fraction			BTEX						
			F1 minus BTEX (C6-C10)	F2-Napthalene (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil																					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m			**40**	**230**											**0.6**		**390**			**95**	
1-2m			**65**												**0.7**					**210**	
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)					**650**			**10,000**							**10**	**600**	**288**			**1000**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
STP13-4	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-5	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP13-6	06-Aug-2020	NT84925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP14-1	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP14-2	29-Jul-2020	ES2025648	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP14-3	29-Jul-2020	ES2025648	<10	<50	<10	<50	150	<100	150	200	<10	<50	200	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-1	04-Aug-2020	ES2026818	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC17	04-Aug-2020	ES2026818	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-2	04-Aug-2020	ES2026818	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-3	04-Aug-2020	ES2026818	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-4	04-Aug-2020	ES2026818	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-5	04-Aug-2020	ES2026818	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-6	04-Aug-2020	ES2026818	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-1a	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-2a	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-3a	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-4a	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-5a	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP15-6a	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP16-1	05-Aug-2020	ES2026823	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP16-2	05-Aug-2020	ES2026823	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP16-3	05-Aug-2020	ES2026823	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP16A-1a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16A-2a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-1b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-2b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-3b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-4b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-5b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP16B-6b	24-Aug-2020	NT84933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP17-1	05-Aug-2020	ES2026823	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP17-2	05-Aug-2020	ES2026823	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP17-3	05-Aug-2020	ES2026823	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP17-4	05-Aug-2020	ES2026823	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP17-5	05-Aug-2020	ES2026823	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP18-1	10-Aug-2020	ES2027007	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP18-2	10-Aug-2020	ES2027007	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP18-3	10-Aug-2020	ES2027007	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP18-4	10-Aug-2020	ES2027007	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP18-5	10-Aug-2020	ES2027007	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP18-6	10-Aug-2020	ES2027007	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP19-1	13-Aug-2020	ES2028218	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP19-2	13-Aug-2020	ES2028218	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP19-3	13-Aug-2020	ES2028218	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP20-1	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP20-2	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP20-3	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP20-4	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			TPH									TRH - Semivolatile Fraction			BTEX						
			F1 minus BTEX (C6-C10)	F2-Napthalene (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil																					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m			**40**	**230**											**0.6**		**390**			**95**	
1-2m			**65**												**0.7**					**210**	
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)					**650**			**10,000**							**10**	**600**	**288**			**1000**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
STP20-5	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP20-6	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP20-7	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP20-8	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP21-1	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP21-2	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP21-3	17-Aug-2020	ES2028221	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP21-1a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-2a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-3a	19-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-1b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-2b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-3b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-4b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-5b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21B-6b	05-Aug-2020	NT84933-V2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-1	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-2	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-3	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-4	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-5	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-6	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP22-7	18-Aug-2020	NT84930a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP24-1	03-Sep-2020	ES2030598	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP24-2	02-Sep-2020	ES2030598	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP24-3	02-Sep-2020	ES2030598	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP24-4	02-Sep-2020	ES2030598	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP24-5	02-Sep-2020	ES2030598	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC18	02-Sep-2020	ES2030598	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP24-6	02-Sep-2020	ES2030598	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP25-01	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP25-02	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP25-03	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP25-04	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP26-01	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP26-02	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP26-03	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP26-04	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP26-05	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP26-06	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP26-07	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP27-01	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP27-02	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP27-03	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP27-04	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP27-05	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP28-01	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP28-02	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2

Table 4
Stockpile Analytical Results
Remediation and Validation - Residential Allotments

			TPH									TRH - Semivolatile Fraction			BTEX						
			F1 minus BTEX (C6-C10)	F2-Napthalene (C10-C16)	C6 - C9	C10 - C14	C15 - C28	C29-C36	C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10	>C10 - C16 Fraction	>C16 - C34 Fraction	>C34 - C40 Fraction	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	50	10	50	100	100	50	50	10	50	100	100	0.2	0.5	0.5	0.5	0.5	0.5	0.2
WA DOH 2009 Asbestos Management for Residential use																					
NEPM 2013 Table 1A(1) HILs Res B Soil																					
NEPM 2003 Calculated EILs for Soil contaminants (Aged) - URPOS																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Silt																					
0-1m			**40**	**230**											**0.6**		**390**			**95**	
1-2m			**65**												**0.7**					**210**	
NSW EPA 2014 General Solid Waste Classification Criteria (CT1)					**650**			**10,000**							**10**	**600**	**288**			**1000**	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**																			
STP28-03	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP28-04	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP28-05	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP28-06	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP29-01	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP29-02	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP29-03	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP30-01	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP30-02	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP30-03	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP30-04	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP30-05	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP30-06	22-Sep-2020	745824-S	-	-	<20	<20	<50	<50	<50	<100	<20	-	-	-	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	<0.3
STP31-01	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP31-02	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP31-03	14-Sep-2020	ES2032265	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP32-01	18-Sep-2020	ES2033114	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP32-02	18-Sep-2020	ES2033114	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP32-03	18-Sep-2020	ES2033114	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
QC29	18-Sep-2020	ES2033114	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP33-01	18-Sep-2020	ES2033114	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP33-02	18-Sep-2020	ES2033114	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
STP33-03	18-Sep-2020	ES2033114	<10	<50	<10	<50	<100	<100	<50	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
VS01	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS02	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS03	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS04	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS05	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS06	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS07	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VS08	12-Aug-2020	ES2028010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-01	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-02	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP21-Val-03	07-Sep-2020	ES2033117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP34-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP35-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP36-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STP37-VAL-1	22-Sep-2020	745824-AID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX H

Certified Laboratory Reports

CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN 50 005 085 521

☐ Sydney Laboratory
Unit F3 Bld F 16 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ Brisbane Laboratory
Unit 1 21 Smallwood Place Murarrie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ Perth Laboratory
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

☐ Melbourne Laboratory
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company	SLR Consulting (NT)	Project №	680.10679 DIPL John Stokes Square	Project Manager	Sarah Doherty
Address	5/21 Parap Rd Parap NT 0820	Project Name	DIPL John Stokes Square- Residential Remediation	EDD Format (Excel, EDI, etc.)	Esdat & csv
Contact Name	Sarah Doherty; Robin Birua				
Phone №	417647498; 0482 680165				
Special Directions	Jars go to Melbourne, ACM goes to Sydney				
Purchase Order					
Quote ID №	200422SLRNT				

Sample(s)	Robin Birua
Handed over by	Robin Birua
Email for Results	gsheridan@slrconsulting.com; pturyn@slrconsulting.com; sdoherty@slrconsulting.com, rbirua@slrconsulting.com, jmcdowell@slrconsulting.com>

Analyses (Where metals are required, please specify "Total" or "Filtered". NOTE: cyanide must be listed as either SUITE or single)

№	Client Sample ID	Sampled Date/Time (dd/mm/yy hh:mm)	Matrix Soil (S) Water (W)	B14: OCP/OPP	B6: TRH, BTEXN, Metals	Asbestos presence/absence grab sample	Asbestos NEPM & WA Guidelines	Asbestos Bulk ID	R21: soil characterisation	Hold	Containers: Glass soil Jar	Containers: 500 Bag	Containers: Asbestos grab sample P/A	Containers: Asbestos bag of fragments	Containers: Glass jar charaterisation	Containers: Rinsate bottles	Sample Comments / Dangerous Goods Hazard Warning
1	STP34-Val-1	22-09-20	Soil			X							1				Classificaiton of stockpile 36
2	STP35-Val-1	22-09-20	Soil			X							1				
3	STP36-Val-1	22-09-20	Soil			X							1				
4	STP37-Val-1	22-09-20	Soil			X							1				
						X							1				
	STP30-6	22-09-20	Soil	X	X		X				1	1					

Same Day TAT Please for all samples

Add new rows

Total Counts: 1 | 1 | 4 | 1 | 1 | 1 | 4

Required Turnaround Time (TAT) Default will be 5 days if not stated.

*Surcharge will apply
☐ Overnight (reporting by 9am)*
☑ Same day ◆ ☐ 1 day ◆
☐ 2 days ◆ ☐ 3 days ◆
☐ 5 days (Standard)
☐ Other[ ]

Method of Shipment	Courier (#)	Hand Delivered	Postal	Name	Robin Birua	Signature	Date	23-09-2020	Time	
Eurofins | mgt Laboratory Use Only	Received By: Ashrin Desai	SYD | BNE | MEL | PER | ADL | NTL | DRW		Signature		Date: 23/09/20	Time: 10:20AM	Temperature: 31.0C		
	Received By:	SYD | BNE | MEL | PER | ADL | NTL | DRW		Signature		Date	Time	Report № 745824		

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Submission of samples to the laboratory will be deemed acceptance of Eurofins | mgt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins | mgt Standard Terms and Conditions is available on request.

eurofins | Environment Testing

ABN: 50 005 085 521 www.eurofins.com.au EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
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Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Sample Receipt Advice

Company name:	SLR Consulting (NT)
Contact name:	Gemma Sheridan
Project name:	DIPL JOHN STOKES SQUARE -RESIDENTIAL REMEDIATION
Project ID:	680.10679 DIPL JOHN STOKES SQUARE
Turnaround time:	1 Day
Date/Time received	Sep 23, 2020 10:20 AM
Eurofins reference	745824

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Michael Morrison on phone : 03 8564 5933 or by email: MichaelMorrison@eurofins.com

Results will be delivered electronically via email to Gemma Sheridan - gsheridan@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (NT) email address.

eurofins | Environment Testing

ABN: 50 005 085 521 web: www.eurofins.com.au email: EnviroSales@eurofins.com

Australia

Melbourne
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Site # 1254 & 14271

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Site # 23736

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
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New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (NT)
Address: GPO Box 654
Darwin
NT 0801

Order No.:
Report #: 745824
Phone: +61 2 9428 8100
Fax:

Received: Sep 23, 2020 10:20 AM
Due: Sep 24, 2020
Priority: 1 Day
Contact Name: Gemma Sheridan

Project Name: DIPL JOHN STOKES SQUARE -RESIDENTIAL REMEDIATION
Project ID: 680.10679 DIPL JOHN STOKES SQUARE

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Asbestos - AS4964	Asbestos - WA guidelines	Suite B14: OCP/OPP	Moisture Set	Eurofins Suite B6
Melbourne Laboratory - NATA Site # 1254 & 14271								X	X	X
Sydney Laboratory - NATA Site # 18217						X	X			
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	STP30-06	Sep 22, 2020		Soil	M20-Se38585		X	X	X	X
2	STP34-VAL-1	Sep 22, 2020		Soil	M20-Se38623	X				
3	STP35-VAL-1	Sep 22, 2020		Soil	M20-Se38624	X				
4	STP36-VAL-1	Sep 22, 2020		Soil	M20-Se38625	X				
5	STP37-VAL-1	Sep 22, 2020		Soil	M20-Se38626	X				
Test Counts						4	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting (NT)
GPO Box 654
Darwin
NT 0801

Attention:	Gemma Sheridan
Report	745824-AID
Project Name	DIPL JOHN STOKES SQUARE -RESIDENTIAL REMEDIATION
Project ID	680.10679 DIPL JOHN STOKES SQUARE
Received Date	Sep 23, 2020
Date Reported	Sep 24, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name DIPL JOHN STOKES SQUARE -RESIDENTIAL REMEDIATION
Project ID 680.10679 DIPL JOHN STOKES SQUARE
Date Sampled Sep 22, 2020
Report 745824-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
STP30-06	20-Se38585	Sep 22, 2020	Approximate Sample 793g Sample consisted of: Brown coarse-grained clayey soil, brick, plaster fragment and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
STP34-VAL-1	20-Se38623	Sep 22, 2020	Approximate Sample 51g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
STP35-VAL-1	20-Se38624	Sep 22, 2020	Approximate Sample 39g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
STP36-VAL-1	20-Se38625	Sep 22, 2020	Approximate Sample 44g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
STP37-VAL-1	20-Se38626	Sep 22, 2020	Approximate Sample 34g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Sep 24, 2020	Indefinite
Asbestos - LTM-ASB-8020	Sydney	Sep 24, 2020	Indefinite

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ABN: 50 005 085 521 web: www.eurofins.com.au email: EnviroSales@eurofins.com

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Site # 1254 & 14271

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NATA # 1261 Site # 18217

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NATA # 1261
Site # 23736

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Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (NT)
Address: GPO Box 654
Darwin
NT 0801

Order No.:
Report #: 745824
Phone: +61 2 9428 8100
Fax:

Received: Sep 23, 2020 10:20 AM
Due: Sep 24, 2020
Priority: 1 Day
Contact Name: Gemma Sheridan

Project Name: DIPL JOHN STOKES SQUARE -RESIDENTIAL REMEDIATION
Project ID: 680.10679 DIPL JOHN STOKES SQUARE

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Asbestos - AS4964	Asbestos - WA guidelines	Suite B14: OCP/OPP	Moisture Set	Eurofins Suite B6
Melbourne Laboratory - NATA Site # 1254 & 14271								X	X	X
Sydney Laboratory - NATA Site # 18217						X	X			
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	STP30-06	Sep 22, 2020		Soil	M20-Se38585		X	X	X	X
2	STP34-VAL-1	Sep 22, 2020		Soil	M20-Se38623	X				
3	STP35-VAL-1	Sep 22, 2020		Soil	M20-Se38624	X				
4	STP36-VAL-1	Sep 22, 2020		Soil	M20-Se38625	X				
5	STP37-VAL-1	Sep 22, 2020		Soil	M20-Se38626	X				
Test Counts						4	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

Chamath JHM Annakkage	Senior Analyst-Asbestos (NSW)

Authorised by:

Laxman Dias	Senior Analyst-Asbestos (NSW)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting (NT)
GPO Box 654
Darwin
NT 0801

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Gemma Sheridan**

Report **745824-S**
Project name DIPL JOHN STOKES SQUARE -RESIDENTIAL REMEDIATION
Project ID 680.10679 DIPL JOHN STOKES SQUARE
Received Date Sep 23, 2020

Client Sample ID			**STP30-06**
Sample Matrix			**Soil**
Eurofins Sample No.			**M20-Se38585**
Date Sampled			**Sep 22, 2020**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	53
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05

Client Sample ID			STP30-06
Sample Matrix			Soil
Eurofins Sample No.			M20-Se38585
Date Sampled			Sep 22, 2020
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	110
Tetrachloro-m-xylene (surr.)	1	%	77
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2

Client Sample ID			STP30-06
Sample Matrix			**Soil**
Eurofins Sample No.			**M20-Se38585**
Date Sampled			**Sep 22, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	110
Heavy Metals			
Arsenic	2	mg/kg	18
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	210
Copper	5	mg/kg	9.5
Lead	5	mg/kg	17
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	12
Zinc	5	mg/kg	15
% Moisture	1	%	11

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins Suite B6			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Sep 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Sep 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Sep 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Sep 24, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Metals M8	Melbourne	Sep 24, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Suite B14: OCP/OPP			
Organochlorine Pesticides	Melbourne	Sep 24, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Organophosphorus Pesticides	Melbourne	Sep 24, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8081)			
% Moisture	Melbourne	Sep 23, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Address: GPO Box 654
Darwin
NT 0801

Order No.:
Report #: 745824
Phone: +61 2 9428 8100
Fax:

Received: Sep 23, 2020 10:20 AM
Due: Sep 24, 2020
Priority: 1 Day
Contact Name: Gemma Sheridan

Project Name: DIPL JOHN STOKES SQUARE -RESIDENTIAL REMEDIATION
Project ID: 680.10679 DIPL JOHN STOKES SQUARE

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Asbestos - AS4964	Asbestos - WA guidelines	Suite B14: OCP/OPP	Moisture Set	Eurofins Suite B6
Melbourne Laboratory - NATA Site # 1254 & 14271								X	X	X
Sydney Laboratory - NATA Site # 18217						X	X			
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	STP30-06	Sep 22, 2020		Soil	M20-Se38585		X	X	X	X
2	STP34-VAL-1	Sep 22, 2020		Soil	M20-Se38623	X				
3	STP35-VAL-1	Sep 22, 2020		Soil	M20-Se38624	X				
4	STP36-VAL-1	Sep 22, 2020		Soil	M20-Se38625	X				
5	STP37-VAL-1	Sep 22, 2020		Soil	M20-Se38626	X				
Test Counts						4	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram | **mg/L:** milligrams per litre | **ug/L:** micrograms per litre

ppm: Parts per million | **ppb:** Parts per billion | **%:** Percentage

org/100mL: Organisms per 100 millilitres | **NTU:** Nephelometric Turbidity Units | **MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	111			70-130	Pass	
TRH C10-C14	%	98			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	81			70-130	Pass	
Toluene	%	78			70-130	Pass	
Ethylbenzene	%	99			70-130	Pass	
m&p-Xylenes	%	97			70-130	Pass	
Xylenes - Total*	%	96			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	75			70-130	Pass	
TRH C6-C10	%	101			70-130	Pass	
TRH >C10-C16	%	100			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	100			70-130	Pass	
4.4'-DDD	%	96			70-130	Pass	
4.4'-DDE	%	86			70-130	Pass	
4.4'-DDT	%	103			70-130	Pass	
a-BHC	%	86			70-130	Pass	
Aldrin	%	117			70-130	Pass	
b-BHC	%	108			70-130	Pass	
d-BHC	%	90			70-130	Pass	
Dieldrin	%	109			70-130	Pass	
Endosulfan I	%	97			70-130	Pass	
Endosulfan II	%	122			70-130	Pass	
Endosulfan sulphate	%	112			70-130	Pass	
Endrin	%	118			70-130	Pass	
Endrin aldehyde	%	94			70-130	Pass	
Endrin ketone	%	111			70-130	Pass	
g-BHC (Lindane)	%	113			70-130	Pass	
Heptachlor	%	92			70-130	Pass	
Heptachlor epoxide	%	106			70-130	Pass	
Hexachlorobenzene	%	84			70-130	Pass	
Methoxychlor	%	78			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	103			70-130	Pass	
Dimethoate	%	96			70-130	Pass	
Ethion	%	122			70-130	Pass	
Fenitrothion	%	116			70-130	Pass	
Methyl parathion	%	105			70-130	Pass	
Mevinphos	%	77			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	107			80-120	Pass	
Cadmium	%	108			80-120	Pass	
Chromium	%	120			80-120	Pass	
Copper	%	111			80-120	Pass	
Lead	%	120			80-120	Pass	
Mercury	%	113			80-120	Pass	
Nickel	%	109			80-120	Pass	
Zinc	%	107			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M20-Se38654	NCP	%	111			70-130	Pass	
TRH C10-C14	M20-Se38664	NCP	%	99			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M20-Se38654	NCP	%	87			70-130	Pass	
Toluene	M20-Se38654	NCP	%	101			70-130	Pass	
Ethylbenzene	M20-Se38654	NCP	%	95			70-130	Pass	
m&p-Xylenes	M20-Se38654	NCP	%	93			70-130	Pass	
o-Xylene	M20-Se38654	NCP	%	94			70-130	Pass	
Xylenes - Total*	M20-Se38654	NCP	%	94			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	M20-Se38654	NCP	%	110			70-130	Pass	
TRH C6-C10	M20-Se38654	NCP	%	109			70-130	Pass	
TRH >C10-C16	M20-Se38664	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M20-Se29740	NCP	%	119			70-130	Pass	
4.4'-DDD	M20-Se29740	NCP	%	110			70-130	Pass	
4.4'-DDE	M20-Se29740	NCP	%	99			70-130	Pass	
4.4'-DDT	M20-Se29740	NCP	%	88			70-130	Pass	
a-BHC	M20-Se29740	NCP	%	97			70-130	Pass	
Aldrin	M20-Se29740	NCP	%	93			70-130	Pass	
b-BHC	M20-Se29740	NCP	%	127			70-130	Pass	
d-BHC	M20-Se29740	NCP	%	87			70-130	Pass	
Dieldrin	M20-Se29740	NCP	%	106			70-130	Pass	
Endosulfan I	M20-Se29740	NCP	%	109			70-130	Pass	
Endosulfan II	M20-Se29740	NCP	%	109			70-130	Pass	
Endosulfan sulphate	M20-Se29740	NCP	%	114			70-130	Pass	
Endrin	M20-Se29740	NCP	%	117			70-130	Pass	
Endrin aldehyde	M20-Se29740	NCP	%	125			70-130	Pass	
Endrin ketone	M20-Se29740	NCP	%	111			70-130	Pass	
g-BHC (Lindane)	M20-Se29740	NCP	%	106			70-130	Pass	
Heptachlor	M20-Se29740	NCP	%	83			70-130	Pass	
Heptachlor epoxide	M20-Se29740	NCP	%	120			70-130	Pass	
Hexachlorobenzene	M20-Se29740	NCP	%	83			70-130	Pass	
Methoxychlor	M20-Se29740	NCP	%	77			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M20-Se38394	NCP	%	110			75-125	Pass	
Cadmium	M20-Se38394	NCP	%	106			75-125	Pass	
Copper	M20-Se38394	NCP	%	104			75-125	Pass	
Lead	M20-Se38394	NCP	%	120			75-125	Pass	
Mercury	M20-Se38394	NCP	%	108			75-125	Pass	
Nickel	M20-Se38394	NCP	%	108			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M20-Se38585	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M20-Se38663	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M20-Se38663	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M20-Se38663	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M20-Se38585	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	M20-Se38585	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	M20-Se38585	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	M20-Se38585	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	M20-Se38585	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	M20-Se38585	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M20-Se38585	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M20-Se38585	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M20-Se38663	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M20-Se38663	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M20-Se38663	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M20-Se38392	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M20-Se38392	NCP	mg/kg	0.10	0.06	41	30%	Fail	Q15
4.4'-DDT	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M20-Se38392	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M20-Se38392	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	M20-Se38392	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	M20-Se38392	NCP	mg/kg	< 2	< 2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Naled	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	M20-Se38392	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	M20-Se38392	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Chromium	M20-Se38394	NCP	mg/kg	13	13	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M20-Se38653	NCP	%	6.5	4.1	45	30%	Fail	Q15

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

Michael Morrison	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Nibha Vaidya	Senior Analyst-Asbestos (NSW)

Glenn Jackson
General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Toll MYTG111917

TAT

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ CANBERRA: GPO 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: Ground Floor, 503 Murray Street, Perth WA 6000
- ☐ NELSON: 6 Duncan Street, Port Nelson, 7010 NZ
- ☐ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 1 of 1
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua, James	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com; jmcdowell@slrconsulting.com	Required TAT: Same Day	

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200M)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	Val-T-1a	18/09/2020	Soil	X1 Bag and X1 Glass Jar				x							[redacted]
2	Val-149-1	18/09/2020	Soil	X1 Bag and X1 Glass Jar				x							
3	Val-161-1	18/09/2020	Soil	X1 Bag and X1 Glass Jar				x							
4	Val-139-1	18/09/2020	Soil	X1 Bag and X1 Glass Jar				x							
5															
6															
7															
8															

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robi Birua	Date / Time	18/09/2020	**Received by**	Sign	Date / Time 22/09/20	**Temperature Received:**
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time 23-9-2020	9.5°C
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Environmental Division
Newcastle
Work Order Reference
EN2006388

Telephone : +61 2 4014 2500

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EN2006388**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: Sarah Dorherty	Contact	:
Address	: Lvl 11, 176 Wellington Parade, East Melbourne, VIC 3002 3002	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
E-mail	: sdoherty@slrconsulting.com	E-mail	:
Telephone	: ----	Telephone	: +61 2 4014 2500
Facsimile	: ----	Facsimile	: +61 2 4967 7382
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: JAMES, ROBIN BIRUA		

Dates

Date Samples Received	: 23-Sep-2020 09:50	Issue Date	: 23-Sep-2020
Client Requested Due Date	: 23-Sep-2020	Scheduled Reporting Date	: **23-Sep-2020**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: ----
Receipt Detail	:	No. of samples received / analysed	: 4 / 4

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	SOIL - EA200G Asbestos Identification in Soils -
EN2006388-001	18-Sep-2020 00:00	Val-T-1a	✓
EN2006388-002	18-Sep-2020 00:00	Val-149-1	✓
EN2006388-003	18-Sep-2020 00:00	Val-161-1	✓
EN2006388-004	18-Sep-2020 00:00	Val-139-1	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

J Mcdowell

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EN2006388**	Page	: 1 of 3
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: Sarah Dorherty	Contact	:
Address	: Lvl 11, 176 Wellington Parade, East Melbourne, VIC 3002 3002	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes Square	Date Samples Received	: 23-Sep-2020 09:50
Order number	: ----	Date Analysis Commenced	: 23-Sep-2020
C-O-C number	: ----	Issue Date	: 23-Sep-2020 16:41
Sampler	: JAMES, ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 4		
No. of samples analysed	: 4		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Amendment (23/09/2020): This report has been amended as a result of a request to change sample identification numbers (IDs) received by ALS from Robin Birua on 23/09/20. All analysis results are as per the previous report.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-1a	Val-149-1	Val-149-2	Val-149-3	----
			Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	----
Compound	CAS Number	LOR	Unit	EN2006388-001	EN2006388-002	EN2006388-003	EN2006388-004	--------
				Result	Result	Result	Result	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**No**	**----**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**No**	**----**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**-**	**----**
Sample weight (dry)	----	0.01	g	**42.6**	**61.4**	**63.3**	**42.2**	**----**
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**----**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**----**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**----**

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	Val-T-1a - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-149-1 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-149-2 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-149-3 - 18-Sep-2020 00:00	Mid brown soil.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EN2006388**	Page	: 1 of 3
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: Sarah Dorherty	Contact	:
Address	: Lvl 11, 176 Wellington Parade, East Melbourne, VIC 3002 3002	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes Square	Date Samples Received	: 23-Sep-2020
Order number	: ----	Date Analysis Commenced	: 23-Sep-2020
C-O-C number	: ----	Issue Date	: 23-Sep-2020
Sampler	: JAMES, ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 4		
No. of samples analysed	: 4		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EN2006388**	Page	: 1 of 4
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: Sarah Dorherty	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes Square	Date Samples Received	: 23-Sep-2020
Site	: ----	Issue Date	: 23-Sep-2020
Sampler	: JAMES, ROBIN BIRUA	No. of samples received	: 4
Order number	: ----	No. of samples analysed	: 4

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
Val-T-1a, Val-149-1, Val-149-2, Val-149-3	**18-Sep-2020**	**----**	----	----	**23-Sep-2020**	17-Mar-2021	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining

SLR

Toll - MYTG700979

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one) ☐ Brisbane ☐ Gold Coast ☐ Sydney ☐ Newcastle ☐ Canberra ☐ Wollongong ☐ Melbourne ☐ Adelaide ☐ Perth ☐ Auckland

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Julie McDowell

PM CONTACT No: 435 359 720

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Robin Birua

SAMPLER CONTACT No: 0482 680 165

Email Reports and Invoices to: jmcdowell@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com

Turnaround Time (TAT): ☐ Standard TAT ☒ Non Standard or Urgent TAT

Required TAT: STANDARD

COC Number: 1 of 2

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote EN/032/20 [2020-2021]

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	Sewer-wall -1	2.12.20	Soil					X						
2	Sewer-Wall-2	"	"					X						
3	Sewer-Wall-3	"	"					X						
4	Sewer-Wall-4	"	"											On Hold
			"											
5	Sewer-Val-1	"	"				X							
6	Sewer-Val-2	"	"											On Hold
7	Sewer-Val-3	"	"				X							
8	Sewer-Val-4	"	"											On Hold

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign: Robin Birua	Date / Time: 3.12.20	Received by	Sign:	Date / Time: 03/12/20 1100	Temperature Received:	
Relinquished By	Sign:	Date / Time:	Received by	Sign: MM	Date / Time: 04/12/20	9.20am	
Relinquished By	Sign:	Date / Time:	Received by	Sign:	Date / Time:		

Environmental Division
Newcastle
Work Order Reference
EN2008222

Telephone : +61 2 4014 2500

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EN2008222**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: Julie McDowell	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
E-mail	: jmcdowell@slrconsulting.com	E-mail	: Hannah.White@alsglobal.com
Telephone	: ----	Telephone	: +61 2 4014 2500
Facsimile	: ----	Facsimile	: +61 2 4967 7382
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0012 (EN/032/20 Primary Work Only)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 04-Dec-2020 09:20	Issue Date	: 07-Dec-2020
Client Requested Due Date	: 11-Dec-2020	Scheduled Reporting Date	: **11-Dec-2020**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: ----
Receipt Detail	:	No. of samples received / analysed	: 8 / 5

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	(On Hold) SOIL No analysis requested	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200G Asbestos Identification in Soils -
EN2008222-001	02-Dec-2020 00:00	Sewer-wall-1		✓	
EN2008222-002	02-Dec-2020 00:00	Sewer-wall-2		✓	
EN2008222-003	02-Dec-2020 00:00	Sewer-wall-3		✓	
EN2008222-004	02-Dec-2020 00:00	Sewer-wall-4	✓		
EN2008222-005	02-Dec-2020 00:00	Sewer-val-1			✓
EN2008222-006	02-Dec-2020 00:00	Sewer-val-2	✓		
EN2008222-007	02-Dec-2020 00:00	Sewer-val-3			✓
EN2008222-008	02-Dec-2020 00:00	Sewer-val-4	✓		

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

Julie McDowell

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EN2008222**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: Julie McDowell	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes Square	Date Samples Received	: 04-Dec-2020 09:20
Order number	: ----	Date Analysis Commenced	: 07-Dec-2020
C-O-C number	: ----	Issue Date	: 08-Dec-2020 17:28
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 8		
No. of samples analysed	: 5		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	Sewer-wall-1	Sewer-wall-2	Sewer-wall-3	Sewer-val-1	Sewer-val-3
			Sampling date / time	02-Dec-2020 00:00	02-Dec-2020 00:00	02-Dec-2020 00:00	02-Dec-2020 00:00	02-Dec-2020 00:00
Compound	CAS Number	LOR	Unit	EN2008222-001	EN2008222-002	EN2008222-003	EN2008222-005	EN2008222-007
				Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**Yes**	**No**	**No**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**Ch + Am**	**-**	**-**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g	**622**	**733**	**769**	**53.2**	**69.8**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	<0.0004	<0.0004	**0.0812**	----	----
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	<0.001	<0.001	**0.010**	----	----
ø **Weight Used for % Calculation**	----	0.0001	kg	**0.622**	**0.733**	**0.769**	----	----
ø **Fibrous Asbestos >7mm**	----	0.0004	g	<0.0004	<0.0004	<0.0004	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	Sewer-wall-1 - 02-Dec-2020 00:00	Mid brown soil.
EA200: Description	Sewer-wall-2 - 02-Dec-2020 00:00	Mid brown soil.
EA200: Description	Sewer-wall-3 - 02-Dec-2020 00:00	Mid brown soil containing two pieces of degraded asbestos cement sheeting approximately 15x5x3mm.
EA200: Description	Sewer-val-1 - 02-Dec-2020 00:00	Mid brown soil.
EA200: Description	Sewer-val-3 - 02-Dec-2020 00:00	Mid brown soil.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EN2008222**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: Julie McDowell	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes Square	Date Samples Received	: 04-Dec-2020
Order number	: ----	Date Analysis Commenced	: 07-Dec-2020
C-O-C number	: ----	Issue Date	: 08-Dec-2020
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 8		
No. of samples analysed	: 5		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EN2008222**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: Julie McDowell	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes Square	Date Samples Received	: 04-Dec-2020
Site	: ----	Issue Date	: 08-Dec-2020
Sampler	: ROBIN BIRUA	No. of samples received	: 8
Order number	: ----	No. of samples analysed	: 5

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
Sewer-wall-1, Sewer-wall-2, Sewer-wall-3, Sewer-val-1, Sewer-val-3	**02-Dec-2020**	**----**	----	----	**07-Dec-2020**	31-May-2021	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
Sewer-wall-1, Sewer-wall-2, Sewer-wall-3	**02-Dec-2020**	**----**	----	----	**07-Dec-2020**	31-May-2021	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).

24.7.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

CLIENT: SLR Consulting
PROJECT: John Stokes Square
PROJECT NUMBER: 680.10679
PROJECT MANAGER: Sarah Doherty
PM CONTACT No: 0417 647 498

LABORATORY: ALS
LABORATORY ADDRESS:
SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch
SAMPLER CONTACT No:
Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com

Turnaround Time (TAT)
☐ Standard TAT
☒ Non Standard or Urgent TAT
Required TAT: 1 day

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Characterisation (P-22)	TCLP Leachate (EN33)	ASLP Leachate (EN60)	Leachable As, Cr (EG020C)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Additional Information (Comment on any gross contamination or specific requirements)
1	STP1-1	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
2	STP1-2	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
3	STP1-3	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
4	STP2-1	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
5	STP2-2	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
6	STP2-3	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
7	STP2-4	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
8	STP2-5	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
9	STP2-6	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
10	STP2-7	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
11	STP2-8	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
12	STP ORG-1-1	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
13	STP ORG-1-2	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
14	STP ORG-1-3	21/07/2020	S	1x sample jar, 1x asbestos bag	x								
15	QC1-DUP	21/07/2020	S	1x sample jar	x								
16	Rinsate	21/07/2020	W	1, 1x metals bottle, 1, Phenol an								x	

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By / Date: [illegible]
Relinquished By / Date: [illegible]
Consignee / Courier:
WO No: ES2024787
Attach By PO Internal Sheet:

Environmental Division
Sydney
Work Order Reference
ES2024787

Telephone : 61-2-8784 8555

LAB OF ORIGIN: DARWIN

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	JAM	Date / Time	21/07/2020
Relinquished By	Sign	Date / Time	
Relinquished By	Sign	Date / Time	

Received by	Sign ALS Darwin	Date / Time 1125	4pm 21/07/20
Received by	Sign	Date / Time 23.07.20 8.30 am	
Received by	Sign	Date / Time	

Temperature Received: 9.6°C

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2024787**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	:	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 4
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: 1	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		

Dates

Date Samples Received	: 21-Jul-2020 16:00	Issue Date	: 23-Jul-2020
Client Requested Due Date	: 24-Jul-2020	Scheduled Reporting Date	: **24-Jul-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 9.6
Receipt Detail	:	No. of samples received / analysed	: 16 / 16

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Sample #16 received one VOC vial empty.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method Client sample ID	Sample Container Received	Preferred Sample Container for Analysis
Asbestos Classification and Quantitation per NEPM 2013 : EA200N		
STP1-1	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP1-2	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP1-3	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP2-1	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP2-2	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP2-3	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP2-4	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP2-5	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP2-6	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP2-7	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP2-8	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP ORG-1-1	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP ORG-1-2	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP ORG-1-3	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
Dissolved Mercury by FIMS : EG035F		
RINSATE	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
Dissolved Metals by ICP-MS - Suite A : EG020A-F		
RINSATE	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2024787-001	21-Jul-2020 00:00	STP1-1	✓	✓	✓	✓
ES2024787-002	21-Jul-2020 00:00	STP1-2	✓	✓	✓	✓
ES2024787-003	21-Jul-2020 00:00	STP1-3	✓	✓	✓	✓
ES2024787-004	21-Jul-2020 00:00	STP2-1	✓	✓	✓	✓
ES2024787-005	21-Jul-2020 00:00	STP2-2	✓	✓	✓	✓
ES2024787-006	21-Jul-2020 00:00	STP2-3	✓	✓	✓	✓
ES2024787-007	21-Jul-2020 00:00	STP2-4	✓	✓	✓	✓

			SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2024787-008	21-Jul-2020 00:00	STP2-5	✓	✓	✓	✓
ES2024787-009	21-Jul-2020 00:00	STP2-6	✓	✓	✓	✓
ES2024787-010	21-Jul-2020 00:00	STP2-7	✓	✓	✓	✓
ES2024787-011	21-Jul-2020 00:00	STP2-8	✓	✓	✓	✓
ES2024787-012	21-Jul-2020 00:00	STP ORG-1-1	✓	✓	✓	✓
ES2024787-013	21-Jul-2020 00:00	STP ORG-1-2	✓	✓	✓	✓
ES2024787-014	21-Jul-2020 00:00	STP ORG-1-3	✓	✓	✓	✓
ES2024787-015	21-Jul-2020 00:00	QU1-DUP	✓		✓	✓

Matrix: **WATER**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	WATER - W-05 TRH/BTEXN/8 Metals	WATER - W-12 OC/OP Pesticides
ES2024787-016	21-Jul-2020 00:00	RINSATE	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2024787**	Page	: 1 of 19
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 21-Jul-2020 16:00
Order number	: ----	Date Analysis Commenced	: 23-Jul-2020
C-O-C number	: 1	Issue Date	: 24-Jul-2020 16:59
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 16		
No. of samples analysed	: 16		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP1-1	STP1-2	STP1-3	STP2-1	STP2-2
			Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2024787-001	ES2024787-002	ES2024787-003	ES2024787-004	ES2024787-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.1	7.7	7.8	9.7	8.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	677	743	581	719	810
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.677	0.743	0.581	0.719	0.810
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	10	14	11	18
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	42	26	36	41	55
Copper	7440-50-8	5	mg/kg	12	15	14	14	16
Lead	7439-92-1	5	mg/kg	11	12	19	11	12
Nickel	7440-02-0	2	mg/kg	3	3	4	5	4
Zinc	7440-66-6	5	mg/kg	33	40	56	72	66
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP1-1	STP1-2	STP1-3	STP2-1	STP2-2
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-001	ES2024787-002	ES2024787-003	ES2024787-004	ES2024787-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.10**
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.10**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.18**	**0.14**	**0.16**	**0.29**	**0.16**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.18**	**0.14**	**0.16**	**0.29**	**0.16**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP1-1	STP1-2	STP1-3	STP2-1	STP2-2
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-001	ES2024787-002	ES2024787-003	ES2024787-004	ES2024787-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP1-1	STP1-2	STP1-3	STP2-1	STP2-2
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-001	ES2024787-002	ES2024787-003	ES2024787-004	ES2024787-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**88.6**	**93.0**	**90.8**	**93.8**	**93.3**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**62.5**	**64.6**	**63.1**	**61.6**	**64.0**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**79.1**	**80.1**	**82.0**	**77.5**	**79.6**
2-Chlorophenol-D4	93951-73-6	0.5	%		**84.9**	**87.3**	**92.5**	**87.3**	**88.1**
2.4.6-Tribromophenol	118-79-6	0.5	%		**66.4**	**65.9**	**71.2**	**69.7**	**62.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**99.7**	**102**	**109**	**106**	**105**
Anthracene-d10	1719-06-8	0.5	%		**97.9**	**99.0**	**103**	**98.4**	**101**
4-Terphenyl-d14	1718-51-0	0.5	%		**97.0**	**98.7**	**104**	**102**	**99.8**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**86.7**	**89.2**	**90.0**	**86.4**	**87.8**
Toluene-D8	2037-26-5	0.2	%		**91.7**	**95.8**	**88.4**	**98.5**	**97.1**
4-Bromofluorobenzene	460-00-4	0.2	%		**96.8**	**97.4**	**97.8**	**102**	**102**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP2-3	STP2-4	STP2-5	STP2-6	STP2-7
			Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2024787-006	ES2024787-007	ES2024787-008	ES2024787-009	ES2024787-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	10.1	11.1	7.3	8.6	8.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	611	572	698	659	594
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	Yes	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.611	0.572	0.698	0.659	0.594
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	13	15	15	9	14
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	37	28	29	31	29
Copper	7440-50-8	5	mg/kg	17	17	14	14	16
Lead	7439-92-1	5	mg/kg	12	12	12	12	11
Nickel	7440-02-0	2	mg/kg	5	5	4	4	5
Zinc	7440-66-6	5	mg/kg	52	59	58	36	53
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP2-3	STP2-4	STP2-5	STP2-6	STP2-7
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-006	ES2024787-007	ES2024787-008	ES2024787-009	ES2024787-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.09**	**0.13**	**0.08**	**0.05**	**0.08**
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.09**	**0.13**	**0.08**	**0.05**	**0.08**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.31**	**0.31**	**0.33**	**0.19**	**0.31**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.31**	**0.31**	**0.33**	**0.19**	**0.31**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP2-3	STP2-4	STP2-5	STP2-6	STP2-7
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-006	ES2024787-007	ES2024787-008	ES2024787-009	ES2024787-010
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP2-3	STP2-4	STP2-5	STP2-6	STP2-7
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-006	ES2024787-007	ES2024787-008	ES2024787-009	ES2024787-010
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**88.0**	**90.1**	**87.2**	**89.2**	**92.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**102**	**106**	**105**	**96.0**	**104**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**78.6**	**76.0**	**75.7**	**77.7**	**74.6**
2-Chlorophenol-D4	93951-73-6	0.5	%		**85.7**	**87.1**	**85.8**	**84.9**	**84.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**62.7**	**61.2**	**64.3**	**61.7**	**65.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**102**	**104**	**103**	**103**	**102**
Anthracene-d10	1719-06-8	0.5	%		**95.6**	**98.8**	**97.4**	**97.9**	**99.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**97.4**	**99.3**	**98.9**	**99.2**	**98.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.1**	**96.2**	**89.9**	**87.4**	**90.7**
Toluene-D8	2037-26-5	0.2	%		**93.5**	**103**	**96.8**	**97.9**	**97.6**
4-Bromofluorobenzene	460-00-4	0.2	%		**102**	**101**	**97.4**	**102**	**105**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP2-8	STP ORG-1-1	STP ORG-1-2	STP ORG-1-3	QU1-DUP
			Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2024787-011	ES2024787-012	ES2024787-013	ES2024787-014	ES2024787-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.8	6.7	9.8	4.9	10.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	----
Asbestos Type	1332-21-4	-	--	-	-	-	-	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	----
Sample weight (dry)	----	0.01	g	638	632	654	691	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	----
Organic Fibre	----	0.1	g/kg	No	No	Yes	No	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	----
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	----
ø Weight Used for % Calculation	----	0.0001	kg	0.638	0.632	0.654	0.691	----
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	11	13	13	13	9
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	42	63	54	55	24
Copper	7440-50-8	5	mg/kg	14	12	13	11	10
Lead	7439-92-1	5	mg/kg	11	12	13	11	9
Nickel	7440-02-0	2	mg/kg	4	4	4	3	3
Zinc	7440-66-6	5	mg/kg	33	83	66	73	37
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	0.06	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP2-8	STP ORG-1-1	STP ORG-1-2	STP ORG-1-3	QU1-DUP
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-011	ES2024787-012	ES2024787-013	ES2024787-014	ES2024787-015
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.12**	<0.05	<0.05	<0.05	**0.11**
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.12**	<0.05	<0.05	<0.05	**0.11**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.41**	**0.40**	**0.58**	**0.30**	**0.18**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.46**	**0.40**	**0.58**	**0.30**	**0.18**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP2-8	STP ORG-1-1	STP ORG-1-2	STP ORG-1-3	QU1-DUP
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-011	ES2024787-012	ES2024787-013	ES2024787-014	ES2024787-015
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP2-8	STP ORG-1-1	STP ORG-1-2	STP ORG-1-3	QU1-DUP
				Client sampling date / time	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00	21-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2024787-011	ES2024787-012	ES2024787-013	ES2024787-014	ES2024787-015
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**91.6**	**92.7**	**89.8**	**93.6**	**88.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**103**	**110**	**97.7**	**65.5**	**58.5**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**71.7**	**77.8**	**75.8**	**75.6**	**76.5**
2-Chlorophenol-D4	93951-73-6	0.5	%		**80.9**	**87.6**	**85.8**	**84.8**	**83.2**
2.4.6-Tribromophenol	118-79-6	0.5	%		**60.3**	**71.9**	**68.3**	**68.7**	**60.1**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**100**	**108**	**104**	**105**	**103**
Anthracene-d10	1719-06-8	0.5	%		**95.8**	**104**	**98.6**	**100**	**98.1**
4-Terphenyl-d14	1718-51-0	0.5	%		**95.4**	**104**	**99.0**	**101**	**98.1**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**92.4**	**94.0**	**93.3**	**98.6**	**86.7**
Toluene-D8	2037-26-5	0.2	%		**92.0**	**102**	**96.6**	**101**	**94.4**
4-Bromofluorobenzene	460-00-4	0.2	%		**100**	**114**	**105**	**106**	**98.1**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	21-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2024787-016	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	21-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2024787-016	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	21-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2024787-016	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**70.2**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**80.9**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**94.3**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**97.5**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**84.1**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP1-1 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP1-2 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP1-3 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP2-1 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP2-2 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP2-3 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP2-4 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP2-5 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP2-6 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP2-7 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP2-8 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP ORG-1-1 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP ORG-1-2 - 21-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP ORG-1-3 - 21-Jul-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2024787**	Page	: 1 of 14
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 21-Jul-2020
Order number	: ----	Date Analysis Commenced	: 23-Jul-2020
C-O-C number	: 1	Issue Date	: 24-Jul-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 16		
No. of samples analysed	: 16		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3157545)									
ES2024787-001	STP1-1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	42	48	12.2	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	3	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	10	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	12	13	11.5	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	33	37	10.6	No Limit
ES2024787-011	STP2-8	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	42	40	6.28	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	11	10	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	14	13	8.94	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	33	32	3.15	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3157546)									
ES2024787-003	STP1-3	EA055: Moisture Content	----	0.1	%	7.8	8.0	1.71	No Limit
ES2024787-014	STP ORG-1-3	EA055: Moisture Content	----	0.1	%	4.9	5.4	8.73	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3157544)									
ES2024787-001	STP1-1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2024787-011	STP2-8	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3157478)									
ES2024787-001	STP1-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3157478) - continued									
ES2024787-001	STP1-1	EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.18	0.16	11.4	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2024787-011	STP2-8	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	0.05	0.06	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	0.06	0.05	19.6	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.12	0.09	23.2	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.41	0.37	8.71	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3157478)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3157478) - continued									
ES2024787-001	STP1-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2024787-011	STP2-8	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3157477)									
ES2024787-001	STP1-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3157477) - continued									
ES2024787-001	STP1-1	EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2024787-011	STP2-8	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3157476)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3157476) - continued									
ES2024787-001	STP1-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2024787-011	STP2-8	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3157479)									
ES2024787-001	STP1-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2024787-011	STP2-8	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3157476)									
ES2024787-001	STP1-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2024787-011	STP2-8	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3157479)									
ES2024787-001	STP1-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2024787-011	STP2-8	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3157479)									
ES2024787-001	STP1-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2024787-011	STP2-8	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3157645)									
ES2024787-016	RINSATE	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3157645) - continued									
ES2024787-016	RINSATE	EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3157976)									
ES2024946-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
ES2025127-007	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<0.02 mg/L	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3157976)									
ES2024946-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
ES2025127-007	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<0.02 mg/L	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3157976)									
ES2024946-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit
ES2025127-007	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<0.001 mg/L	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<0.002 mg/L	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<0.002 mg/L	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<0.002 mg/L	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<0.002 mg/L	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<0.005 mg/L	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3157545)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	106	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	82.2	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	115	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	102	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	106	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	104	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	95.5	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3157544)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	104	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3157478)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.8	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	102	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	99.0	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.1	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	97.7	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	99.8	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	102	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	102	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.6	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	79.8	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	92.7	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3157478)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	89.4	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.1	62.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3157478) - continued								
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	81.6	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	78.7	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	100	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	90.4	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	97.6	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	100	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	104	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	91.3	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.3	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	100	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	107	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.8	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	100	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3157477)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	98.0	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	98.2	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	101	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	103	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	101	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	104	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	102	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	92.7	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	93.1	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	81.4	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	93.6	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	98.3	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	83.8	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	82.6	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	80.1	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3157476)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	92.8	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	98.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	94.4	71.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3157479)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	106	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3157476)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	105	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	98.9	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	95.5	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3157479)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	108	68.4	128
EP080: BTEXN (QCLot: 3157479)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	96.0	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	105	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	105	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	108	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	119	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3157645)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	91.5	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	89.4	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	91.3	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	86.8	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	87.5	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	85.4	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	88.9	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3157646)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	97.3	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3157517)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	84.3	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	83.6	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	94.8	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	85.2	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	91.4	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	87.4	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	91.6	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	85.6	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	84.4	64.1	110

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3157517) - continued								
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	93.8	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	83.6	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	89.0	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	90.4	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	97.7	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	94.1	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	88.0	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	81.5	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	88.2	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	102	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	85.5	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	102	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3157517)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	101	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	90.6	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	22.7	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	105	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	104	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	90.7	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	99.8	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	105	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	89.5	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	94.3	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	95.7	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	87.4	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	100	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	87.5	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	97.7	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	89.9	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	91.3	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	105	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	96.5	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3157518)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	90.0	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	100.0	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	113	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3157976)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	88.5	75.0	127

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3157518)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	89.9	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	71.7	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	80.2	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3157976)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	92.2	75.0	127
EP080: BTEXN (QCLot: 3157976)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	105	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	99.7	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	104	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	99.1	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	102	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	107	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3157545)							
ES2024787-001	STP1-1	EG005T: Arsenic	7440-38-2	50 mg/kg	95.0	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	88.5	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	82.4	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	94.1	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	89.4	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	89.5	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	87.0	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3157544)							
ES2024787-001	STP1-1	EG035T: Mercury	7439-97-6	5 mg/kg	83.5	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3157478)							
ES2024787-001	STP1-1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	82.6	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	88.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	97.7	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	97.6	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	81.0	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	95.3	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3157478)							
ES2024787-001	STP1-1	EP068: Diazinon	333-41-5	0.5 mg/kg	98.3	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	95.4	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	85.4	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	81.9	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	91.3	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3157477)							
ES2024787-001	STP1-1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	95.3	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	96.0	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3157476)							
ES2024787-001	STP1-1	EP071: C10 - C14 Fraction	----	523 mg/kg	98.8	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	104	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	125	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3157479)							
ES2024787-001	STP1-1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	108	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3157476)							
ES2024787-001	STP1-1	EP071: >C10 - C16 Fraction	----	860 mg/kg	106	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	115	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	124	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3157479)							
ES2024787-001	STP1-1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	110	70.0	130
EP080: BTEXN (QCLot: 3157479)							
ES2024787-001	STP1-1	EP080: Benzene	71-43-2	2.5 mg/kg	90.1	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	98.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	102	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	101	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	101	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	103	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035F: Dissolved Mercury by FIMS (QCLot: 3157646)							
ES2024787-016	RINSATE	EG035F: Mercury	7439-97-6	0.01 mg/L	97.6	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3157976)							
ES2024946-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	110	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3157976)							

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3157976) - continued							
ES2024946-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	109	70.0	130
EP080: BTEXN (QCLot: 3157976)							
ES2024946-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	112	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	103	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	102	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	100	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	103	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	96.5	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2024787**	Page	: 1 of 10
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 21-Jul-2020
Site	: ----	Issue Date	: 24-Jul-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty	No. of samples received	: 16
Order number	: ----	No. of samples analysed	: 16

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count QC	Count Regular	Rate (%) Actual	Rate (%) Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
Dissolved Mercury by FIMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Dissolved Metals by ICP-MS - Suite A	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Due for extraction	Evaluation	Analysis: Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3, QU1-DUP	**21-Jul-2020**	**----**	----	----	**23-Jul-2020**	04-Aug-2020	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3	**21-Jul-2020**	**----**	----	----	**24-Jul-2020**	17-Jan-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200N: Asbestos Quantification (non-NATA)								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200N)								
STP1-1,	STP1-2,	**21-Jul-2020**	**----**	----	----	**24-Jul-2020**	17-Jan-2021	✓
STP1-3,	STP2-1,							
STP2-2,	STP2-3,							
STP2-4,	STP2-5,							
STP2-6,	STP2-7,							
STP2-8,	STP ORG-1-1,							
STP ORG-1-2,	STP ORG-1-3							
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
STP1-1,	STP1-2,	**21-Jul-2020**	**23-Jul-2020**	17-Jan-2021	✓	**23-Jul-2020**	17-Jan-2021	✓
STP1-3,	STP2-1,							
STP2-2,	STP2-3,							
STP2-4,	STP2-5,							
STP2-6,	STP2-7,							
STP2-8,	STP ORG-1-1,							
STP ORG-1-2,	STP ORG-1-3,							
QU1-DUP								
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
STP1-1,	STP1-2,	**21-Jul-2020**	**23-Jul-2020**	18-Aug-2020	✓	**24-Jul-2020**	18-Aug-2020	✓
STP1-3,	STP2-1,							
STP2-2,	STP2-3,							
STP2-4,	STP2-5,							
STP2-6,	STP2-7,							
STP2-8,	STP ORG-1-1,							
STP ORG-1-2,	STP ORG-1-3,							
QU1-DUP								
EP068A: Organochlorine Pesticides (OC)								
Soil Glass Jar - Unpreserved (EP068)								
STP1-1,	STP1-2,	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	01-Sep-2020	✓
STP1-3,	STP2-1,							
STP2-2,	STP2-3,							
STP2-4,	STP2-5,							
STP2-6,	STP2-7,							
STP2-8,	STP ORG-1-1,							
STP ORG-1-2,	STP ORG-1-3,							
QU1-DUP								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3, QU1-DUP	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	01-Sep-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3, QU1-DUP	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	01-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3, QU1-DUP	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	04-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3, QU1-DUP	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**24-Jul-2020**	01-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3, QU1-DUP	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	04-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3, QU1-DUP	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**24-Jul-2020**	01-Sep-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP1-1, STP1-2, STP1-3, STP2-1, STP2-2, STP2-3, STP2-4, STP2-5, STP2-6, STP2-7, STP2-8, STP ORG-1-1, STP ORG-1-2, STP ORG-1-3, QU1-DUP	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	04-Aug-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-F)							
RINSATE	**21-Jul-2020**	**----**	----	----	**23-Jul-2020**	17-Jan-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035F)							
RINSATE	**21-Jul-2020**	**----**	----	----	**24-Jul-2020**	04-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**21-Jul-2020**	**23-Jul-2020**	28-Jul-2020	✓	**24-Jul-2020**	01-Sep-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**21-Jul-2020**	**23-Jul-2020**	28-Jul-2020	✓	**24-Jul-2020**	01-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**21-Jul-2020**	**23-Jul-2020**	28-Jul-2020	✓	**24-Jul-2020**	01-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	04-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**21-Jul-2020**	**23-Jul-2020**	28-Jul-2020	✓	**24-Jul-2020**	01-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	04-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**21-Jul-2020**	**23-Jul-2020**	04-Aug-2020	✓	**23-Jul-2020**	04-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	16	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	100.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
TRH - Semivolatile Fraction	EP071	0	1	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 6.1 and Table 1 (14 day holding time).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 - 2004 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM 2013 with Confirmation of Identification by AS 4964 - 2004 Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270E Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270E. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260D. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270E Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260D Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510B 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (2013) Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

Subcon / Forward Lab / Split WO
Lab / Analysis: Melbourne
Organised By / Date: Asbestos
Relinquished By / Date:
Courier:
WO No: ES2025094
Attach

TAT

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR Internal Sheet:

(Tick one)	☐ CANBERRA: Level 2, 15 Lancaster Place, Majura Park, ACT 2609	☐ SOUTH COAST: 154 Princes Highway, Ulladulla, NSW 2539	☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
OFFICE	☐ CANBERRA: GPO 410, Canberra ACT 2600	☐ MACKAY: 21 River Street, Mackay, QLD 4740	☐ MACKAY: 21 River Street, Mackay, QLD 4740	☐ PERTH: Ground Floor, 503 Murray Street, Perth, WA 6000	☐ NELSON: 6 Duncan Street, Port Nelson, 7010 NZ
	☒ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820	☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122	☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122	☐ ROCKHAMPTON: rockhampton@slrconsulting.com	☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 1 of 1
PROJECT: John Stokes Square	LABORATORY ADDRESS:		
PROJECT NUMBER: 680.10679	SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch	☐ Standard TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No:	☒ Non Standard or Urgent TAT	
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com	Required TAT: 1 day	

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No EA200/EA200F for any of the QC samples - S-26 & S-12 analysis only for QC1, QC2, QC3, QC4, QC5

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Charterisation (P-22)	TCLP Leachate (EN33)	ASLP Leachate (EN60)	Leachable As, Cr (EG020C)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	Char-val	23.7.20	s	1 x jar			x							
2	Char-sp	23.7.20	s	1 x jar			x							
3	V01	23.7.20	s	1 x jar, 1 x small bag									x	
4	V02	23.7.20	s	1 x jar, 1 x small bag		x								
5	V03	23.7.20	s	1 x jar, 1 x small bag									x	
6	V04	23.7.20	s	1 x jar, 1 x small bag		x								
7	V05	23.7.20	s	1 x jar, 1 x small bag									x	
8	V06	23.7.20	s	1 x jar, 1 x small bag		x								
9	V07	23.7.20	s	1 x jar, 1 x small bag									x	
10	V08	23.7.20	s	1 x jar, 1 x small bag		x								

Environmental Division
Sydney
Work Order Reference
ES2025094

Telephone : + 61-2-8784 8555

| | | |

31	V29	23.7.20	S	1 x jar, 1 x small bag									x
32	V30	23.7.20	S	2 x jar, 1 x small bag		x			x	x			
33	V31	23.7.20	S	1 x jar, 1 x small bag									x
34	V32	23.7.20	S	1 x jar, 1 x small bag		x							
35	V33	23.7.20	S	1 x jar, 1 x small bag									x
36	V34	23.7.20	S	1 x jar, 1 x small bag		x							
37	V35	23.7.20	S	1 x jar, 1 x small bag									x
38	V36	23.7.20	S	1 x jar, 1 x small bag		x							
39	V37	23.7.20	S	1 x jar, 1 x small bag									x
40	V38	23.7.20	S	1 x jar, 1 x small bag		x							
41	V39	23.7.20	S	1 x jar, 1 x small bag									x
42	V40	23.7.20	S	1 x jar, 1 x small bag		x							
43	V41	23.7.20	S	1 x jar, 1 x small bag									x
44	V42	23.7.20	S	1 x jar, 1 x small bag		x							
45	V43	23.7.20	S	1 x jar, 1 x small bag									x
46	V44	23.7.20	S	1 x jar, 1 x small bag		x							
47	V45	23.7.20	S	1 x jar, 1 x small bag									x
48	V46	23.7.20	S	1 x jar, 1 x small bag		x							
49	V47	23.7.20	S	1 x jar, 1 x small bag									x
50	V48	23.7.20	S	1 x jar, 1 x small bag		x							

51	V49	23.7.20	S	1 x jar, 1 x small bag								x
52	V50	23.7.20	S	1 x jar, 1 x small bag		x						
53	V51	23.7.20	S	1 x jar, 1 x small bag								x
54	V52	23.7.20	S	1 x jar, 1 x small bag		x						
55	V53	23.7.20	S	1 x jar, 1 x small bag								x
56	V54	23.7.20	S	1 x jar, 1 x small bag		x						
57	V55	23.7.20	S	1 x jar, 1 x small bag								x
58	V56	23.7.20	S	1 x jar, 1 x small bag		x						
59	V57	23.7.20	S	1 x jar, 1 x small bag								x
60	V58	23.7.20	S	1 x jar, 1 x small bag		x						
61	V59	23.7.20	S	1 x jar, 1 x small bag								x
62	V60	23.7.20	S	2 x jar, 1 x small bag		x			x	x		
63	V61	23.7.20	S	1 x jar, 1 x small bag								x
64	V62	23.7.20	S	1 x jar, 1 x small bag		x						
65	V63	23.7.20	S	1 x jar, 1 x small bag								x
66	V64	23.7.20	S	1 x jar, 1 x small bag		x						
67	V65	23.7.20	S	1 x jar, 1 x small bag								x
68	V66	23.7.20	S	1 x jar, 1 x small bag		x						
69	V67	23.7.20	S	1 x jar, 1 x small bag								x
70	V68	23.7.20	S	1 x jar, 1 x small bag		x						

71	V69	23.7.20	S	1 x jar, 1 x small bag								x
72	V70	23.7.20	S	1 x jar, 1 x small bag		x						
73	V71	23.7.20	S	1 x jar, 1 x small bag								x
74	V72	23.7.20	S	1 x jar, 1 x small bag		x						
75	V73	23.7.20	S	1 x jar, 1 x small bag								x
76	V74	23.7.20	S	1 x jar, 1 x small bag		x						
77	V75	23.7.20	S	1 x jar, 1 x small bag								x
78	V76	23.7.20	S	1 x jar, 1 x small bag		x						
79	V77	23.7.20	S	1 x jar, 1 x small bag								x
80	V78	23.7.20	S	1 x jar, 1 x small bag		x						
81	V79	23.7.20	S	1 x jar, 1 x small bag								x
82	V80	23.7.20	S	2 x jar, 1 x small bag		x			x	x		
83	V81	23.7.20	S	1 x jar, 1 x small bag								x
84	V82	23.7.20	S	1 x jar, 1 x small bag		x						
85	V83	23.7.20	S	1 x jar, 1 x small bag								x
86	STP3-1	22/07/2020	S	1 x jar, 1 x 500ml bag	x							
87	STP3-2	22/07/2020	S	1 x jar, 1 x 500ml bag	x							
88	STP3-3	22/07/2020	S	1 x jar, 1 x 500ml bag	x							
89	STP4-1	22/07/2020	S	1 x jar, 1 x 500ml bag	x							
90	STP4-2	22/07/2020	S	1 x jar, 1 x 500ml bag	x							

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91	STP4-3	22/07/2020	S	1 x jar, 1 x 500ml bag	x							
92	STP5-1	22/07/2020	soil & bulk material	1 x jar, 2 x 500ml bag	x							
93	STP5-2	22/07/2020	S	1 x jar, 1 x 500ml bag	x							
94	STP5-3	22/07/2020	S	1 x jar, 1 x 500ml bag	x							
95	STP5-INSO	22/07/2020	bulk material	1 x bag						x		
96	STP6-1	23/07/2020	S	1 x jar, 1 x 500ml bag	x							
97	STP6-2	23/07/2020	S	1 x jar, 1 x 500ml bag	x							
98	STP6-3	23/07/2020	S	1 x jar, 1 x 500ml bag	x							
99	STP6-4	23/07/2020	S	1 x jar, 1 x 500ml bag	x							
100	STP6-5	23/07/2020	S	1 x jar, 1 x 500ml bag	x							
101	STP6-6	23/07/2020	S	1 x jar, 1 x 500ml bag	x							
102	QC1	22/07/2020	S	1 x jar	x							No EA200F analysis
103	QC2	23/07/2020	S	1 x jar		x						No EA200 analysis
104	QC3	23/07/2020	S	1 x jar		x						No EA200 analysis
105	QC4	23/07/2020	S	1 x jar		x						No EA200 analysis
106	QC5	23/07/2020	S	1 x jar		x						No EA200 analysis
107	RINSATE [22-07-2020]	22/07/2020	W	4 x bottles							x	
108	RINSATE [23-07-2020]	23/07/2020	W	4 x bottles							x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign Kim -AIS	Date / Time 24.07.20 8.30 am	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2025094**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 6
Order number	: 680.10679	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		

Dates

Date Samples Received	: 24-Jul-2020 08:30	Issue Date	: 28-Jul-2020
Client Requested Due Date	: 30-Jul-2020	Scheduled Reporting Date	: **30-Jul-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 4	Temperature	: 28.6' C
Receipt Detail	:	No. of samples received / analysed	: 107 / 63

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- 28/7/2020: This is an updated SRN which indicates the removal of analysis for samples CHAR-SP and CHAR-VAL as requested.
- **Samples #101 and #107 were not received.**
- **Unable to conduct Clay Content for samples #1 and #2 due to limited volume received.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Melbourne.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method Client sample ID	Sample Container Received	Preferred Sample Container for Analysis
Dissolved Mercury by FIMS : EG035F		
RINSATE [23-07-2020]	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
Dissolved Metals by ICP-MS - Suite A : EG020A-F		
RINSATE [23-07-2020]	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered

Any sample identifications that cannot be displayed entirely in the analysis summary table will be listed below.

ES2025094-108 : [23-Jul-2020] : RINSATE [23-07-2020]

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - EG020C Leachable Metals by ICPMS	SOIL - EN60a ASLP Leachate Procedure	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2025094-003	23-Jul-2020 00:00	V01	✓						
ES2025094-004	23-Jul-2020 00:00	V02		✓	✓			✓	✓
ES2025094-005	23-Jul-2020 00:00	V03	✓						
ES2025094-006	23-Jul-2020 00:00	V04		✓	✓			✓	✓
ES2025094-007	23-Jul-2020 00:00	V05	✓						
ES2025094-008	23-Jul-2020 00:00	V06		✓	✓			✓	✓
ES2025094-009	23-Jul-2020 00:00	V07	✓						
ES2025094-010	23-Jul-2020 00:00	V08		✓	✓			✓	✓
ES2025094-011	23-Jul-2020 00:00	V09	✓						
ES2025094-012	23-Jul-2020 00:00	V10		✓	✓			✓	✓
ES2025094-013	23-Jul-2020 00:00	V11	✓						
ES2025094-014	23-Jul-2020 00:00	V12		✓	✓			✓	✓
ES2025094-015	23-Jul-2020 00:00	V13	✓						
ES2025094-016	23-Jul-2020 00:00	V14		✓	✓			✓	✓
ES2025094-017	23-Jul-2020 00:00	V15	✓						
ES2025094-018	23-Jul-2020 00:00	V16		✓	✓			✓	✓
ES2025094-019	23-Jul-2020 00:00	V17	✓						
ES2025094-020	23-Jul-2020 00:00	V18		✓	✓			✓	✓
ES2025094-021	23-Jul-2020 00:00	V19	✓						
ES2025094-022	23-Jul-2020 00:00	V20		✓	✓			✓	✓
ES2025094-023	23-Jul-2020 00:00	V21	✓						
ES2025094-024	23-Jul-2020 00:00	V22		✓	✓			✓	✓
ES2025094-025	23-Jul-2020 00:00	V23	✓						
ES2025094-026	23-Jul-2020 00:00	V24		✓	✓			✓	✓
ES2025094-027	23-Jul-2020 00:00	V25	✓						
ES2025094-028	23-Jul-2020 00:00	V26		✓	✓			✓	✓
ES2025094-029	23-Jul-2020 00:00	V27	✓						
ES2025094-030	23-Jul-2020 00:00	V28		✓	✓			✓	✓

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - EG020C Leachable Metals by ICPMS	SOIL - EN60a ASLP Leachate Procedure	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2025094-031	23-Jul-2020 00:00	V29	✓						
ES2025094-032	23-Jul-2020 00:00	V30		✓	✓	✓	✓	✓	✓
ES2025094-033	23-Jul-2020 00:00	V31	✓						
ES2025094-034	23-Jul-2020 00:00	V32		✓	✓			✓	✓
ES2025094-035	23-Jul-2020 00:00	V33	✓						
ES2025094-036	23-Jul-2020 00:00	V34		✓	✓			✓	✓
ES2025094-037	23-Jul-2020 00:00	V35	✓						
ES2025094-038	23-Jul-2020 00:00	V36		✓	✓			✓	✓
ES2025094-039	23-Jul-2020 00:00	V37	✓						
ES2025094-040	23-Jul-2020 00:00	V38		✓	✓			✓	✓
ES2025094-041	23-Jul-2020 00:00	V39	✓						
ES2025094-042	23-Jul-2020 00:00	V40		✓	✓			✓	✓
ES2025094-043	23-Jul-2020 00:00	V41	✓						
ES2025094-044	23-Jul-2020 00:00	V42		✓	✓			✓	✓
ES2025094-045	23-Jul-2020 00:00	V43	✓						
ES2025094-046	23-Jul-2020 00:00	V44		✓	✓			✓	✓
ES2025094-047	23-Jul-2020 00:00	V45	✓						
ES2025094-048	23-Jul-2020 00:00	V46		✓	✓			✓	✓
ES2025094-049	23-Jul-2020 00:00	V47	✓						
ES2025094-050	23-Jul-2020 00:00	V48		✓	✓			✓	✓
ES2025094-051	23-Jul-2020 00:00	V49	✓						
ES2025094-052	23-Jul-2020 00:00	V50		✓	✓			✓	✓
ES2025094-053	23-Jul-2020 00:00	V51	✓						
ES2025094-054	23-Jul-2020 00:00	V52		✓	✓			✓	✓
ES2025094-055	23-Jul-2020 00:00	V53	✓						
ES2025094-056	23-Jul-2020 00:00	V54		✓	✓			✓	✓
ES2025094-057	23-Jul-2020 00:00	V55	✓						
ES2025094-058	23-Jul-2020 00:00	V56		✓	✓			✓	✓
ES2025094-059	23-Jul-2020 00:00	V57	✓						
ES2025094-060	23-Jul-2020 00:00	V58		✓	✓			✓	✓
ES2025094-061	23-Jul-2020 00:00	V59	✓						
ES2025094-062	23-Jul-2020 00:00	V60		✓	✓	✓	✓	✓	✓
ES2025094-063	23-Jul-2020 00:00	V61	✓						
ES2025094-064	23-Jul-2020 00:00	V62		✓	✓			✓	✓
ES2025094-065	23-Jul-2020 00:00	V63	✓						
ES2025094-066	23-Jul-2020 00:00	V64		✓	✓			✓	✓
ES2025094-067	23-Jul-2020 00:00	V65	✓						
ES2025094-068	23-Jul-2020 00:00	V66		✓	✓			✓	✓
ES2025094-069	23-Jul-2020 00:00	V67	✓						
ES2025094-070	23-Jul-2020 00:00	V68		✓	✓			✓	✓
ES2025094-071	23-Jul-2020 00:00	V69	✓						

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - EG020C Leachable Metals by ICPMS	SOIL - EN60a ASLP Leachate Procedure	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2025094-072	23-Jul-2020 00:00	V70		✓	✓			✓	✓
ES2025094-073	23-Jul-2020 00:00	V71	✓						
ES2025094-074	23-Jul-2020 00:00	V72		✓	✓			✓	✓
ES2025094-075	23-Jul-2020 00:00	V73	✓						
ES2025094-076	23-Jul-2020 00:00	V74		✓	✓			✓	✓
ES2025094-077	23-Jul-2020 00:00	V75	✓						
ES2025094-078	23-Jul-2020 00:00	V76		✓	✓			✓	✓
ES2025094-079	23-Jul-2020 00:00	V77	✓						
ES2025094-080	23-Jul-2020 00:00	V78		✓	✓			✓	✓
ES2025094-081	23-Jul-2020 00:00	V79	✓						
ES2025094-082	23-Jul-2020 00:00	V80		✓	✓	✓	✓	✓	✓
ES2025094-083	23-Jul-2020 00:00	V81	✓						
ES2025094-084	23-Jul-2020 00:00	V82		✓	✓			✓	✓
ES2025094-085	23-Jul-2020 00:00	V83	✓						
ES2025094-086	22-Jul-2020 00:00	STP3-1		✓				✓	✓
ES2025094-087	22-Jul-2020 00:00	STP3-2		✓				✓	✓
ES2025094-088	22-Jul-2020 00:00	STP3-3		✓				✓	✓
ES2025094-089	22-Jul-2020 00:00	STP4-1		✓				✓	✓
ES2025094-090	22-Jul-2020 00:00	STP4-2		✓				✓	✓
ES2025094-091	22-Jul-2020 00:00	STP4-3		✓				✓	✓
ES2025094-092	22-Jul-2020 00:00	STP5-1		✓				✓	✓
ES2025094-093	22-Jul-2020 00:00	STP5-2		✓				✓	✓
ES2025094-094	22-Jul-2020 00:00	STP5-3		✓				✓	✓
ES2025094-096	23-Jul-2020 00:00	STP6-1		✓				✓	✓
ES2025094-097	23-Jul-2020 00:00	STP6-2		✓				✓	✓
ES2025094-098	23-Jul-2020 00:00	STP6-3		✓				✓	✓
ES2025094-099	23-Jul-2020 00:00	STP6-4		✓				✓	✓
ES2025094-100	23-Jul-2020 00:00	STP6-5		✓				✓	✓
ES2025094-101	23-Jul-2020 00:00	STP6-6		✓				✓	✓
ES2025094-103	23-Jul-2020 00:00	QC2		✓				✓	✓
ES2025094-104	23-Jul-2020 00:00	QC3		✓				✓	✓
ES2025094-105	23-Jul-2020 00:00	QC4		✓				✓	✓
ES2025094-106	23-Jul-2020 00:00	QC5		✓				✓	✓

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by
ES2025094-086	22-Jul-2020 00:00	STP3-1	✓
ES2025094-087	22-Jul-2020 00:00	STP3-2	✓
ES2025094-088	22-Jul-2020 00:00	STP3-3	✓
ES2025094-089	22-Jul-2020 00:00	STP4-1	✓
ES2025094-090	22-Jul-2020 00:00	STP4-2	✓
ES2025094-091	22-Jul-2020 00:00	STP4-3	✓
ES2025094-092	22-Jul-2020 00:00	STP5-1	✓
ES2025094-093	22-Jul-2020 00:00	STP5-2	✓
ES2025094-094	22-Jul-2020 00:00	STP5-3	✓
ES2025094-096	23-Jul-2020 00:00	STP6-1	✓
ES2025094-097	23-Jul-2020 00:00	STP6-2	✓
ES2025094-098	23-Jul-2020 00:00	STP6-3	✓
ES2025094-099	23-Jul-2020 00:00	STP6-4	✓
ES2025094-100	23-Jul-2020 00:00	STP6-5	✓
ES2025094-101	23-Jul-2020 00:00	STP6-6	✓

Matrix: **SOLID**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOLID - EA200B Asbestos Identification in Bulk Solids (Excluding
ES2025094-095	22-Jul-2020 00:00	STP5-INSO	✓
ES2025094-109	22-Jul-2020 00:00	STP5-1	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-05 TRH/BTEXN/8 Metals	WATER - W-12 OC/OP Pesticides
ES2025094-108	23-Jul-2020 00:00	RINSATE [23-07-2020]	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2025094**	Page	: 1 of 59
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 24-Jul-2020 08:30
Order number	: 680.10679	Date Analysis Commenced	: 25-Jul-2020
C-O-C number	: ----	Issue Date	: 30-Jul-2020 16:08
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 107		
No. of samples analysed	: 63		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Uyen Dalkin	Approved Asbestos Identifier	Melbourne Asbestos, Springvale, VIC
Vanessa Phung	Team Leader - Asbestos	Melbourne Asbestos, Springvale, VIC

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EP080: Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005: Poor precision was obtained for Chromium on sample ES2025094-60. Results have been confirmed by re-extraction and reanalysis.
- EG005: Poor precision was obtained for Chromium on sample ES2025094-93. Results have been confirmed by re-extraction and re-analysis.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres

- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- ED007 and ED008: When Exchangeable Al is reported from these methods, it should be noted that Rayment & Lyons (2011) suggests Exchange Acidity by 1M KCl - Method 15G1 (ED005) is a more suitable method for the determination of exchange acidity (H+ + Al3+).
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)				Client sample ID	**V30**	**V60**	**V80**	**----**	**----**
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	----	----
Compound	*CAS Number*	*LOR*	*Unit*		**ES2025094-032**	**ES2025094-062**	**ES2025094-082**	**--------**	**--------**
					Result	Result	Result	----	----
EG020C: Leachable Metals by ICPMS									
Arsenic	7440-38-2	0.005	mg/L		<0.005	<0.005	<0.005	**----**	**----**
Chromium	7440-47-3	0.01	mg/L		<0.01	<0.01	<0.01	**----**	**----**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V02	V04	V06	V08	V10
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-004	ES2025094-006	ES2025094-008	ES2025094-010	ES2025094-012
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.3	8.3	10.3	8.2	9.7
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	68.7	45.4	49.1	57.8	41.2
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	Yes	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	6	5	6	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	88	155	108	109	84
Copper	7440-50-8	5	mg/kg	7	<5	<5	<5	6
Lead	7439-92-1	5	mg/kg	10	10	10	8	8
Nickel	7440-02-0	2	mg/kg	5	3	4	3	4
Zinc	7440-66-6	5	mg/kg	57	<5	<5	11	24
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	0.07	<0.05	<0.05	<0.05	0.12
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.06
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	0.39	<0.05	0.15	0.06	0.14
trans-Chlordane	5103-74-2	0.05	mg/kg	0.33	<0.05	0.15	0.06	0.14
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	0.06	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	1.56	<0.05	<0.05	0.14	0.10
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V02	V04	V06	V08	V10
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-004	ES2025094-006	ES2025094-008	ES2025094-010	ES2025094-012
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		**1.56**	<0.05	<0.05	**0.14**	**0.16**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V02	V04	V06	V08	V10
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-004	ES2025094-006	ES2025094-008	ES2025094-010	ES2025094-012
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V02	V04	V06	V08	V10
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-004	ES2025094-006	ES2025094-008	ES2025094-010	ES2025094-012
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**106**	**105**	**100**	**102**	**98.8**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**104**	**101**	**92.1**	**95.5**	**94.7**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**88.8**	**88.6**	**87.2**	**87.4**	**87.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		**93.8**	**93.0**	**92.4**	**92.2**	**91.2**
2.4.6-Tribromophenol	118-79-6	0.5	%		**61.8**	**59.6**	**58.6**	**57.7**	**56.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**107**	**105**	**105**	**105**	**104**
Anthracene-d10	1719-06-8	0.5	%		**101**	**100**	**100**	**100**	**98.2**
4-Terphenyl-d14	1718-51-0	0.5	%		**100**	**98.2**	**97.3**	**98.0**	**96.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**97.7**	**93.5**	**85.9**	**84.3**	**87.4**
Toluene-D8	2037-26-5	0.2	%		**96.2**	**93.5**	**88.0**	**82.5**	**83.6**
4-Bromofluorobenzene	460-00-4	0.2	%		**95.1**	**95.0**	**88.1**	**82.3**	**83.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V12	V14	V16	V18	V20
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-014	ES2025094-016	ES2025094-018	ES2025094-020	ES2025094-022
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.3	5.4	5.3	5.1	8.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	27.2	49.3	44.0	39.3	29.0
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	Yes	Yes	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	6	6	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	111	131	85	71	132
Copper	7440-50-8	5	mg/kg	<5	<5	8	13	<5
Lead	7439-92-1	5	mg/kg	8	8	9	13	6
Nickel	7440-02-0	2	mg/kg	5	3	4	4	<2
Zinc	7440-66-6	5	mg/kg	<5	<5	14	24	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	0.06	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	0.17	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	0.17	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	0.07	<0.05	0.08	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V12	V14	V16	V18	V20
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-014	ES2025094-016	ES2025094-018	ES2025094-020	ES2025094-022
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		**0.07**	<0.05	**0.08**	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V12	V14	V16	V18	V20
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-014	ES2025094-016	ES2025094-018	ES2025094-020	ES2025094-022
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V12	V14	V16	V18	V20
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-014	ES2025094-016	ES2025094-018	ES2025094-020	ES2025094-022
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**99.0**	**101**	**101**	**102**	**104**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**96.6**	**97.8**	**101**	**99.5**	**104**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**88.2**	**90.9**	**92.3**	**92.4**	**91.1**
2-Chlorophenol-D4	93951-73-6	0.5	%		**91.9**	**94.9**	**96.7**	**96.4**	**95.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**59.3**	**68.7**	**73.6**	**71.6**	**69.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**104**	**103**	**104**	**104**	**104**
Anthracene-d10	1719-06-8	0.5	%		**98.8**	**96.4**	**98.2**	**97.0**	**98.0**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.4**	**98.5**	**99.9**	**99.3**	**99.7**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.1**	**93.7**	**95.4**	**98.7**	**99.6**
Toluene-D8	2037-26-5	0.2	%		**94.6**	**93.2**	**98.2**	**99.4**	**100**
4-Bromofluorobenzene	460-00-4	0.2	%		**93.2**	**93.2**	**95.2**	**95.4**	**96.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V22	V24	V26	V28	V30
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-024	ES2025094-026	ES2025094-028	ES2025094-030	ES2025094-032
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.3	7.4	5.9	8.7	4.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	37.1	42.9	50.1	55.1	90.1
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	<5	<5	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	131	112	102	77	102
Copper	7440-50-8	5	mg/kg	<5	5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	9	9	8	9	8
Nickel	7440-02-0	2	mg/kg	2	5	2	4	3
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	<5	9
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EN60: ASLP Leaching Procedure								
Initial pH	----	0.1	pH Unit	----	----	----	----	7.8
After HCl pH	----	0.1	pH Unit	----	----	----	----	1.4
Extraction Fluid pH	----	0.1	pH Unit	----	----	----	----	4.9
Final pH	----	0.1	pH Unit	----	----	----	----	5.0
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V22	V24	V26	V28	V30
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-024	ES2025094-026	ES2025094-028	ES2025094-030	ES2025094-032
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V22	V24	V26	V28	V30
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-024	ES2025094-026	ES2025094-028	ES2025094-030	ES2025094-032
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V22	V24	V26	V28	V30
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-024	ES2025094-026	ES2025094-028	ES2025094-030	ES2025094-032
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**99.4**	**97.3**	**101**	**99.8**	**97.6**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**97.0**	**90.1**	**106**	**87.3**	**92.1**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**87.6**	**73.7**	**75.5**	**78.1**	**72.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**91.3**	**82.6**	**84.9**	**85.4**	**84.1**
2.4.6-Tribromophenol	118-79-6	0.5	%		**66.1**	**44.9**	**53.7**	**48.6**	**47.8**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**101**	**105**	**108**	**109**	**105**
Anthracene-d10	1719-06-8	0.5	%		**94.2**	**102**	**104**	**104**	**102**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.3**	**103**	**105**	**104**	**102**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**110**	**83.0**	**90.6**	**83.8**	**87.4**
Toluene-D8	2037-26-5	0.2	%		**113**	**80.8**	**89.7**	**84.4**	**78.6**
4-Bromofluorobenzene	460-00-4	0.2	%		**108**	**79.1**	**88.8**	**83.8**	**79.6**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V32	V34	V36	V38	V40
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-034	ES2025094-036	ES2025094-038	ES2025094-040	ES2025094-042
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	2.8	2.8	3.0	7.7	3.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	52.9	93.3	72.9	76.4	93.2
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	Yes	Yes	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	6	6	<5	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	127	100	163	120	144
Copper	7440-50-8	5	mg/kg	9	<5	<5	<5	6
Lead	7439-92-1	5	mg/kg	12	9	10	10	11
Nickel	7440-02-0	2	mg/kg	6	5	5	4	6
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V32	V34	V36	V38	V40
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-034	ES2025094-036	ES2025094-038	ES2025094-040	ES2025094-042
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V32	V34	V36	V38	V40
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-034	ES2025094-036	ES2025094-038	ES2025094-040	ES2025094-042
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V32	V34	V36	V38	V40
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-034	ES2025094-036	ES2025094-038	ES2025094-040	ES2025094-042
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**96.8**	**96.9**	**104**	**99.4**	**102**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**87.0**	**88.0**	**89.6**	**69.7**	**64.8**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**71.5**	**76.6**	**73.3**	**77.8**	**72.0**
2-Chlorophenol-D4	93951-73-6	0.5	%		**82.1**	**85.0**	**83.9**	**86.7**	**83.1**
2.4.6-Tribromophenol	118-79-6	0.5	%		**47.3**	**48.5**	**48.1**	**48.2**	**50.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**102**	**107**	**107**	**109**	**105**
Anthracene-d10	1719-06-8	0.5	%		**101**	**104**	**99.7**	**105**	**102**
4-Terphenyl-d14	1718-51-0	0.5	%		**99.8**	**104**	**104**	**106**	**101**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**100**	**99.7**	**98.0**	**87.7**	**125**
Toluene-D8	2037-26-5	0.2	%		**95.4**	**99.6**	**98.2**	**85.3**	**119**
4-Bromofluorobenzene	460-00-4	0.2	%		**92.5**	**96.0**	**93.5**	**82.5**	**114**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V42	V44	V46	V48	V50
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-044	ES2025094-046	ES2025094-048	ES2025094-050	ES2025094-052
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	2.1	1.7	3.4	1.1	6.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	103	58.5	91.0	99.2	95.6
APPROVED IDENTIFIER:	----	-	--	U.DALKIN	U.DALKIN	U.DALKIN	U.DALKIN	U.DALKIN
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	Yes	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	<5	6	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	25	145	128	84	113
Copper	7440-50-8	5	mg/kg	<5	<5	<5	12	<5
Lead	7439-92-1	5	mg/kg	<5	10	9	15	9
Nickel	7440-02-0	2	mg/kg	<2	4	4	5	3
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	51	8
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V42	V44	V46	V48	V50
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-044	ES2025094-046	ES2025094-048	ES2025094-050	ES2025094-052
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V42	V44	V46	V48	V50
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-044	ES2025094-046	ES2025094-048	ES2025094-050	ES2025094-052
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V42	V44	V46	V48	V50
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-044	ES2025094-046	ES2025094-048	ES2025094-050	ES2025094-052
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**81.7**	**126**	**112**	**104**	**100.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**93.6**	**95.6**	**128**	**73.1**	**75.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**89.5**	**72.1**	**85.0**	**69.9**	**85.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		**94.8**	**91.0**	**93.9**	**93.1**	**95.1**
2.4.6-Tribromophenol	118-79-6	0.5	%		**67.3**	**48.4**	**63.9**	**49.7**	**65.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**105**	**106**	**106**	**111**	**107**
Anthracene-d10	1719-06-8	0.5	%		**103**	**102**	**99.2**	**104**	**99.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**98.3**	**102**	**97.8**	**109**	**99.0**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**93.0**	**80.4**	**90.8**	**93.5**	**97.8**
Toluene-D8	2037-26-5	0.2	%		**89.3**	**82.6**	**94.0**	**98.0**	**92.8**
4-Bromofluorobenzene	460-00-4	0.2	%		**99.3**	**83.9**	**102**	**103**	**103**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V52	V54	V56	V58	V60
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-054	ES2025094-056	ES2025094-058	ES2025094-060	ES2025094-062
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.4	2.0	8.2	2.9	6.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	87.6	76.5	70.2	83.4	72.9
APPROVED IDENTIFIER:	----	-	--	U.DALKIN	U.DALKIN	U.DALKIN	U.DALKIN	U.DALKIN
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	5	6	<5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	122	84	92	84	90
Copper	7440-50-8	5	mg/kg	<5	6	7	<5	5
Lead	7439-92-1	5	mg/kg	14	10	10	10	11
Nickel	7440-02-0	2	mg/kg	3	5	4	5	6
Zinc	7440-66-6	5	mg/kg	28	10	23	6	10
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EN60: ASLP Leaching Procedure								
Initial pH	----	0.1	pH Unit	----	----	----	----	7.4
After HCl pH	----	0.1	pH Unit	----	----	----	----	1.4
Extraction Fluid pH	----	0.1	pH Unit	----	----	----	----	4.9
Final pH	----	0.1	pH Unit	----	----	----	----	5.0
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	0.54	0.16	0.14	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V52	V54	V56	V58	V60
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-054	ES2025094-056	ES2025094-058	ES2025094-060	ES2025094-062
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	**0.56**	**0.37**	**0.08**	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	**1.10**	**0.53**	**0.22**	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V52	V54	V56	V58	V60
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-054	ES2025094-056	ES2025094-058	ES2025094-060	ES2025094-062
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V52	V54	V56	V58	V60
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-054	ES2025094-056	ES2025094-058	ES2025094-060	ES2025094-062
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**104**	**84.5**	**88.7**	**79.4**	**102**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**74.4**	**93.2**	**95.4**	**77.6**	**66.8**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**87.4**	**79.8**	**84.4**	**83.9**	**78.0**
2-Chlorophenol-D4	93951-73-6	0.5	%		**93.1**	**92.2**	**90.6**	**95.4**	**91.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**66.4**	**54.4**	**64.4**	**61.5**	**57.0**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**104**	**105**	**102**	**106**	**104**
Anthracene-d10	1719-06-8	0.5	%		**97.7**	**98.6**	**95.6**	**102**	**96.7**
4-Terphenyl-d14	1718-51-0	0.5	%		**97.2**	**99.6**	**93.5**	**99.5**	**96.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**88.0**	**81.2**	**86.5**	**94.5**	**93.0**
Toluene-D8	2037-26-5	0.2	%		**92.5**	**86.0**	**97.7**	**95.8**	**97.9**
4-Bromofluorobenzene	460-00-4	0.2	%		**97.8**	**89.3**	**97.4**	**99.2**	**102**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V62	V64	V66	V68	V70
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-064	ES2025094-066	ES2025094-068	ES2025094-070	ES2025094-072
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.2	1.8	4.8	8.1	3.7
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	Yes	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	Ch	-	-	-
Sample weight (dry)	----	0.01	g	79.1	76.5	91.9	80.9	67.0
APPROVED IDENTIFIER:	----	-	--	U.DALKIN	U.DALKIN	U.DALKIN	U.DALKIN	U.DALKIN
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	Yes	Yes	Yes	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	5	<5	<5	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	93	94	90	83	145
Copper	7440-50-8	5	mg/kg	<5	9	<5	5	7
Lead	7439-92-1	5	mg/kg	8	27	8	9	11
Nickel	7440-02-0	2	mg/kg	4	4	4	7	4
Zinc	7440-66-6	5	mg/kg	<5	57	14	6	15
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V62	V64	V66	V68	V70
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-064	ES2025094-066	ES2025094-068	ES2025094-070	ES2025094-072
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V62	V64	V66	V68	V70
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-064	ES2025094-066	ES2025094-068	ES2025094-070	ES2025094-072
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V62	V64	V66	V68	V70
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-064	ES2025094-066	ES2025094-068	ES2025094-070	ES2025094-072
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**114**	**120**	**106**	**108**	**84.7**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**82.9**	**68.9**	**83.8**	**65.6**	**65.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**86.1**	**73.9**	**85.8**	**86.3**	**88.0**
2-Chlorophenol-D4	93951-73-6	0.5	%		**92.4**	**91.5**	**95.4**	**93.2**	**93.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**61.0**	**50.7**	**62.7**	**59.6**	**63.5**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**105**	**105**	**108**	**105**	**106**
Anthracene-d10	1719-06-8	0.5	%		**97.0**	**98.3**	**98.3**	**97.0**	**97.5**
4-Terphenyl-d14	1718-51-0	0.5	%		**97.2**	**99.9**	**102**	**97.9**	**98.0**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**88.9**	**100**	**94.4**	**95.5**	**100**
Toluene-D8	2037-26-5	0.2	%		**94.6**	**100**	**99.4**	**98.6**	**103**
4-Bromofluorobenzene	460-00-4	0.2	%		**100**	**106**	**102**	**103**	**107**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V72	V74	V76	V78	V80
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-074	ES2025094-076	ES2025094-078	ES2025094-080	ES2025094-082
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	2.6	6.7	9.4	5.5	9.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	73.9	71.5	75.2	55.7	40.2
APPROVED IDENTIFIER:	----	-	--	U.DALKIN	U.DALKIN	U.DALKIN	U.DALKIN	U.DALKIN
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	Yes
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	6	7	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	120	106	54	58	63
Copper	7440-50-8	5	mg/kg	<5	<5	17	22	5
Lead	7439-92-1	5	mg/kg	10	9	14	11	8
Nickel	7440-02-0	2	mg/kg	4	4	5	4	4
Zinc	7440-66-6	5	mg/kg	8	6	45	26	6
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EN60: ASLP Leaching Procedure								
Initial pH	----	0.1	pH Unit	----	----	----	----	6.7
After HCl pH	----	0.1	pH Unit	----	----	----	----	1.4
Extraction Fluid pH	----	0.1	pH Unit	----	----	----	----	4.9
Final pH	----	0.1	pH Unit	----	----	----	----	4.9
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V72	V74	V76	V78	V80
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-074	ES2025094-076	ES2025094-078	ES2025094-080	ES2025094-082
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.12**	<0.05	**0.12**	**0.10**	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.12**	<0.05	**0.12**	**0.10**	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V72	V74	V76	V78	V80
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-074	ES2025094-076	ES2025094-078	ES2025094-080	ES2025094-082
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V72	V74	V76	V78	V80
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-074	ES2025094-076	ES2025094-078	ES2025094-080	ES2025094-082
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**92.1**	**104**	**80.5**	**91.5**	**96.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**107**	**61.8**	**82.0**	**106**	**60.9**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**76.1**	**87.1**	**81.6**	**86.6**	**88.1**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.1**	**95.2**	**92.2**	**94.0**	**94.2**
2.4.6-Tribromophenol	118-79-6	0.5	%		**46.9**	**68.7**	**53.2**	**62.2**	**62.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**103**	**104**	**107**	**108**	**106**
Anthracene-d10	1719-06-8	0.5	%		**95.1**	**101**	**99.5**	**100**	**98.1**
4-Terphenyl-d14	1718-51-0	0.5	%		**95.4**	**98.9**	**100**	**99.3**	**98.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**75.9**	**84.2**	**86.3**	**91.8**	**90.2**
Toluene-D8	2037-26-5	0.2	%		**76.4**	**87.7**	**94.6**	**89.8**	**93.0**
4-Bromofluorobenzene	460-00-4	0.2	%		**80.8**	**94.0**	**96.9**	**98.2**	**98.7**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V82	STP3-1	STP3-2	STP3-3	STP4-1
			Client sampling date / time	23-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-084	ES2025094-086	ES2025094-087	ES2025094-088	ES2025094-089
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.3	19.9	18.4	20.4	18.7
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	93.7	607	671	573	764
APPROVED IDENTIFIER:	----	-	--	U.DALKIN	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	Yes	Yes	Yes	Yes	Yes
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	----	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	----	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	----	0.607	0.671	0.573	0.764
ø Fibrous Asbestos >7mm	----	0.0004	g	----	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	52	67	73	80	86
Copper	7440-50-8	5	mg/kg	<5	<5	6	<5	6
Lead	7439-92-1	5	mg/kg	10	7	8	6	9
Nickel	7440-02-0	2	mg/kg	3	2	3	<2	3
Zinc	7440-66-6	5	mg/kg	36	10	11	7	15
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.07	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V82	STP3-1	STP3-2	STP3-3	STP4-1
				Client sampling date / time	23-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-084	ES2025094-086	ES2025094-087	ES2025094-088	ES2025094-089
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	**0.06**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	**0.06**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V82	STP3-1	STP3-2	STP3-3	STP4-1
				Client sampling date / time	23-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-084	ES2025094-086	ES2025094-087	ES2025094-088	ES2025094-089
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V82	STP3-1	STP3-2	STP3-3	STP4-1
				Client sampling date / time	23-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-084	ES2025094-086	ES2025094-087	ES2025094-088	ES2025094-089
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**105**	**103**	**105**	**101**	**100**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**70.2**	**71.3**	**72.0**	**66.7**	**65.9**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**82.8**	**79.0**	**76.3**	**78.8**	**73.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.0**	**90.0**	**87.6**	**92.9**	**84.5**
2.4.6-Tribromophenol	118-79-6	0.5	%		**67.7**	**73.0**	**68.5**	**70.9**	**58.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**109**	**110**	**105**	**108**	**103**
Anthracene-d10	1719-06-8	0.5	%		**108**	**102**	**102**	**104**	**102**
4-Terphenyl-d14	1718-51-0	0.5	%		**99.2**	**98.4**	**93.3**	**98.0**	**94.7**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**84.7**	**77.4**	**78.8**	**78.6**	**88.4**
Toluene-D8	2037-26-5	0.2	%		**89.8**	**76.0**	**78.9**	**76.7**	**81.2**
4-Bromofluorobenzene	460-00-4	0.2	%		**86.1**	**91.2**	**74.5**	**91.9**	**89.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP4-2	STP4-3	STP5-1	STP5-2	STP5-3
			Client sampling date / time	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-090	ES2025094-091	ES2025094-092	ES2025094-093	ES2025094-094
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	16.8	19.1	18.6	16.3	17.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No*	No*	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	Ch	Ch	-	-
Sample weight (dry)	----	0.01	g	562	688	668	646	506
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	Yes	Yes	Yes
Organic Fibre	----	0.1	g/kg	Yes	Yes	Yes	Yes	Yes
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	0.0340	0.0015	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	0.005	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.562	0.688	0.668	0.646	0.506
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	0.0005	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	<5	5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	52	70	77	82	86
Copper	7440-50-8	5	mg/kg	11	<5	8	44	8
Lead	7439-92-1	5	mg/kg	12	6	14	33	16
Nickel	7440-02-0	2	mg/kg	3	<2	3	4	3
Zinc	7440-66-6	5	mg/kg	127	12	35	84	114
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP4-2	STP4-3	STP5-1	STP5-2	STP5-3
				Client sampling date / time	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-090	ES2025094-091	ES2025094-092	ES2025094-093	ES2025094-094
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP4-2	STP4-3	STP5-1	STP5-2	STP5-3
				Client sampling date / time	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-090	ES2025094-091	ES2025094-092	ES2025094-093	ES2025094-094
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP4-2	STP4-3	STP5-1	STP5-2	STP5-3
				Client sampling date / time	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00	22-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-090	ES2025094-091	ES2025094-092	ES2025094-093	ES2025094-094
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**106**	**106**	**102**	**95.4**	**105**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**69.2**	**69.5**	**63.2**	**64.4**	**67.8**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**83.1**	**79.9**	**84.4**	**76.2**	**83.0**
2-Chlorophenol-D4	93951-73-6	0.5	%		**87.9**	**89.1**	**90.2**	**87.6**	**88.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**66.1**	**64.4**	**64.2**	**61.2**	**68.7**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**108**	**108**	**111**	**107**	**108**
Anthracene-d10	1719-06-8	0.5	%		**106**	**104**	**108**	**106**	**104**
4-Terphenyl-d14	1718-51-0	0.5	%		**98.4**	**98.3**	**101**	**97.1**	**103**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.0**	**95.6**	**95.7**	**101**	**105**
Toluene-D8	2037-26-5	0.2	%		**78.2**	**76.8**	**77.8**	**76.4**	**78.7**
4-Bromofluorobenzene	460-00-4	0.2	%		**83.8**	**80.4**	**81.2**	**87.5**	**90.8**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP6-1	STP6-2	STP6-3	STP6-4	STP6-5
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-096	ES2025094-097	ES2025094-098	ES2025094-099	ES2025094-100
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.2	9.7	9.4	9.5	8.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	702	699	597	550	699
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG	V.PHUNG
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	Yes	Yes	Yes	Yes	Yes
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.702	0.699	0.597	0.550	0.699
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	<5	6	5	22
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	82	35	68	49	44
Copper	7440-50-8	5	mg/kg	6	<5	7	10	9
Lead	7439-92-1	5	mg/kg	9	9	10	11	15
Nickel	7440-02-0	2	mg/kg	3	2	4	5	4
Zinc	7440-66-6	5	mg/kg	18	14	24	34	32
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	0.06	0.08	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP6-1	STP6-2	STP6-3	STP6-4	STP6-5
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-096	ES2025094-097	ES2025094-098	ES2025094-099	ES2025094-100
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	**0.05**	<0.05	<0.05	**0.08**
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	**0.05**	<0.05	<0.05	**0.08**
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	**0.24**	**0.28**	**0.08**	**0.12**	**0.21**
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.30**	**0.36**	**0.08**	**0.12**	**0.21**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	**0.05**	**0.06**	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP6-1	STP6-2	STP6-3	STP6-4	STP6-5
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-096	ES2025094-097	ES2025094-098	ES2025094-099	ES2025094-100
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP6-1	STP6-2	STP6-3	STP6-4	STP6-5
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-096	ES2025094-097	ES2025094-098	ES2025094-099	ES2025094-100
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**91.8**	**90.0**	**107**	**104**	**111**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**75.2**	**83.8**	**67.7**	**105**	**114**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**81.7**	**83.2**	**78.0**	**76.3**	**81.5**
2-Chlorophenol-D4	93951-73-6	0.5	%		**93.2**	**88.3**	**86.4**	**88.5**	**90.6**
2.4.6-Tribromophenol	118-79-6	0.5	%		**60.6**	**58.9**	**53.2**	**55.2**	**61.7**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**114**	**109**	**108**	**109**	**112**
Anthracene-d10	1719-06-8	0.5	%		**111**	**105**	**103**	**106**	**107**
4-Terphenyl-d14	1718-51-0	0.5	%		**112**	**107**	**103**	**107**	**109**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.9**	**101**	**98.4**	**106**	**82.0**
Toluene-D8	2037-26-5	0.2	%		**105**	**111**	**99.7**	**113**	**88.2**
4-Bromofluorobenzene	460-00-4	0.2	%		**99.4**	**103**	**94.2**	**105**	**85.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP6-6	QC2	QC3	QC4	QC5
			Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025094-101	ES2025094-103	ES2025094-104	ES2025094-105	ES2025094-106
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.5	10.4	4.1	6.4	3.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	----	----
Asbestos Type	1332-21-4	-	--	-	----	----	----	----
Sample weight (dry)	----	0.01	g	650	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	----	----
Organic Fibre	----	0.1	g/kg	Yes	----	----	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	----	----	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	----	----	----	----
ø Weight Used for % Calculation	----	0.0001	kg	0.650	----	----	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	61	78	64	28	99
Copper	7440-50-8	5	mg/kg	7	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	10	8	8	20	8
Nickel	7440-02-0	2	mg/kg	4	3	2	4	<2
Zinc	7440-66-6	5	mg/kg	21	39	8	14	13
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.13	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	0.06	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP6-6	QC2	QC3	QC4	QC5
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-101	ES2025094-103	ES2025094-104	ES2025094-105	ES2025094-106
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	**0.36**	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	**0.36**	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.25**	**0.09**	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.25**	**0.15**	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		**0.06**	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP6-6	QC2	QC3	QC4	QC5
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-101	ES2025094-103	ES2025094-104	ES2025094-105	ES2025094-106
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP6-6	QC2	QC3	QC4	QC5
				Client sampling date / time	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00	23-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025094-101	ES2025094-103	ES2025094-104	ES2025094-105	ES2025094-106
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**102**	**99.5**	**104**	**104**	**102**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**64.0**	**86.2**	**68.8**	**67.3**	**65.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**80.6**	**74.2**	**76.3**	**78.9**	**71.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**87.8**	**88.1**	**88.2**	**87.0**	**85.9**
2.4.6-Tribromophenol	118-79-6	0.5	%		**54.3**	**54.5**	**50.0**	**52.1**	**47.8**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**108**	**110**	**111**	**110**	**107**
Anthracene-d10	1719-06-8	0.5	%		**100**	**105**	**107**	**107**	**105**
4-Terphenyl-d14	1718-51-0	0.5	%		**105**	**106**	**107**	**106**	**107**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**77.0**	**92.8**	**84.5**	**90.1**	**97.4**
Toluene-D8	2037-26-5	0.2	%		**82.2**	**106**	**98.0**	**100**	**104**
4-Bromofluorobenzene	460-00-4	0.2	%		**79.9**	**97.1**	**89.2**	**91.3**	**96.3**

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)			Client sample ID	STP5-INSO	STP5-1	----	----	----
			Client sampling date / time	22-Jul-2020 00:00	22-Jul-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2025094-095	ES2025094-109	--------	--------	--------
				Result	Result	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**Yes**	----	----	----
Asbestos Type	1332-21-4	-	--	**-**	**Ch**	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**N/A**	----	----	----
Sample weight (dry)	----	0.01	g	**3.30**	**118**	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**Yes**	**No**	----	----	----
Organic Fibre	----	0.1	g/kg	**No**	**No**	----	----	----
APPROVED IDENTIFIER:	----	-	--	**U.DALKIN**	**U.DALKIN**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE [23-07-2020]	----	----	----	----
				Client sampling date / time	23-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025094-108	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE [23-07-2020]	----	----	----	----
				Client sampling date / time	23-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025094-108	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE [23-07-2020]	----	----	----	----
				Client sampling date / time	23-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025094-108	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**94.9**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**87.2**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**74.0**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**95.9**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**99.4**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	V02 - 23-Jul-2020 00:00	Brown red clay like soil with rock matter.
EA200: Description	V04 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V06 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V08 - 23-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	V10 - 23-Jul-2020 00:00	Brown red clay like soil with rock matter.
EA200: Description	V12 - 23-Jul-2020 00:00	Brown tan clay like soil with rock matter.
EA200: Description	V14 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V16 - 23-Jul-2020 00:00	Brown red soil with rock and organic matter.
EA200: Description	V18 - 23-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	V20 - 23-Jul-2020 00:00	Brown red clay like soil with rock matter.
EA200: Description	V22 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V24 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V26 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V28 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V30 - 23-Jul-2020 00:00	Brown red soil with rock matter.
EA200: Description	V32 - 23-Jul-2020 00:00	Red clay like soil with rock and organic matter.
EA200: Description	V34 - 23-Jul-2020 00:00	Red grey sandy oil with rock and organic matter.
EA200: Description	V36 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V38 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V40 - 23-Jul-2020 00:00	Brown red clay like soil with rock matter.
EA200: Description	V42 - 23-Jul-2020 00:00	Red grey clay like soil with rock matter.
EA200: Description	V44 - 23-Jul-2020 00:00	Orange sandy soil with rock matter.
EA200: Description	V46 - 23-Jul-2020 00:00	Orange soil with rock matter.
EA200: Description	V48 - 23-Jul-2020 00:00	Brown tan soil with rock and organic matter.
EA200: Description	V50 - 23-Jul-2020 00:00	Orange sandy soil with rock matter.
EA200: Description	V52 - 23-Jul-2020 00:00	Orange sandy soil with rock matter.
EA200: Description	V54 - 23-Jul-2020 00:00	Orange sandy soil with rock matter.
EA200: Description	V56 - 23-Jul-2020 00:00	Red clay like soil with rock matter.
EA200: Description	V58 - 23-Jul-2020 00:00	Orange clay like soil with rock matter.
EA200: Description	V60 - 23-Jul-2020 00:00	Orange soil with rock matter.
EA200: Description	V62 - 23-Jul-2020 00:00	Orange soil with rock matter.
EA200: Description	V64 - 23-Jul-2020 00:00	Red soil with rock and orgnaic matter plus multiple fibrous asbestos fragments approx 15 x 4 x 1mm.
EA200: Description	V66 - 23-Jul-2020 00:00	Orange soil with rock and organic matter.
EA200: Description	V68 - 23-Jul-2020 00:00	Orange sandy soil with rock and organic matter.
EA200: Description	V70 - 23-Jul-2020 00:00	Brown orange soil with rock matter.
EA200: Description	V72 - 23-Jul-2020 00:00	Red sandy soil with rock matter.
EA200: Description	V74 - 23-Jul-2020 00:00	Red sandy soil with rock matter.
EA200: Description	V76 - 23-Jul-2020 00:00	Brown soil with rock matter.

Sub-Matrix: **SOIL**

Method: Compound	*Client sample ID - Client sampling date / time*	*Analytical Results*
EA200: Description	V78 - 23-Jul-2020 00:00	Red soil with rock matter.
EA200: Description	V80 - 23-Jul-2020 00:00	Orange clay like soil with rock and organic matter.
EA200: Description	V82 - 23-Jul-2020 00:00	Orange sandy soil with rock and organic matter.
EA200: Description	STP3-1 - 22-Jul-2020 00:00	Tan clay like soil with rock and organic matter.
EA200: Description	STP3-2 - 22-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP3-3 - 22-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP4-1 - 22-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP4-2 - 22-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP4-3 - 22-Jul-2020 00:00	Brown red clay like soil with rock and organic matter plus one fibrous asbestos fragment approx 7 x 1 x 1mm and one asbestos fibre bundle approx 1 x 0.5 x 0.5mm.
EA200: Description	STP5-1 - 22-Jul-2020 00:00	Red brown clay like soil with rock and organic matter plus synthetic mineral fibres and one asbestos fibre bundle approx 2 x 0.5 x 0.5mm.
EA200: Description	STP5-2 - 22-Jul-2020 00:00	Red orange clay like soil with rock and organic matter plus one synthetic mineral fibre bundle.
EA200: Description	STP5-3 - 22-Jul-2020 00:00	Red orange clay like soil with rock and organic matter plus one synthetic mineral fibre bundle.
EA200: Description	STP6-1 - 23-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP6-2 - 23-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP6-3 - 23-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP6-4 - 23-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP6-5 - 23-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.
EA200: Description	STP6-6 - 23-Jul-2020 00:00	Brown red clay like soil with rock and organic matter.

Sub-Matrix: **SOLID**

Method: Compound	*Client sample ID - Client sampling date / time*	*Analytical Results*
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	STP5-INSO - 22-Jul-2020 00:00	Synthetic mineral fibre bundles with attached soil matter.
EA200: Description	STP5-1 - 22-Jul-2020 00:00	Asbestos sheeting frgaments with attached soil matter approx 80 x 60 x 4mm.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2025094**	Page	: 1 of 32
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 24-Jul-2020
Order number	: 680.10679	Date Analysis Commenced	: 25-Jul-2020
C-O-C number	: ----	Issue Date	: 30-Jul-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 107		
No. of samples analysed	: 63		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Uyen Dalkin	Approved Asbestos Identifier	Melbourne Asbestos, Springvale, VIC
Vanessa Phung	Team Leader - Asbestos	Melbourne Asbestos, Springvale, VIC

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3164661)									
ES2025094-001	Char-val	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	91	98	7.32	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	5	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	11	14	21.3	No Limit
ES2025094-020	V18	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	71	73	3.41	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	3	34.5	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	13	8	52.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	13	10	33.9	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	24	14	51.8	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3164663)									
ES2025094-040	V38	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	120	122	1.71	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	6	31.6	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
ES2025094-060	V58	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	84	# 109	26.3	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	5	4	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3164663) - continued									
ES2025094-060	V58	EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	11	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	6	<5	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3165063)									
ES2025094-080	V78	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	58	52	10.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	6	17.6	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	22	23	5.26	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	10	16.1	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	26	32	21.6	No Limit
ES2025094-093	STP5-2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	82	# 101	21.2	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	44	19	80.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	33	28	17.4	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	84	92	9.09	0% - 50%
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3165066)									
ES2025094-105	QC4	EG005T: Chromium	7440-47-3	2	mg/kg	28	31	10.2	0% - 50%
ES2025094-105	QC4	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	20	10	69.2	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	14	14	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3164665)									
ES2025094-008	V06	EA055: Moisture Content	----	0.1	%	10.3	10.0	2.83	0% - 50%
ES2025094-030	V28	EA055: Moisture Content	----	0.1	%	8.7	10.9	22.4	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3164666)									
ES2025094-048	V46	EA055: Moisture Content	----	0.1	%	3.4	3.3	0.00	No Limit
ES2025094-070	V68	EA055: Moisture Content	----	0.1	%	8.1	7.6	7.16	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3165067)									
ES2025094-084	V82	EA055: Moisture Content	----	0.1	%	3.3	4.0	18.8	No Limit
ES2025094-097	STP6-2	EA055: Moisture Content	----	0.1	%	9.7	10.1	3.94	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3164662)									
ES2025094-004	V02	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2025094-024	V22	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3164664)									
ES2025094-044	V42	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2025094-064	V62	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3165064)									
ES2025094-080	V78	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2025094-093	STP5-2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3165065)									
ES2025094-105	QC4	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3161624)									
ES2025094-004	V02	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	0.07	0.07	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.33	0.29	10.5	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	0.06	<0.05	22.3	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	1.56	1.29	18.8	0% - 20%
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025094-024	V22	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3161624) - continued									
ES2025094-024	V22	EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3161637)									
ES2025094-044	V42	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025094-064	V62	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3161637) - continued									
ES2025094-064	V62	EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3161640)									
ES2025094-084	V82	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025094-096	STP6-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3161640) - continued									
ES2025094-096	STP6-1	EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	0.06	0.07	20.5	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.24	0.19	26.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3161624)									
ES2025094-004	V02	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025094-024	V22	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3161624) - continued									
ES2025094-024	V22	EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3161637)									
ES2025094-044	V42	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025094-064	V62	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3161637) - continued									
ES2025094-064	V62	EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3161640)									
ES2025094-084	V82	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025094-096	STP6-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3161640) - continued									
ES2025094-096	STP6-1	EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3161623)									
ES2025094-004	V02	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2025094-024	V22	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3161623) - continued									
ES2025094-024	V22	EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3161638)									
ES2025094-044	V42	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2025094-064	V62	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3161638) - continued									
ES2025094-064	V62	EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3161642)									
ES2025094-084	V82	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2025094-096	STP6-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3161642) - continued									
ES2025094-096	STP6-1	EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3161458)									
ES2025094-004	V02	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2025094-024	V22	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3161622)									
ES2025094-004	V02	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025094-024	V22	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3161639)									
ES2025094-044	V42	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025094-064	V62	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3161641)									
ES2025094-084	V82	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025094-096	STP6-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3161697)									
ES2025094-044	V42	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2025094-064	V62	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3161706)									
ES2025094-084	V82	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2025094-096	STP6-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3161458)									
ES2025094-004	V02	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2025094-024	V22	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3161622)									
ES2025094-004	V02	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025094-024	V22	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3161639)									
ES2025094-044	V42	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025094-064	V62	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3161641)									
ES2025094-084	V82	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025094-096	STP6-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3161697)									
ES2025094-044	V42	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2025094-064	V62	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3161706)									
ES2025094-084	V82	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2025094-096	STP6-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3161458)									
ES2025094-004	V02	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3161458) - continued									
ES2025094-004	V02	EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2025094-024	V22	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3161697)									
ES2025094-044	V42	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2025094-064	V62	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3161706)									
ES2025094-084	V82	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2025094-096	STP6-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 3161706) - continued									
ES2025094-096	STP6-1	EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020C: Leachable Metals by ICPMS (QC Lot: 3167328)									
ES2025094-032	V30	EG020A-C: Arsenic	7440-38-2	0.005	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-C: Chromium	7440-47-3	0.01	mg/L	<0.01	<0.01	0.00	No Limit
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3167313)									
EW2003346-015	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
ES2025288-001	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	0.094	0.093	1.32	0% - 20%
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	0.027	0.026	0.00	0% - 20%
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	0.033	0.032	5.08	0% - 20%
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.191	0.193	1.03	0% - 20%
EG035F: Dissolved Mercury by FIMS (QC Lot: 3167312)									
ES2025288-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3161814)									
ES2025093-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
ES2025459-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3161814)									
ES2025093-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
ES2025459-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3161814)									
ES2025093-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit
ES2025459-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3161814) - continued									
ES2025459-001	Anonymous	EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3164661)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	109	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	93.9	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	126	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	109	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	115	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	114	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	109	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3164663)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	115	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	98.3	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	127	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	115	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	124	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	117	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	110	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3165063)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	108	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	92.8	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	119	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	103	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	108	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	109	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	107	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3165066)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	125	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	90.7	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	128	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	108	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	130	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	120	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	120	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3164662)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	85.2	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3164664)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3164664) - continued								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	82.6	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3165064)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	91.8	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3165065)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	72.4	70.0	105
EN60: ASLP Leaching Procedure (QCLot: 3162585)								
EN60a: Final pH	----	0.1	pH Unit	1.0	----	----	----	----
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161624)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	102	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	92.9	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.7	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.3	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	99.1	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	98.2	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	98.2	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	102	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.7	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	96.3	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.9	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	96.6	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	102	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	95.1	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161637)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.3	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	103	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.9	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	62.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161637) - continued								
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	81.3	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.2	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	100	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.5	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	87.3	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.0	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	88.1	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161640)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.9	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	86.5	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.0	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	94.9	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.7	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.1	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.8	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	99.0	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	96.2	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	104	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	94.0	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161624)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	85.8	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	93.0	54.0	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161624) - continued								
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	89.5	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	90.4	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.8	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	88.7	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	106	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	103	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	105	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	95.7	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	100	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	104	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161637)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	80.4	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	79.5	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	78.6	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.5	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	77.1	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.7	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.8	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	78.5	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	78.0	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.8	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	76.6	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	87.9	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.4	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.8	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161640)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.7	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	62.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161640) - continued								
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	73.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.3	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	87.1	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	84.3	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	100.0	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.5	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	98.6	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	88.4	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	103	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	105	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3161623)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	104	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	103	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	105	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	105	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	116	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	116	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	115	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	115	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	100	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	110	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	95.3	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	111	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	122	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	117	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	114	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	115	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3161638)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	102	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	104	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	103	73.0	127

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3161638) - continued								
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	103	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	112	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	113	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	112	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	112	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	101	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	109	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	98.9	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	106	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	102	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	102	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	99.7	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	99.4	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3161642)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	100	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	102	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	105	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	103	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	108	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	109	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	109	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	108	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	95.1	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	100	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	91.6	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	109	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	101	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	90.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	88.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	84.5	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161458)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	109	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161622)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	88.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	89.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	87.7	71.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161639)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	93.7	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	88.6	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	94.5	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161641)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	95.7	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	92.8	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	88.2	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161697)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	104	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161706)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	88.1	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161458)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	102	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161622)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	89.6	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	88.3	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	85.8	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161639)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	89.7	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	108	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	76.4	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161641)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	93.2	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	91.6	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	81.8	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161697)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	103	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161706)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	85.8	68.4	128
EP080: BTEXN (QCLot: 3161458)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	110	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	118	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	111	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	110	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	114	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	119	63.0	119

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 3161697)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	94.2	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	99.9	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	99.9	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	96.1	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	105	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	107	63.0	119
EP080: BTEXN (QCLot: 3161706)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	90.6	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	88.2	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	88.9	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	86.0	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	89.2	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	84.8	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020C: Leachable Metals by ICPMS (QCLot: 3167328)								
EG020A-C: Arsenic	7440-38-2	0.005	mg/L	<0.005	0.1 mg/L	89.2	82.0	116
EG020A-C: Chromium	7440-47-3	0.01	mg/L	<0.01	0.1 mg/L	90.1	84.0	116
EG020F: Dissolved Metals by ICP-MS (QCLot: 3167313)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	90.0	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	88.4	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	87.2	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	87.0	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	87.0	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	87.6	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	87.1	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3167312)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	96.5	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161634)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	86.8	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	93.7	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	78.7	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	87.6	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	93.9	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	85.2	65.2	108

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161634) - continued								
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	99.7	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	91.3	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	86.8	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	92.3	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	84.3	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	88.9	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	94.3	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	85.4	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	89.9	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	98.4	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	80.2	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	80.3	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	79.5	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	85.5	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	91.3	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161634)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	78.8	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	81.5	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	23.6	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	92.1	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	94.8	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	96.4	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	95.8	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	104	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	102	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	102	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	98.5	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	97.1	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	98.8	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	93.0	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	93.5	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	86.8	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	90.6	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	84.9	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	106	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161633)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	85.4	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	88.5	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	104	56.0	121

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161814)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	82.3	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161633)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	81.9	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	87.7	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	87.1	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161814)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	78.0	75.0	127
EP080: BTEXN (QCLot: 3161814)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	90.0	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	88.3	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	81.0	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	83.3	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	80.6	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	86.0	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3164661)							
ES2025094-001	Char-val	EG005T: Arsenic	7440-38-2	50 mg/kg	82.6	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.8	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	74.8	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	98.6	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	97.7	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	98.5	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	95.0	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3164663)							
ES2025094-040	V38	EG005T: Arsenic	7440-38-2	50 mg/kg	89.5	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	106	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	88.6	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	105	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	106	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	112	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3164663) - continued							
ES2025094-040	V38	EG005T: Zinc	7440-66-6	250 mg/kg	105	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3165063)							
ES2025094-080	V78	EG005T: Arsenic	7440-38-2	50 mg/kg	83.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	92.6	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	89.5	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	93.6	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	93.0	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	94.4	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	95.5	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3165066)							
ES2025094-105	QC4	EG005T: Arsenic	7440-38-2	50 mg/kg	95.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	107	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	97.2	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	98.0	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	103	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	106	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	116	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3164662)							
ES2025094-004	V02	EG035T: Mercury	7439-97-6	5 mg/kg	86.3	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3164664)							
ES2025094-044	V42	EG035T: Mercury	7439-97-6	5 mg/kg	87.9	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3165064)							
ES2025094-080	V78	EG035T: Mercury	7439-97-6	5 mg/kg	81.3	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3165065)							
ES2025094-105	QC4	EG035T: Mercury	7439-97-6	5 mg/kg	85.2	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161624)							
ES2025094-004	V02	EP068: gamma-BHC	58-89-9	0.5 mg/kg	92.3	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	74.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	89.3	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	105	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	93.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	74.9	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161637)							
ES2025094-044	V42	EP068: gamma-BHC	58-89-9	0.5 mg/kg	78.6	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	90.9	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	106	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161637) - continued							
ES2025094-044	V42	EP068: Dieldrin	60-57-1	0.5 mg/kg	102	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	96.7	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	78.5	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3161640)							
ES2025094-084	V82	EP068: gamma-BHC	58-89-9	0.5 mg/kg	87.9	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	82.6	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	81.4	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	84.0	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	82.3	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	74.4	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161624)							
ES2025094-004	V02	EP068: Diazinon	333-41-5	0.5 mg/kg	87.8	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	76.7	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	93.1	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	84.3	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	84.5	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161637)							
ES2025094-044	V42	EP068: Diazinon	333-41-5	0.5 mg/kg	97.4	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	81.3	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	83.0	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	83.6	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	80.1	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3161640)							
ES2025094-084	V82	EP068: Diazinon	333-41-5	0.5 mg/kg	95.2	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	73.2	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	87.8	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	77.8	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	101	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3161623)							
ES2025094-004	V02	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	100.0	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	106	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3161638)							
ES2025094-044	V42	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	97.8	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	102	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3161642)							
ES2025094-084	V82	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	99.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	101	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161458)							
ES2025094-004	V02	EP080: C6 - C9 Fraction	----	32.5 mg/kg	82.8	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161622)							
ES2025094-004	V02	EP071: C10 - C14 Fraction	----	523 mg/kg	94.7	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	106	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	124	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161639)							
ES2025094-044	V42	EP071: C10 - C14 Fraction	----	523 mg/kg	115	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	84.8	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	105	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161641)							
ES2025094-084	V82	EP071: C10 - C14 Fraction	----	523 mg/kg	99.2	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	108	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	125	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161697)							
ES2025094-044	V42	EP080: C6 - C9 Fraction	----	32.5 mg/kg	86.4	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161706)							
ES2025094-084	V82	EP080: C6 - C9 Fraction	----	32.5 mg/kg	99.2	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161458)							
ES2025094-004	V02	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	78.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161622)							
ES2025094-004	V02	EP071: >C10 - C16 Fraction	----	860 mg/kg	99.6	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	116	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	109	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161639)							
ES2025094-044	V42	EP071: >C10 - C16 Fraction	----	860 mg/kg	108	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	89.6	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	101	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161641)							
ES2025094-084	V82	EP071: >C10 - C16 Fraction	----	860 mg/kg	103	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	117	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	112	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161697)							
ES2025094-044	V42	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	92.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161706)							
ES2025094-084	V82	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	101	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080: BTEXN (QCLot: 3161458)							
ES2025094-004	V02	EP080: Benzene	71-43-2	2.5 mg/kg	96.3	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	91.0	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	91.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	89.9	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	95.1	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	89.0	70.0	130
EP080: BTEXN (QCLot: 3161697)							
ES2025094-044	V42	EP080: Benzene	71-43-2	2.5 mg/kg	74.0	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	89.8	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	78.0	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	90.8	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	79.4	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	81.9	70.0	130
EP080: BTEXN (QCLot: 3161706)							
ES2025094-084	V82	EP080: Benzene	71-43-2	2.5 mg/kg	84.2	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	82.9	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	82.2	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	94.0	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	81.1	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	80.1	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020C: Leachable Metals by ICPMS (QCLot: 3167328)							
ES2025094-062	V60	EG020A-C: Arsenic	7440-38-2	1 mg/L	92.1	70.0	130
		EG020A-C: Chromium	7440-47-3	1 mg/L	85.5	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 3167313)							
ES2025249-009	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	107	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	112	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	109	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	109	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	110	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	105	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	112	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EG035F: Dissolved Mercury by FIMS (QCLot: 3167312)							
ES2025094-108	RINSATE [23-07-2020]	EG035F: Mercury	7439-97-6	0.01 mg/L	89.5	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3161814)							
ES2025093-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	116	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3161814)							
ES2025093-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	102	70.0	130
EP080: BTEXN (QCLot: 3161814)							
ES2025093-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	104	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	98.3	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	93.1	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	89.5	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	97.1	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	91.0	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2025094**	Page	: 1 of 21
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 24-Jul-2020
Site	: ----	Issue Date	: 30-Jul-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch	No. of samples received	: 107
Order number	: 680.10679	No. of samples analysed	: 63

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	ES2025094--060	V58	**Chromium**	7440-47-3	26.3 %	0% - 20%	**RPD exceeds LOR based limits**
EG005(ED093)T: Total Metals by ICP-AES	ES2025094--093	STP5-2	**Chromium**	7440-47-3	21.2 %	0% - 20%	**RPD exceeds LOR based limits**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count QC	Count Regular	Rate (%) Actual	Rate (%) Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
Pesticides by GCMS	0	13	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	16	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Pesticides by GCMS	0	13	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	16	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Evaluation	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**----**	----	----	**28-Jul-2020**	05-Aug-2020	✓
Soil Glass Jar - Unpreserved (EA055)							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C) - Continued							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80, V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**----**	----	----	**28-Jul-2020**	06-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80, V82	**23-Jul-2020**	**----**	----	----	**28-Jul-2020**	19-Jan-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**----**	----	----	**28-Jul-2020**	18-Jan-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6	**23-Jul-2020**	**----**	----	----	**28-Jul-2020**	19-Jan-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**----**	----	----	**28-Jul-2020**	18-Jan-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6	**23-Jul-2020**	**----**	----	----	**28-Jul-2020**	19-Jan-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**28-Jul-2020**	18-Jan-2021	✓	**28-Jul-2020**	18-Jan-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80, V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**28-Jul-2020**	19-Jan-2021	✓	**28-Jul-2020**	19-Jan-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**28-Jul-2020**	19-Aug-2020	✓	**29-Jul-2020**	19-Aug-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80, V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**28-Jul-2020**	20-Aug-2020	✓	**29-Jul-2020**	20-Aug-2020	✓
EN60: ASLP Leaching Procedure							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a)							
V30, V60, V80	**23-Jul-2020**	**27-Jul-2020**	19-Jan-2021	✓	**----**	----	----

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**27-Jul-2020**	05-Aug-2020	✓	**28-Jul-2020**	05-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**28-Jul-2020**	03-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	05-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**28-Jul-2020**	05-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**27-Jul-2020**	05-Aug-2020	✓	**28-Jul-2020**	05-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**28-Jul-2020**	03-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	05-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**28-Jul-2020**	05-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**27-Jul-2020**	05-Aug-2020	✓	**27-Jul-2020**	05-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	03-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80, V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	05-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**25-Jul-2020**	05-Aug-2020	✓	**27-Jul-2020**	05-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**27-Jul-2020**	05-Aug-2020	✓	**27-Jul-2020**	05-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	06-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons - Continued							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**28-Jul-2020**	06-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80, V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	05-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**25-Jul-2020**	05-Aug-2020	✓	**27-Jul-2020**	05-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**27-Jul-2020**	05-Aug-2020	✓	**27-Jul-2020**	05-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	06-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**28-Jul-2020**	06-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80, V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	05-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP3-1, STP3-2, STP3-3, STP4-1, STP4-2, STP4-3, STP5-1, STP5-2, STP5-3	**22-Jul-2020**	**25-Jul-2020**	05-Aug-2020	✓	**27-Jul-2020**	05-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V82, STP6-1, STP6-2, STP6-3, STP6-4, STP6-5, STP6-6, QC2, QC3, QC4, QC5	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	06-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V02, V04, V06, V08, V10, V12, V14, V16, V18, V20, V22, V24, V26, V28, V30, V32, V34, V36, V38, V40, V42, V44, V46, V48, V50, V52, V54, V56, V58, V60, V62, V64, V66, V68, V70, V72, V74, V76, V78, V80	**23-Jul-2020**	**25-Jul-2020**	06-Aug-2020	✓	**28-Jul-2020**	06-Aug-2020	✓

Matrix: **SOLID**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation

Matrix: **SOLID**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP5-1	**22-Jul-2020**	**----**	----	----	**28-Jul-2020**	18-Jan-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP5-INSO	**22-Jul-2020**	**----**	----	----	**28-Jul-2020**	18-Jan-2021	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020C: Leachable Metals by ICPMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-C)							
V30, V60, V80	**27-Jul-2020**	**29-Jul-2020**	23-Jan-2021	✓	**29-Jul-2020**	23-Jan-2021	✓
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-F)							
RINSATE [23-07-2020]	**23-Jul-2020**	**----**	----	----	**29-Jul-2020**	19-Jan-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035F)							
RINSATE [23-07-2020]	**23-Jul-2020**	**----**	----	----	**29-Jul-2020**	06-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE [23-07-2020]	**23-Jul-2020**	**28-Jul-2020**	30-Jul-2020	✓	**29-Jul-2020**	06-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE [23-07-2020]	**23-Jul-2020**	**28-Jul-2020**	30-Jul-2020	✓	**29-Jul-2020**	06-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE [23-07-2020]	**23-Jul-2020**	**28-Jul-2020**	30-Jul-2020	✓	**29-Jul-2020**	06-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE [23-07-2020]	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	06-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE [23-07-2020]	**23-Jul-2020**	**28-Jul-2020**	30-Jul-2020	✓	**29-Jul-2020**	06-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE [23-07-2020]	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	06-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE [23-07-2020]	**23-Jul-2020**	**27-Jul-2020**	06-Aug-2020	✓	**27-Jul-2020**	06-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	6	60	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	6	60	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	6	60	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	7	60	**11.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	8	60	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	6	60	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	6	60	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	60	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	60	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
ASLP for Non & Semivolatile Analytes	EN60a	1	4	**25.00**	**9.09**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	60	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	60	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	60	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	60	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	1	5	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	7	**28.57**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
Leachable Metals by ICPMS - Suite A	EG020A-C	1	3	**33.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	13	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	16	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPMS - Suite A	EG020A-C	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPMS - Suite A	EG020A-C	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPMS - Suite A	EG020A-C	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	13	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	16	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 6.1 and Table 1 (14 day holding time).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 - 2004 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM 2013 with Confirmation of Identification by AS 4964 - 2004 Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Leachable Metals by ICPMS - Suite A	EG020A-C	SOIL	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020: The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270E Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270E. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260D. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.
Asbestos Identification in Bulk Solids	EA200	SOLID	In house: Referenced to AS 4964 - 2004 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270E Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260D Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Higginson 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM (2013) Schedule B(3) (Method 103)
Exchangeable Cations Preparation Method	ED007PR	SOIL	In house: Referenced to Rayment & Higginson (1992) method 15A1. A 1M NH4Cl extraction by end over end tumbling at a ratio of 1:20. There is no pretreatment for soluble salts. Extracts can be run by ICP for cations.
Digestion for Total Recoverable Metals in TCLP Leachate	EN25C	SOIL	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (2013) Schedule B(3)
1:5 solid / water leach for soluble analytes	EN34	SOIL	10 g of soil is mixed with 50 mL of reagent grade water and tumbled end over end for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis.
ASLP for Non & Semivolatile Analytes	EN60a	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Organic Matter	EP004-PR	SOIL	In house: Referenced to AS1289.4.1.1 - 1997. Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (2013) Schedule B(3) (Method 105)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.

Preparation Methods	Method	Matrix	Method Descriptions
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510B 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (2013) Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

30.7.20 5819, V132A, SV25, M-A2/C Newcastle

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one): ☐ Sydney ☐ Canberra ☐ Brisbane ☐ Melbourne ☐ Perth ☐ Adelaide ☒ Darwin ☐ Auckland ☐ Wellington ☐ Christchurch

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 1 of 1
PROJECT: John Stokes Square	LABORATORY ADDRESS:		
PROJECT NUMBER: 680.10679	SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch	☐ Standard TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No:	☒ Non Standard or Urgent TAT	
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com	Required TAT: 1 day	

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No EA200F for STP8-1, STP8-2, STP8-3, STP8-4, QC6 (S-26 & S-12 analysis only)

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Charaterisation (P-22)	TCLP Leachate (EN33)	ASLP Leachate (EN60)	Leachable As, Cr (EG020C)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	STP8-1	27/07/2020	s	1 x jar	×									No EA200F analysis
2	STP8-2	27/07/2020	s	1 x jar	×									No EA200F analysis
3	STP8-3	27/07/2020	s	1 x jar	×									No EA200F analysis
4	STP8-4	27/07/2020	s	1 x jar	×									No EA200F analysis
5	QC6	27/07/2020	s	1 x jar	×									No EA200F analysis
6	STP7-1	27/07/2020	s & ACM	1 x jar & 2 x bag	×									
7	STP7-2	27/07/2020	s	1 x jar & 1 x bag	×									
8	STP7-3	27/07/2020	s	1 x jar & 1 x bag	×									
9	STP7-4	27/07/2020	s	1 x jar & 1 x bag	×									
10	STP7-5	27/07/2020	s	1 x jar & 1 x bag	×									
11	STP7-6	27/07/2020	s & ACM	1 x jar & 2 x bag	×									
12	STP7-7	27/07/2020	s	2 x jar & 1 x bag	×				×	×				
13	RINSATE	27/07/2020	w	4 x bottles								×		

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By / Date: A. Peters 6/7/20
Relinquished By / Date: 6/7/20
Connote / Courier: ES2025253
WO No: ES2025253
Attach By PO / Internal Sheet:

Environmental Division Sydney
Work Order Reference
ES2025253

Telephone : +61-2-8784 8555

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign Kim - ALS	Date / Time 28.07.20 8.30 am
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time

LAB OF ORIGIN: DARWIN

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **ES2025253**		
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 4
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		

Dates

Date Samples Received	: 28-Jul-2020 08:30	Issue Date	: 31-Jul-2020
Client Requested Due Date	: 03-Aug-2020	Scheduled Reporting Date	: **03-Aug-2020**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 1	Temperature	: 17.1' C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 15 / 15

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **31/07/20: This is an updated SRA which indicates additional analysis.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method Client sample ID	Sample Container Received	Preferred Sample Container for Analysis
Asbestos Classification and Quantitation per NEPM 2013 : EA200N		
STP7-1	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP7-2	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP7-3	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP7-4	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP7-5	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP7-6	- Snap Lock Bag - ACM/Asbestos Grab Bag	- Snap Lock Bag: Separate bag received
STP7-7	- Snap Lock Bag	- Snap Lock Bag: Separate bag received
Dissolved Mercury by FIMS : EG035F		
RINSATE	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
Dissolved Metals by ICP-MS - Suite A : EG020A-F		
RINSATE	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EG020C Leachable Metals by ICPMS	SOIL - EN33a TCLP Leachate	SOIL - EN60a ASLP Leachate Procedure	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2025253-001	27-Jul-2020 00:00	STP8-1	✓					✓	✓
ES2025253-002	27-Jul-2020 00:00	STP8-2	✓					✓	✓
ES2025253-003	27-Jul-2020 00:00	STP8-3	✓					✓	✓
ES2025253-004	27-Jul-2020 00:00	STP8-4	✓					✓	✓
ES2025253-005	27-Jul-2020 00:00	QC6	✓					✓	✓
ES2025253-006	27-Jul-2020 00:00	STP7-1	✓	✓				✓	✓
ES2025253-007	27-Jul-2020 00:00	STP7-2	✓	✓				✓	✓
ES2025253-008	27-Jul-2020 00:00	STP7-3	✓	✓				✓	✓
ES2025253-009	27-Jul-2020 00:00	STP7-4	✓	✓				✓	✓
ES2025253-010	27-Jul-2020 00:00	STP7-5	✓	✓				✓	✓
ES2025253-011	27-Jul-2020 00:00	STP7-6	✓	✓				✓	✓
ES2025253-012	27-Jul-2020 00:00	STP7-7	✓	✓	✓	✓	✓	✓	✓

Matrix: **SOLID**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOLID - EA200B Asbestos Identification in Bulk Solids (Excluding
ES2025253-014	27-Jul-2020 00:00	STP7-1	✓
ES2025253-015	27-Jul-2020 00:00	STP7-6	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-05 TRH/BTEXN/8 Metals	WATER - W-12 OC/OP Pesticides
ES2025253-013	27-Jul-2020 00:00	RINSATE	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2025253**	Page	: 1 of 23
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 28-Jul-2020 08:30
Order number	: ----	Date Analysis Commenced	: 28-Jul-2020
C-O-C number	: ----	Issue Date	: 04-Aug-2020 11:37
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 15		
No. of samples analysed	: 15		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005: Poor precision was obtained for Chromium on sample ES2025253-1. Results have been confirmed by re-extraction and re-analysis.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- Amendment (31/07/2020): This report has been amended and re-released to allow the reporting of additional analytical data. Suite S-26, S-12 added to sample #12.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.

- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)			Client sample ID	**STP7-7**	**----**	**----**	**----**	**----**
			Client sampling date / time	27-Jul-2020 00:00	----	----	----	----
Compound	*CAS Number*	*LOR*	*Unit*	**ES2025253-012**	**--------**	**--------**	**--------**	**--------**
				Result	----	----	----	----
EG020C: Leachable Metals by ICPMS								
Arsenic	7440-38-2	0.005	mg/L	<0.005	**----**	**----**	**----**	**----**
Chromium	7440-47-3	0.01	mg/L	<0.01	**----**	**----**	**----**	**----**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP8-1	STP8-2	STP8-3	STP8-4	QC6
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025253-001	ES2025253-002	ES2025253-003	ES2025253-004	ES2025253-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.0	5.5	7.0	11.4	7.2
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	8	5	7	10
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	60	31	72	109	70
Copper	7440-50-8	5	mg/kg	10	10	7	7	9
Lead	7439-92-1	5	mg/kg	13	11	9	10	11
Nickel	7440-02-0	2	mg/kg	6	6	5	5	6
Zinc	7440-66-6	5	mg/kg	46	40	18	17	36
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.06	0.08	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	0.09	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.09	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	0.09	0.18	0.36	0.08	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP8-1	STP8-2	STP8-3	STP8-4	QC6
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025253-001	ES2025253-002	ES2025253-003	ES2025253-004	ES2025253-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.09**	**0.18**	**0.42**	**0.16**	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP8-1	STP8-2	STP8-3	STP8-4	QC6
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025253-001	ES2025253-002	ES2025253-003	ES2025253-004	ES2025253-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP8-1	STP8-2	STP8-3	STP8-4	QC6
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025253-001	ES2025253-002	ES2025253-003	ES2025253-004	ES2025253-005
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		93.6	94.1	87.9	91.9	100
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		84.8	76.7	71.3	71.5	77.2
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		82.3	85.5	80.7	76.9	83.7
2-Chlorophenol-D4	93951-73-6	0.5	%		90.4	95.4	86.5	87.4	91.0
2.4.6-Tribromophenol	118-79-6	0.5	%		76.8	76.5	69.8	68.4	71.5
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		106	110	102	104	107
Anthracene-d10	1719-06-8	0.5	%		107	107	104	104	107
4-Terphenyl-d14	1718-51-0	0.5	%		98.9	102	96.1	97.2	101
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		81.7	82.3	89.1	80.8	85.8
Toluene-D8	2037-26-5	0.2	%		92.1	93.0	99.4	92.9	97.0
4-Bromofluorobenzene	460-00-4	0.2	%		95.1	95.4	100	92.8	97.1

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP7-1	STP7-2	STP7-3	STP7-4	STP7-5
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025253-006	ES2025253-007	ES2025253-008	ES2025253-009	ES2025253-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.3	7.6	8.6	21.1	19.7
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	726	621	594	666	604
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.726	0.621	0.594	0.666	0.604
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	6	6	5	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	111	97	148	116	92
Copper	7440-50-8	5	mg/kg	7	7	6	7	5
Lead	7439-92-1	5	mg/kg	10	11	11	10	9
Nickel	7440-02-0	2	mg/kg	5	6	7	5	4
Zinc	7440-66-6	5	mg/kg	25	19	33	18	15
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	0.09	0.08	0.12	0.08	0.09
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP7-1	STP7-2	STP7-3	STP7-4	STP7-5
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025253-006	ES2025253-007	ES2025253-008	ES2025253-009	ES2025253-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.16**	**0.25**	**0.16**	**0.14**	**0.09**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.25**	**0.33**	**0.28**	**0.22**	**0.18**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP7-1	STP7-2	STP7-3	STP7-4	STP7-5
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025253-006	ES2025253-007	ES2025253-008	ES2025253-009	ES2025253-010
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP7-1	STP7-2	STP7-3	STP7-4	STP7-5
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025253-006	ES2025253-007	ES2025253-008	ES2025253-009	ES2025253-010
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**92.4**	**88.9**	**92.7**	**95.1**	**87.7**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**75.9**	**87.3**	**82.8**	**65.2**	**68.2**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**82.4**	**77.7**	**82.2**	**74.5**	**77.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**90.1**	**88.3**	**89.8**	**85.6**	**90.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**70.4**	**68.1**	**70.0**	**63.0**	**67.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**106**	**105**	**106**	**102**	**108**
Anthracene-d10	1719-06-8	0.5	%		**100**	**105**	**106**	**96.1**	**109**
4-Terphenyl-d14	1718-51-0	0.5	%		**99.9**	**96.8**	**100**	**95.2**	**101**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**84.6**	**101**	**98.9**	**81.7**	**80.9**
Toluene-D8	2037-26-5	0.2	%		**95.6**	**92.5**	**97.9**	**92.6**	**91.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**96.3**	**104**	**103**	**92.4**	**93.3**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP7-6	STP7-7	----	----	----
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2025253-011	ES2025253-012	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**11.1**	**8.5**	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	----	----	----
Asbestos Type	1332-21-4	-	--	**-**	**-**	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	----	----	----
Sample weight (dry)	----	0.01	g	**654**	**701**	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	----	----	----
Organic Fibre	----	0.1	g/kg	**No**	**No**	----	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	----	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	<0.0004	<0.0004	----	----	----
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	<0.001	<0.001	----	----	----
ø **Weight Used for % Calculation**	----	0.0001	kg	**0.654**	**0.701**	----	----	----
ø **Fibrous Asbestos >7mm**	----	0.0004	g	<0.0004	<0.0004	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**6**	**8**	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	**124**	**121**	----	----	----
Copper	7440-50-8	5	mg/kg	**5**	**6**	----	----	----
Lead	7439-92-1	5	mg/kg	**11**	**10**	----	----	----
Nickel	7440-02-0	2	mg/kg	**4**	**5**	----	----	----
Zinc	7440-66-6	5	mg/kg	**15**	**13**	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EN33: TCLP Leach								
Initial pH	----	0.1	pH Unit	**----**	**6.3**	----	----	----
After HCl pH	----	0.1	pH Unit	**----**	**1.5**	----	----	----
Extraction Fluid Number	----	1	-	**----**	**1**	----	----	----
Final pH	----	0.1	pH Unit	**----**	**5.0**	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP7-6	STP7-7	----	----	----
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2025253-011	ES2025253-012	--------	--------	--------
				Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	**0.10**	**0.05**	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	**0.14**	**0.12**	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.24**	**0.17**	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP7-6	STP7-7	----	----	----
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2025253-011	ES2025253-012	--------	--------	--------
					Result	Result	----	----	----
EP068B: Organophosphorus Pesticides (OP) - Continued									
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	----	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP7-6	STP7-7	----	----	----
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2025253-011	ES2025253-012	--------	--------	--------
				Result	Result	----	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued								
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	----	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**96.5**	**116**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**123**	**76.4**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**79.6**	**88.6**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**90.4**	**84.0**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**71.1**	**49.6**	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**105**	**94.7**	----	----	----
Anthracene-d10	1719-06-8	0.5	%	**109**	**99.9**	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**101**	**91.5**	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**81.9**	**78.6**	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP7-6	STP7-7	----	----	----
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2025253-011	ES2025253-012	--------	--------	--------
					Result	Result	----	----	----
EP080S: TPH(V)/BTEX Surrogates - Continued									
Toluene-D8	2037-26-5	0.2	%		**95.0**	**104**	**----**	**----**	**----**
4-Bromofluorobenzene	460-00-4	0.2	%		**95.6**	**104**	**----**	**----**	**----**

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)			Client sample ID	STP7-1	STP7-6	----	----	----
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2025253-014	ES2025253-015	--------	--------	--------
				Result	Result	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples								
Asbestos Detected	1332-21-4	0.1	g/kg	**Yes**	**No**	----	----	----
Asbestos Type	1332-21-4	-	--	**Ch**	**-**	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**N/A**	**No**	----	----	----
Sample weight (dry)	----	0.01	g	**17.0**	**2.80**	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	----	----	----
Organic Fibre	----	0.1	g/kg	**No**	**No**	----	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	27-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025253-013	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	27-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025253-013	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	27-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025253-013	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**71.0**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**77.1**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**103**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**105**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**100**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP7-1 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP7-2 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP7-3 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP7-4 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP7-5 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP7-6 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP7-7 - 27-Jul-2020 00:00	Mid brown soil.

Sub-Matrix: **SOLID**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	STP7-1 - 27-Jul-2020 00:00	Two pieces of cement sheeting and one piece of asbestos vinyl tile.
EA200: Description	STP7-6 - 27-Jul-2020 00:00	One piece of plastic-like material.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2025253**	Page	: 1 of 21
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 28-Jul-2020
Order number	: ----	Date Analysis Commenced	: 28-Jul-2020
C-O-C number	: ----	Issue Date	: 04-Aug-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 15		
No. of samples analysed	: 15		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3166210)									
ES2025253-001	STP8-1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	60	# 75	22.1	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	6	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	10	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	13	12	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	46	44	5.04	No Limit
ES2025253-011	STP7-6	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	124	128	3.01	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	5	5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	15	14	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3173593)									
ES2026288-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	4	4	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	6	9	50.6	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	21	25	16.3	No Limit
ES2026517-006	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	9	9	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	8	9	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3173593) - continued									
ES2026517-006	Anonymous	EG005T: Arsenic	7440-38-2	5	mg/kg	5	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	24	25	5.31	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	16	15	10.7	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	75	78	4.16	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3166214)									
ES2025253-003	STP8-3	EA055: Moisture Content	----	0.1	%	7.0	7.6	7.54	No Limit
ES2025272-004	Anonymous	EA055: Moisture Content	----	0.1	%	12.6	12.3	2.50	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3173608)									
ES2026288-001	Anonymous	EA055: Moisture Content	----	0.1	%	11.1	10.8	3.15	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3166209)									
ES2025253-001	STP8-1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2025253-011	STP7-6	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3173591)									
ES2026288-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2026517-006	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3165251)									
ES2025253-001	STP8-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.09	0.10	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025253-011	STP7-6	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3165251) - continued									
ES2025253-011	STP7-6	EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	0.10	0.15	40.7	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.14	0.13	10.6	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3173029)									
ES2025253-012	STP7-7	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	0.05	0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.12	0.11	9.94	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3173029) - continued									
ES2025253-012	STP7-7	EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3165251)									
ES2025253-001	STP8-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025253-011	STP7-6	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3173029)									
ES2025253-012	STP7-7	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3165250)									
ES2025253-001	STP8-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3165250) - continued									
ES2025253-011	STP7-6	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3173028)									
ES2025253-012	STP7-7	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3173028) - continued									
ES2025253-012	STP7-7	EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3165249)									
ES2025253-001	STP8-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025253-011	STP7-6	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3165636)									
ES2025253-001	STP8-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2025253-011	STP7-6	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3173027)									
ES2025253-012	STP7-7	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3173031)									
ES2025253-012	STP7-7	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3165249)									
ES2025253-001	STP8-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025253-011	STP7-6	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3165636)									
ES2025253-001	STP8-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2025253-011	STP7-6	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3173027)									
ES2025253-012	STP7-7	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3173031)									
ES2025253-012	STP7-7	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3165636)									
ES2025253-001	STP8-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 3165636) - continued									
ES2025253-001	STP8-1	EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2025253-011	STP7-6	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3173031)									
ES2025253-012	STP7-7	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020C: Leachable Metals by ICPMS (QC Lot: 3170740)									
ES2025253-012	STP7-7	EG020A-C: Arsenic	7440-38-2	0.005	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-C: Chromium	7440-47-3	0.01	mg/L	<0.01	<0.01	0.00	No Limit
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3166617)									
ES2025937-007	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	0.008	0.008	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.038	0.031	22.6	No Limit
ES2025921-001	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	0.023	0.024	4.57	0% - 20%
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	0.001	0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	0.002	0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.012	0.012	0.00	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG035F: Dissolved Mercury by FIMS (QC Lot: 3166618)									
ES2025692-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
ES2025937-004	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3166819)									
ES2025316-005	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3166819)									
ES2025316-005	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3166819)									
ES2025316-005	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3166210)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	110	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	79.7	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	118	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	104	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	107	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	108	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	101	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3173593)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	115	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	105	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	127	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	107	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	113	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	112	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	104	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3166209)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	74.6	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3173591)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	84.9	70.0	105
EN33: TCLP Leach (QCLot: 3169661)								
EN33a: Initial pH	----	0.1	pH Unit	1.0	----	----	----	----
EN33a: After HCl pH	----	0.1	pH Unit	1.0	----	----	----	----
EN33a: Final pH	----	0.1	pH Unit	1.0	----	----	----	----
EP068A: Organochlorine Pesticides (OC) (QCLot: 3165251)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	77.8	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.0	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.4	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	77.3	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	66.0	116

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3165251) - continued								
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.5	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	102	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	81.8	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.5	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	88.3	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	89.6	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	79.4	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3173029)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.3	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	96.3	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	106	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.8	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	80.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.5	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.4	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	82.3	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	87.3	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3165251)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	99.3	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.9	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	99.7	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.6	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	70.0	120

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3165251) - continued								
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	81.0	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.6	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	81.9	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	79.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.6	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	75.4	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	82.6	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	102	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	69.0	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3173029)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	91.4	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	104	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.4	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	86.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	91.4	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	87.5	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.5	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3165250)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	99.0	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	101	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	103	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	102	72.0	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3165250) - continued								
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	106	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	106	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	107	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	106	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	93.9	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	97.9	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	90.2	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	104	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	100	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	96.5	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	94.3	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	95.0	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3173028)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	90.3	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	92.8	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	94.8	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	92.4	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	92.5	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	93.0	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	99.9	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	96.9	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	90.3	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	96.9	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	99.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	97.5	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	98.9	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	90.6	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	89.1	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	89.8	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3165249)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	91.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	89.6	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	87.9	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3165636)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	69.2	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3173027)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3173027) - continued								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	88.0	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	95.8	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	91.3	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3173031)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	85.7	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3165249)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	89.0	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	89.1	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	87.6	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3165636)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	74.2	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3173027)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	88.1	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	100	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	88.9	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3173031)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	87.4	68.4	128
EP080: BTEXN (QCLot: 3165636)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	86.3	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	103	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	91.5	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	107	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	93.9	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	96.9	63.0	119
EP080: BTEXN (QCLot: 3173031)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	94.9	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	90.6	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	89.0	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	90.2	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	90.2	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	85.3	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020C: Leachable Metals by ICPMS (QCLot: 3170740)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EG020C: Leachable Metals by ICPMS (QCLot: 3170740) - continued								
EG020A-C: Arsenic	7440-38-2	0.005	mg/L	<0.005	0.1 mg/L	95.1	82.0	116
EG020A-C: Chromium	7440-47-3	0.01	mg/L	<0.01	0.1 mg/L	94.0	84.0	116
EG020F: Dissolved Metals by ICP-MS (QCLot: 3166617)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	89.9	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	90.5	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	88.4	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	87.6	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	86.3	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	86.5	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	85.9	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3166618)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	97.9	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3165275)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	80.7	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	102	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	102	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	100	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	96.4	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	95.1	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	92.1	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	90.4	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	83.1	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	86.7	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	84.6	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	86.0	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	87.7	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	102	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	101	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	97.0	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	89.1	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	98.6	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	106	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	93.7	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	93.8	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3165275)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	87.2	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	100	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	22.9	19.7	48.0

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3165275) - continued								
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	94.7	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	100	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	86.1	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	90.8	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	91.2	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	82.7	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	89.6	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	92.7	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	88.3	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	96.3	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	87.0	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	100	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	93.3	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	104	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	105	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	90.4	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3165276)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	68.7	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	100	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	79.2	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3166819)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	91.4	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3165276)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	89.7	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	78.6	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	81.0	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3166819)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	95.0	75.0	127
EP080: BTEXN (QCLot: 3166819)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	92.6	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	94.9	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	99.7	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	97.2	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	100	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	107	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3166210)							
ES2025253-001	STP8-1	EG005T: Arsenic	7440-38-2	50 mg/kg	87.6	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.9	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	83.3	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	96.9	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	94.8	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	92.6	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	93.5	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3173593)							
ES2026288-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	102	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.8	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	103	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	99.7	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	101	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	100	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	100	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3166209)							
ES2025253-001	STP8-1	EG035T: Mercury	7439-97-6	5 mg/kg	82.4	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3173591)							
ES2026288-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	72.4	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3165251)							
ES2025253-001	STP8-1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	96.8	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	88.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	105	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	92.4	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	99.2	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	78.0	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3173029)							
ES2025253-012	STP7-7	EP068: gamma-BHC	58-89-9	0.5 mg/kg	91.6	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	80.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	100	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	89.0	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	89.2	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	84.0	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3165251)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3165251) - continued							
ES2025253-001	STP8-1	EP068: Diazinon	333-41-5	0.5 mg/kg	84.4	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	77.8	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	80.1	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	80.4	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	73.6	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3173029)							
ES2025253-012	STP7-7	EP068: Diazinon	333-41-5	0.5 mg/kg	90.8	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	75.6	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	84.9	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	86.8	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	76.3	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3165250)							
ES2025253-001	STP8-1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	99.0	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	101	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3173028)							
ES2025253-012	STP7-7	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	97.2	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	102	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3165249)							
ES2025253-001	STP8-1	EP071: C10 - C14 Fraction	----	523 mg/kg	107	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	113	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	125	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3165636)							
ES2025253-001	STP8-1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	80.0	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3173027)							
ES2025253-012	STP7-7	EP071: C10 - C14 Fraction	----	523 mg/kg	81.3	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	92.7	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	110	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3173031)							
ES2025253-012	STP7-7	EP080: C6 - C9 Fraction	----	32.5 mg/kg	125	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3165249)							
ES2025253-001	STP8-1	EP071: >C10 - C16 Fraction	----	860 mg/kg	105	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	124	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	113	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3165636)							
ES2025253-001	STP8-1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	82.9	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3173027)							

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Recovery Limits (%) Low	Matrix Spike (MS) Report: Recovery Limits (%) High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3173027) - continued							
ES2025253-012	STP7-7	EP071: >C10 - C16 Fraction	----	860 mg/kg	91.3	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	99.8	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	114	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3173031)							
ES2025253-012	STP7-7	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	120	70.0	130
EP080: BTEXN (QCLot: 3165636)							
ES2025253-001	STP8-1	EP080: Benzene	71-43-2	2.5 mg/kg	84.2	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	105	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	92.6	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	106	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	93.3	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	98.2	70.0	130
EP080: BTEXN (QCLot: 3173031)							
ES2025253-012	STP7-7	EP080: Benzene	71-43-2	2.5 mg/kg	88.5	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	84.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	84.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	84.4	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	84.4	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	77.7	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Recovery Limits (%) Low	Matrix Spike (MS) Report: Recovery Limits (%) High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3166617)							
ES2025692-001	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	87.1	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	91.6	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	82.3	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	86.5	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	85.1	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	87.2	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	88.5	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 3166618)							
ES2025253-013	RINSATE	EG035F: Mercury	7439-97-6	0.01 mg/L	90.5	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3166819)							
ES2025316-005	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	115	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3166819)							
ES2025316-005	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	117	70.0	130
EP080: BTEXN (QCLot: 3166819)							
ES2025316-005	Anonymous	EP080: Benzene	71-43-2	25 µg/L	102	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	105	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	106	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	102	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	106	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	104	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2025253**	Page	: 1 of 11
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 28-Jul-2020
Site	: ----	Issue Date	: 04-Aug-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty	No. of samples received	: 15
Order number	: ----	No. of samples analysed	: 15

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	ES2025253--001	STP8-1	**Chromium**	7440-47-3	22.1 %	0% - 20%	**RPD exceeds LOR based limits**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Pesticides by GCMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Leachable Metals by ICPMS - Suite A	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / ***Container*** / Client Sample ID(s)	***Sample Date***	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	***Date analysed***	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**----**	----	----	**28-Jul-2020**	10-Aug-2020	✓
Soil Glass Jar - Unpreserved (EA055)							
STP7-7	**27-Jul-2020**	**----**	----	----	**31-Jul-2020**	10-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag (EA200)							
STP7-7	**27-Jul-2020**	**----**	----	----	**29-Jul-2020**	23-Jan-2021	✓
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**----**	----	----	**29-Jul-2020**	23-Jan-2021	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag (EA200N)							
STP7-7	**27-Jul-2020**	**----**	----	----	**29-Jul-2020**	23-Jan-2021	✓
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200N)							
STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**----**	----	----	**29-Jul-2020**	23-Jan-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**28-Jul-2020**	23-Jan-2021	✓	**29-Jul-2020**	23-Jan-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
STP7-7	**27-Jul-2020**	**31-Jul-2020**	23-Jan-2021	✓	**03-Aug-2020**	23-Jan-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**28-Jul-2020**	24-Aug-2020	✓	**29-Jul-2020**	24-Aug-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
STP7-7	**27-Jul-2020**	**31-Jul-2020**	24-Aug-2020	✓	**03-Aug-2020**	24-Aug-2020	✓
EN33: TCLP Leach							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a)							
STP7-7	**27-Jul-2020**	**30-Jul-2020**	23-Jan-2021	✓	**----**	----	----

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**28-Jul-2020**	06-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
STP7-7	**27-Jul-2020**	**31-Jul-2020**	10-Aug-2020	✓	**31-Jul-2020**	09-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**28-Jul-2020**	06-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
STP7-7	**27-Jul-2020**	**31-Jul-2020**	10-Aug-2020	✓	**31-Jul-2020**	09-Sep-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**29-Jul-2020**	06-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP7-7	**27-Jul-2020**	**31-Jul-2020**	10-Aug-2020	✓	**02-Aug-2020**	09-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**28-Jul-2020**	10-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP7-7	**27-Jul-2020**	**31-Jul-2020**	10-Aug-2020	✓	**31-Jul-2020**	10-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**28-Jul-2020**	10-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP7-7	**27-Jul-2020**	**31-Jul-2020**	10-Aug-2020	✓	**31-Jul-2020**	10-Aug-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP8-1, STP8-2, STP8-3, STP8-4, QC6, STP7-1, STP7-2, STP7-3, STP7-4, STP7-5, STP7-6	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**28-Jul-2020**	10-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP7-7	**27-Jul-2020**	**31-Jul-2020**	10-Aug-2020	✓	**31-Jul-2020**	10-Aug-2020	✓

Matrix: **SOLID**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP7-1, STP7-6	**27-Jul-2020**	**----**	----	----	**29-Jul-2020**	23-Jan-2021	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020C: Leachable Metals by ICPMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-C)							
STP7-7	**30-Jul-2020**	**30-Jul-2020**	26-Jan-2021	✓	**30-Jul-2020**	26-Jan-2021	✓
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-F)							
RINSATE	**27-Jul-2020**	**----**	----	----	**29-Jul-2020**	23-Jan-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035F)							
RINSATE	**27-Jul-2020**	**----**	----	----	**29-Jul-2020**	10-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**27-Jul-2020**	**28-Jul-2020**	03-Aug-2020	✓	**29-Jul-2020**	06-Sep-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**27-Jul-2020**	**28-Jul-2020**	03-Aug-2020	✓	**29-Jul-2020**	06-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**27-Jul-2020**	**28-Jul-2020**	03-Aug-2020	✓	**29-Jul-2020**	06-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**28-Jul-2020**	10-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**27-Jul-2020**	**28-Jul-2020**	03-Aug-2020	✓	**29-Jul-2020**	06-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**28-Jul-2020**	10-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**27-Jul-2020**	**28-Jul-2020**	10-Aug-2020	✓	**28-Jul-2020**	10-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	3	30	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	12	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	12	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	29	**13.79**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	30	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	14	**21.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	14	**21.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	2	12	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	12	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	29	**6.90**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	14	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	14	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	2	12	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	12	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TCLP for Non & Semivolatile Analytes	EN33a	1	1	**100.00**	**9.09**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	29	**6.90**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	14	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	14	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	12	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	12	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	29	**6.90**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	14	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	14	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
Leachable Metals by ICPMS - Suite A	EG020A-C	1	1	**100.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	1	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPMS - Suite A	EG020A-C	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPMS - Suite A	EG020A-C	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPMS - Suite A	EG020A-C	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Leachable Metals by ICPMS - Suite A	EG020A-C	SOIL	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020: The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Asbestos Identification in Bulk Solids	EA200	SOLID	In house: Referenced to AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Digestion for Total Recoverable Metals in TCLP Leachate	EN25C	SOIL	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
TCLP for Non & Semivolatile Analytes	EN33a	SOIL	In house QWI-EN/33 referenced to USEPA SW846-1311: The TCLP procedure is designed to determine the mobility of both organic and inorganic analytes present in wastes. The standard TCLP leach is for non-volatile and Semivolatile test parameters.
ASLP for Non & Semivolatile Analytes	EN60a	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.

Preparation Methods	Method	Matrix	Method Descriptions
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

TAT

03.08.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT: ☐ Rush ☐ Same Day ☐ Next Day ☐ 2 Day ☐ 3 Day ☐ Standard ☐ Non Urgent

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number: 1 of 1
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Sarah Doherty/Gemma Sheridan/James Murdoch	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No:	Required TAT: 1 day	
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR ALS work order ES2025256

No EA200F for QC7 or QC8 (S-26 & S-12 analysis only)

No.	Sample ID	Date & Time	Matrix (Soil = S, Water = W)	Containers and Preservatives	REQUESTED ANALYSIS: STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Characterisation (P-22)	TCLP Leachate (EN33)	ASLP Leachate (EN60)	Leachable As, Cr (EG020C)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD	Additional Information (Environmental Division comments/notes as specific requirements)
1	STP-ORG2-1	27/07/2020	S	1 x jar, 1 x 500ml bag	x									
2	CHAR-STP	27/07/2020	S	1 x jar, 1 x 500ml bag			x							
3	CHAR-VAL	27/07/2020	S	1 x jar, 1 x 500ml bag			x							
4	STP-ORG2-2	28/07/2020	S	1 x jar, 1 x 500ml bag	x									
5	31 STP-ORG2-3	28/07/2020	S	1 x jar, 1 x 500ml bag	x									
6	STP-ORG2-4	28/07/2020	S	1 x jar, 1 x 500ml bag	x									
7	STP-ORG2-5	28/07/2020	S	1 x jar, 1 x 500ml bag	x									
8	STP-ORG2-6	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
9	STP-ORG2-7	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
10	STP-ORG2-8	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
11	STP-ORG2-9	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
12	STP-ORG2-10	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
13	STP8-1	27/07/2020	S	1 x jar, 1 x 100ml bag		x								
14	STP8-2	27/07/2020	S	1 x jar, 1 x 100ml bag		x								
15	STP8-3	27/07/2020	S	1 x jar, 1 x 100ml bag		x								
16	STP8-4	27/07/2020	S	1 x jar, 1 x 100ml bag		x								
17	STP9-1	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
18	STP9-2	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
19	STP9-3	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
20	STP9-4	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
21	STP9-5	28/07/2020	S	1 x jar, 1 x 100ml bag		x								
22	STP10-1	28/07/2020	S	1 x jar, 1 x 500ml bag	x									
23	STP10-2	28/07/2020	S	1 x jar, 1 x 500ml bag	x									
24	33 STP10-3	28/07/2020	S	1 x jar, 2 x 500ml bag	x									
25	32 STP10-4	28/07/2020	S	1 x jar, 2 x 500ml bag	x									
26	STP10-5	28/07/2020	S	1 x jar, 2 x 500ml bag	x									
27	34 STP10-6	28/07/2020	S	1 x jar, 2 x 500ml bag	x									
28	QC7	27/07/2020	S	1 x jar	x									No EA200F analysis
29	QC8	28/07/2020	S	1 x jar	x									No EA200F analysis
30	RINSATE	28/07/2020	W	4 x bottles								x		

Environmental Division
Sydney
Work Order Reference
ES2025256

Telephone : +61-2-8784 9555

Subcon / Forward Lab / Split WO
Lab / Analyses:
Organised By: Date: Newcastle
Relinquished By: Date: As above
Courier:
WO No: ES2025256
Attach By PO / Internal Sheet:

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign: Kim -ALS	Date / Time: 29.07.20 8.30	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2025256**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 4
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		

Dates

Date Samples Received	: 29-Jul-2020 08:30	Issue Date	: 29-Jul-2020
Client Requested Due Date	: 30-Jul-2020	Scheduled Reporting Date	: **03-Aug-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 2	Temperature	: 8.4' C - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 32 / 32

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Unable to conduct S-26, S-12 for samples 13, 14, 15, 16, as soil jars not suplied.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method Client sample ID	Sample Container Received	Preferred Sample Container for Analysis
Dissolved Mercury by FIMS : EG035F		
RINSATE	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
Dissolved Metals by ICP-MS - Suite A : EG020A-F		
RINSATE	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200G Asbestos Identification in Soils -	SOIL - P-22 (WA/SYD) NEPM Screen for Soil Classification WA	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2025256-001	27-Jul-2020 00:00	STP-ORG2-1	✓	✓			✓	✓
ES2025256-002	27-Jul-2020 00:00	CHAR-STP	✓			✓		
ES2025256-003	27-Jul-2020 00:00	CHAR-VAL	✓			✓		
ES2025256-004	28-Jul-2020 00:00	STP-ORG2-2	✓	✓			✓	✓
ES2025256-005	28-Jul-2020 00:00	STP-ORG2-3	✓	✓			✓	✓
ES2025256-006	28-Jul-2020 00:00	STP-ORG2-4	✓	✓			✓	✓
ES2025256-007	28-Jul-2020 00:00	STP-ORG2-5	✓	✓			✓	✓
ES2025256-008	28-Jul-2020 00:00	STP-ORG2-6	✓		✓		✓	✓
ES2025256-009	28-Jul-2020 00:00	STP-ORG2-7	✓		✓		✓	✓
ES2025256-010	28-Jul-2020 00:00	STP-ORG2-8	✓		✓		✓	✓
ES2025256-011	28-Jul-2020 00:00	STP-ORG2-9	✓		✓		✓	✓
ES2025256-012	28-Jul-2020 00:00	STP-ORG2-10	✓		✓		✓	✓
ES2025256-013	27-Jul-2020 00:00	STP8-1			✓			
ES2025256-014	27-Jul-2020 00:00	STP8-2			✓			
ES2025256-015	27-Jul-2020 00:00	STP8-3			✓			
ES2025256-016	27-Jul-2020 00:00	STP8-4			✓			
ES2025256-017	28-Jul-2020 00:00	STP9-1	✓		✓		✓	✓
ES2025256-018	28-Jul-2020 00:00	STP9-2	✓		✓		✓	✓
ES2025256-019	28-Jul-2020 00:00	STP9-3	✓		✓		✓	✓
ES2025256-020	28-Jul-2020 00:00	STP9-4	✓		✓		✓	✓
ES2025256-021	28-Jul-2020 00:00	STP9-5	✓		✓		✓	✓
ES2025256-022	28-Jul-2020 00:00	STP10-1	✓	✓			✓	✓
ES2025256-023	28-Jul-2020 00:00	STP10-2	✓	✓			✓	✓
ES2025256-024	28-Jul-2020 00:00	STP10-3	✓	✓			✓	✓
ES2025256-025	28-Jul-2020 00:00	STP10-4	✓	✓			✓	✓
ES2025256-026	28-Jul-2020 00:00	STP10-5	✓	✓			✓	✓
ES2025256-027	28-Jul-2020 00:00	STP10-6	✓	✓			✓	✓
ES2025256-028	27-Jul-2020 00:00	QC7	✓				✓	✓
ES2025256-029	28-Jul-2020 00:00	QC8	✓				✓	✓

Matrix: **SOLID**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOLID - EA200B Asbestos Identification in Bulk Solids (Excluding
ES2025256-031	28-Jul-2020 00:00	STP-ORG2-3 SOLID	✓
ES2025256-032	28-Jul-2020 00:00	STP10-4 SOLID	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-05 TRH/BTEXN/8 Metals
ES2025256-030	28-Jul-2020 00:00	RINSATE	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-12 OC/OP Pesticides
ES2025256-030	28-Jul-2020 00:00	RINSATE	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Attachment - Report (SUBCO)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Attachment - Report (SUBCO)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Attachment - Report (SUBCO)	Email	sdoherty@slrconsulting.com
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- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2025256**	Page	: 1 of 34
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 29-Jul-2020 08:30
Order number	: ----	Date Analysis Commenced	: 29-Jul-2020
C-O-C number	: ----	Issue Date	: 03-Aug-2020 15:49
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 34		
No. of samples analysed	: 34		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Aleksandar Vujkovic	Laboratory Technician	Newcastle - Inorganics, Mayfield West, NSW
Alexander Ristoski	Laboratory Technican	Newcastle - Asbestos, Mayfield West, NSW
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Dian Dao	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- ALS is not NATA accredited for the analysis of Exchangeable Cations on Alkaline Soils when performed under ALS Method ED006.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005: Poor spike recovery was obtained for Chromium on sample ES2025256-25. Results have been confirmed by re-extraction and re-analysis.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- ED007 and ED008: When Exchangeable Al is reported from these methods, it should be noted that Rayment & Lyons (2011) suggests Exchange Acidity by 1M KCl - Method 15G1 (ED005) is a more suitable method for the determination of exchange acidity (H+ + Al3+).

- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP-ORG2-1	CHAR-STP	CHAR-VAL	STP-ORG2-2	STP-ORG2-3
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025256-001	ES2025256-002	ES2025256-003	ES2025256-004	ES2025256-005
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	----	7.7	6.2	----	----
EA002: pH 1:5 (Soils)								
pH Value	----	0.1	pH Unit	----	8.2	6.8	----	----
EA010: Conductivity (1:5)								
Electrical Conductivity @ 25°C	----	1	µS/cm	----	177	49	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	----	10.0	3.6	----	----
Moisture Content	----	1.0	%	12.2	----	----	12.3	8.9
EA150: Soil Classification based on Particle Size								
Clay (<2 µm)	----	1	%	----	10	9	----	----
EA152: Soil Particle Density								
Soil Particle Density (Clay/Silt/Sand)	----	0.01	g/cm3	----	2.64	2.66	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	No	No
Asbestos Type	1332-21-4	-	--	-	----	----	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	No	No
Sample weight (dry)	----	0.01	g	564	----	----	543	600
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	No	No
Organic Fibre	----	0.1	g/kg	No	----	----	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	----	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	----	----	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	----	----	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.564	----	----	0.543	0.600
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	----	----	<0.0004	<0.0004
ED006: Exchangeable Cations on Alkaline Soils								
Exchangeable Calcium	----	0.2	meq/100g	----	4.2	----	----	----
Exchangeable Magnesium	----	0.2	meq/100g	----	<0.2	----	----	----
Exchangeable Potassium	----	0.2	meq/100g	----	<0.2	----	----	----
Exchangeable Sodium	----	0.2	meq/100g	----	<0.2	----	----	----
Cation Exchange Capacity	----	0.2	meq/100g	----	4.4	----	----	----
ED007: Exchangeable Cations								
Exchangeable Calcium	----	0.1	meq/100g	----	----	2.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP-ORG2-1	CHAR-STP	CHAR-VAL	STP-ORG2-2	STP-ORG2-3
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-001	ES2025256-002	ES2025256-003	ES2025256-004	ES2025256-005
					Result	Result	Result	Result	Result
ED007: Exchangeable Cations - Continued									
Exchangeable Magnesium	----	0.1	meq/100g		----	----	0.8	----	----
Exchangeable Potassium	----	0.1	meq/100g		----	----	<0.1	----	----
Exchangeable Sodium	----	0.1	meq/100g		----	----	<0.1	----	----
Cation Exchange Capacity	----	0.1	meq/100g		----	----	3.4	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Iron	7439-89-6	0.005	%		----	4.42	6.41	----	----
Arsenic	7440-38-2	5	mg/kg		11	----	----	9	11
Cadmium	7440-43-9	1	mg/kg		<1	----	----	<1	<1
Chromium	7440-47-3	2	mg/kg		62	----	----	41	45
Copper	7440-50-8	5	mg/kg		13	----	----	13	15
Lead	7439-92-1	5	mg/kg		12	----	----	11	13
Nickel	7440-02-0	2	mg/kg		4	----	----	4	4
Zinc	7440-66-6	5	mg/kg		54	----	----	44	38
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	----	----	<0.1	<0.1
EP004: Organic Matter									
Organic Matter	----	0.5	%		----	1.5	<0.5	----	----
Total Organic Carbon	----	0.5	%		----	0.9	<0.5	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	----	----	0.06	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	----	----	0.06	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	----	----	0.24	0.09
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	----	----	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP-ORG2-1	CHAR-STP	CHAR-VAL	STP-ORG2-2	STP-ORG2-3
				Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-001	ES2025256-002	ES2025256-003	ES2025256-004	ES2025256-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	----	----	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	----	----	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	----	----	**0.24**	**0.09**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	----	----	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	----	----	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	----	----	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP-ORG2-1	CHAR-STP	CHAR-VAL	STP-ORG2-2	STP-ORG2-3
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025256-001	ES2025256-002	ES2025256-003	ES2025256-004	ES2025256-005
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	----	----	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	----	----	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	----	----	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	<50	<50
EP080: BTEXN								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP-ORG2-1	CHAR-STP	CHAR-VAL	STP-ORG2-2	STP-ORG2-3
			Client sampling date / time	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025256-001	ES2025256-002	ES2025256-003	ES2025256-004	ES2025256-005
				Result	Result	Result	Result	Result
EP080: BTEXN - Continued								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	----	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	----	----	<1	<1
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**120**	----	----	**99.8**	**90.9**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**79.1**	----	----	**92.0**	**79.3**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**74.7**	----	----	**78.7**	**63.8**
2-Chlorophenol-D4	93951-73-6	0.5	%	**81.8**	----	----	**86.3**	**69.9**
2.4.6-Tribromophenol	118-79-6	0.5	%	**69.1**	----	----	**76.4**	**58.7**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**99.0**	----	----	**105**	**85.0**
Anthracene-d10	1719-06-8	0.5	%	**104**	----	----	**110**	**90.9**
4-Terphenyl-d14	1718-51-0	0.5	%	**92.4**	----	----	**98.1**	**80.1**
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**95.1**	----	----	**104**	**104**
Toluene-D8	2037-26-5	0.2	%	**91.6**	----	----	**103**	**103**
4-Bromofluorobenzene	460-00-4	0.2	%	**89.2**	----	----	**98.1**	**98.4**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP-ORG2-4	STP-ORG2-5	STP-ORG2-6	STP-ORG2-7	STP-ORG2-8
			Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025256-006	ES2025256-007	ES2025256-008	ES2025256-009	ES2025256-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.6	9.6	10.1	7.0	15.3
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	494	607	59.9	70.9	62.0
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	----	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	----	----	----
ø Weight Used for % Calculation	----	0.0001	kg	0.494	0.607	----	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	23	25	10	13	9
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	67	63	65	46	33
Copper	7440-50-8	5	mg/kg	24	22	13	12	12
Lead	7439-92-1	5	mg/kg	17	17	11	11	11
Nickel	7440-02-0	2	mg/kg	5	5	4	4	4
Zinc	7440-66-6	5	mg/kg	93	58	53	43	54
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP-ORG2-4	STP-ORG2-5	STP-ORG2-6	STP-ORG2-7	STP-ORG2-8
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-006	ES2025256-007	ES2025256-008	ES2025256-009	ES2025256-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.15**	**0.06**	**0.14**	**0.22**	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.15**	**0.06**	**0.14**	**0.22**	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP-ORG2-4	STP-ORG2-5	STP-ORG2-6	STP-ORG2-7	STP-ORG2-8
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-006	ES2025256-007	ES2025256-008	ES2025256-009	ES2025256-010
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP-ORG2-4	STP-ORG2-5	STP-ORG2-6	STP-ORG2-7	STP-ORG2-8
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-006	ES2025256-007	ES2025256-008	ES2025256-009	ES2025256-010
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**93.2**	**94.4**	**109**	**122**	**95.9**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**94.1**	**80.8**	**98.6**	**106**	**72.2**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**68.6**	**74.0**	**71.0**	**69.7**	**74.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**75.7**	**87.0**	**81.5**	**80.8**	**82.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**65.7**	**71.4**	**70.4**	**71.7**	**72.0**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**92.7**	**103**	**101**	**100**	**99.8**
Anthracene-d10	1719-06-8	0.5	%		**96.4**	**104**	**106**	**104**	**106**
4-Terphenyl-d14	1718-51-0	0.5	%		**86.7**	**96.3**	**94.2**	**92.4**	**92.5**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**103**	**105**	**103**	**102**	**96.1**
Toluene-D8	2037-26-5	0.2	%		**103**	**100**	**96.6**	**98.6**	**92.2**
4-Bromofluorobenzene	460-00-4	0.2	%		**97.8**	**95.8**	**94.1**	**94.1**	**88.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP-ORG2-9	STP-ORG2-10	STP8-1	STP8-2	STP8-3
			Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025256-011	ES2025256-012	ES2025256-013	ES2025256-014	ES2025256-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.7	10.9	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	60.2	65.2	73.2	73.4	67.2
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	14	10	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	58	71	----	----	----
Copper	7440-50-8	5	mg/kg	19	16	----	----	----
Lead	7439-92-1	5	mg/kg	16	17	----	----	----
Nickel	7440-02-0	2	mg/kg	4	5	----	----	----
Zinc	7440-66-6	5	mg/kg	56	92	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	0.06	<0.05	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP-ORG2-9	STP-ORG2-10	STP8-1	STP8-2	STP8-3
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-011	ES2025256-012	ES2025256-013	ES2025256-014	ES2025256-015
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	----	----	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		**0.06**	<0.05	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	----	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	----	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	----	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	----	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	----	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	----	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP-ORG2-9	STP-ORG2-10	STP8-1	STP8-2	STP8-3
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-011	ES2025256-012	ES2025256-013	ES2025256-014	ES2025256-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP-ORG2-9	STP-ORG2-10	STP8-1	STP8-2	STP8-3
			Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00	27-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025256-011	ES2025256-012	ES2025256-013	ES2025256-014	ES2025256-015
				Result	Result	Result	Result	Result
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**104**	**118**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**88.8**	**80.2**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**77.1**	**73.8**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**84.7**	**84.8**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**79.1**	**72.2**	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**104**	**104**	----	----	----
Anthracene-d10	1719-06-8	0.5	%	**104**	**107**	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**96.5**	**96.9**	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**104**	**100**	----	----	----
Toluene-D8	2037-26-5	0.2	%	**101**	**99.1**	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	**95.4**	**93.6**	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP8-4	STP9-1	STP9-2	STP9-3	STP9-4
			Client sampling date / time	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025256-016	ES2025256-017	ES2025256-018	ES2025256-019	ES2025256-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	----	10.1	11.9	11.3	13.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	61.8	50.9	71.5	57.9	75.0
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	----	8	9	6	8
Cadmium	7440-43-9	1	mg/kg	----	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	----	45	29	73	28
Copper	7440-50-8	5	mg/kg	----	10	8	8	10
Lead	7439-92-1	5	mg/kg	----	10	9	9	9
Nickel	7440-02-0	2	mg/kg	----	3	4	6	3
Zinc	7440-66-6	5	mg/kg	----	31	33	11	49
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	----	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	----	0.41	0.97	<0.05	0.28
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	----	2.57	2.01	0.18	1.93
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP8-4	STP9-1	STP9-2	STP9-3	STP9-4
				Client sampling date / time	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-016	ES2025256-017	ES2025256-018	ES2025256-019	ES2025256-020
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		----	**2.98**	**2.98**	**0.18**	**2.21**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP8-4	STP9-1	STP9-2	STP9-3	STP9-4
				Client sampling date / time	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-016	ES2025256-017	ES2025256-018	ES2025256-019	ES2025256-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		----	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		----	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		----	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		----	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		----	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP8-4	STP9-1	STP9-2	STP9-3	STP9-4
				Client sampling date / time	27-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-016	ES2025256-017	ES2025256-018	ES2025256-019	ES2025256-020
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		----	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		----	**114**	**89.5**	**92.7**	**71.2**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		----	**95.4**	**77.7**	**108**	**97.7**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	**73.1**	**69.8**	**79.4**	**80.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		----	**83.5**	**82.8**	**82.1**	**82.7**
2.4.6-Tribromophenol	118-79-6	0.5	%		----	**68.2**	**67.9**	**71.3**	**71.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	**101**	**102**	**89.8**	**92.1**
Anthracene-d10	1719-06-8	0.5	%		----	**105**	**104**	**91.9**	**95.8**
4-Terphenyl-d14	1718-51-0	0.5	%		----	**94.2**	**94.9**	**83.2**	**86.8**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	**103**	**103**	**83.1**	**84.7**
Toluene-D8	2037-26-5	0.2	%		----	**102**	**98.0**	**103**	**101**
4-Bromofluorobenzene	460-00-4	0.2	%		----	**96.3**	**92.1**	**102**	**104**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP9-5	STP10-1	STP10-2	STP10-3	STP10-4
			Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025256-021	ES2025256-022	ES2025256-023	ES2025256-024	ES2025256-025
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.5	5.6	7.9	6.8	6.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	65.9	636	674	690	742
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	----	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	----	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	----	0.636	0.674	0.690	0.742
ø Fibrous Asbestos >7mm	----	0.0004	g	----	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	8	9	7	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	81	116	101	103	112
Copper	7440-50-8	5	mg/kg	6	6	11	7	<5
Lead	7439-92-1	5	mg/kg	10	10	9	78	12
Nickel	7440-02-0	2	mg/kg	2	3	5	4	4
Zinc	7440-66-6	5	mg/kg	25	24	18	14	9
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	0.30	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP9-5	STP10-1	STP10-2	STP10-3	STP10-4
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-021	ES2025256-022	ES2025256-023	ES2025256-024	ES2025256-025
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**1.45**	<0.05	**0.09**	**0.11**	**0.11**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**1.75**	<0.05	**0.09**	**0.11**	**0.11**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP9-5	STP10-1	STP10-2	STP10-3	STP10-4
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-021	ES2025256-022	ES2025256-023	ES2025256-024	ES2025256-025
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP9-5	STP10-1	STP10-2	STP10-3	STP10-4
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025256-021	ES2025256-022	ES2025256-023	ES2025256-024	ES2025256-025
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**81.7**	**108**	**94.0**	**115**	**104**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**60.6**	**93.1**	**92.4**	**103**	**94.3**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**77.2**	**82.9**	**80.7**	**80.4**	**80.6**
2-Chlorophenol-D4	93951-73-6	0.5	%		**81.2**	**85.9**	**87.0**	**86.4**	**86.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**70.4**	**76.2**	**75.4**	**78.1**	**74.9**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**90.4**	**96.2**	**97.2**	**98.3**	**97.0**
Anthracene-d10	1719-06-8	0.5	%		**88.5**	**101**	**101**	**102**	**100**
4-Terphenyl-d14	1718-51-0	0.5	%		**85.6**	**90.2**	**90.6**	**91.2**	**90.3**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**91.5**	**91.4**	**88.2**	**88.9**	**87.0**
Toluene-D8	2037-26-5	0.2	%		**111**	**112**	**107**	**108**	**102**
4-Bromofluorobenzene	460-00-4	0.2	%		**113**	**110**	**110**	**110**	**105**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP10-5	STP10-6	QC7	QC8	----
			Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	----
Compound	CAS Number	LOR	Unit	ES2025256-026	ES2025256-027	ES2025256-028	ES2025256-029	--------
				Result	Result	Result	Result	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.4	6.6	13.2	6.0	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	----	----	----
Asbestos Type	1332-21-4	-	--	-	-	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	----	----	----
Sample weight (dry)	----	0.01	g	628	619	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	----	----	----
Organic Fibre	----	0.1	g/kg	No	No	----	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	----	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	----	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	----	----	----
ø Weight Used for % Calculation	----	0.0001	kg	0.628	0.619	----	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	8	9	6	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg	117	85	55	138	----
Copper	7440-50-8	5	mg/kg	6	8	13	6	----
Lead	7439-92-1	5	mg/kg	10	10	11	8	----
Nickel	7440-02-0	2	mg/kg	4	4	4	3	----
Zinc	7440-66-6	5	mg/kg	11	18	56	8	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP10-5	STP10-6	QC7	QC8	----
			Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	----
Compound	CAS Number	LOR	Unit	ES2025256-026	ES2025256-027	ES2025256-028	ES2025256-029	--------
				Result	Result	Result	Result	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	**0.06**	<0.05	<0.05	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.06**	<0.05	<0.05	<0.05	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP10-5	STP10-6	QC7	QC8	----
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	----
Compound	CAS Number	LOR	Unit		ES2025256-026	ES2025256-027	ES2025256-028	ES2025256-029	--------
					Result	Result	Result	Result	----
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP10-5	STP10-6	QC7	QC8	----
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	27-Jul-2020 00:00	28-Jul-2020 00:00	----
Compound	CAS Number	LOR	Unit		ES2025256-026	ES2025256-027	ES2025256-028	ES2025256-029	--------
					Result	Result	Result	Result	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		92.0	71.3	80.4	71.9	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		102	80.7	59.4	73.9	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		78.6	69.5	77.2	70.0	----
2-Chlorophenol-D4	93951-73-6	0.5	%		84.0	79.6	84.0	81.2	----
2.4.6-Tribromophenol	118-79-6	0.5	%		72.2	59.8	75.4	61.6	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		92.7	98.4	98.1	99.1	----
Anthracene-d10	1719-06-8	0.5	%		97.2	104	104	104	----
4-Terphenyl-d14	1718-51-0	0.5	%		86.6	97.7	94.4	96.2	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		87.5	93.8	90.9	94.0	----
Toluene-D8	2037-26-5	0.2	%		108	118	108	114	----
4-Bromofluorobenzene	460-00-4	0.2	%		110	119	113	121	----

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)				Client sample ID	STP-ORG2-3 SOLID	STP10-4 SOLID	STP10-3 SOLID	STP10-6 SOLID	----
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	----
Compound	CAS Number	LOR	Unit		ES2025256-031	ES2025256-032	ES2025256-033	ES2025256-034	--------
					Result	Result	Result	Result	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**Yes**	**Yes**	**Yes**	**----**
Asbestos Type	1332-21-4	-	--		**-**	**Ch + Am**	**Ch + Am**	**Ch + Am**	**----**
Asbestos (Trace)	1332-21-4	5	Fibres		**N/A**	**N/A**	**N/A**	**N/A**	**----**
Sample weight (dry)	----	0.01	g		**3.63**	**0.99**	**30.8**	**5.30**	**----**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**----**
Organic Fibre	----	0.1	g/kg		**Yes**	**No**	**No**	**No**	**----**
APPROVED IDENTIFIER:	----	-	--		**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**----**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	28-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025256-030	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	28-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025256-030	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	28-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025256-030	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**91.4**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**88.8**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**93.0**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**96.8**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**96.7**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP-ORG2-1 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-2 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-3 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-4 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-5 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-6 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-7 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-8 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-9 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP-ORG2-10 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP8-1 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP8-2 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP8-3 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP8-4 - 27-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP9-1 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP9-2 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP9-3 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP9-4 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP9-5 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP10-1 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP10-2 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP10-3 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP10-4 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP10-5 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP10-6 - 28-Jul-2020 00:00	Mid brown soil.

Sub-Matrix: **SOLID**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	STP-ORG2-3SOLID - 28-Jul-2020 00:00	One piece of organic fibre board.
EA200: Description	STP10-4SOLID - 28-Jul-2020 00:00	One piece of asbestos cement sheeting approximately 20x15x3mm.
EA200: Description	STP10-3SOLID - 28-Jul-2020 00:00	One piece of fibrous asbestos fibre board approximately 75x70x5mm.
EA200: Description	STP10-6SOLID - 28-Jul-2020 00:00	Two pieces of asbestos cement sheeting approximately 20x20x5mm.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2025256**	Page	: 1 of 22
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 29-Jul-2020
Order number	: ----	Date Analysis Commenced	: 29-Jul-2020
C-O-C number	: ----	Issue Date	: 03-Aug-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 34		
No. of samples analysed	: 34		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Aleksandar Vujkovic	Laboratory Technician	Newcastle - Inorganics, Mayfield West, NSW
Alexander Ristoski	Laboratory Technican	Newcastle - Asbestos, Mayfield West, NSW
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Dian Dao	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3169919)									
ES2025256-001	STP-ORG2-1	EG005T: Chromium	7440-47-3	2	mg/kg	62	51	18.7	0% - 20%
ES2025256-011	STP-ORG2-9	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	58	67	14.1	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	14	22	47.6	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	19	23	19.3	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	16	18	14.5	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	56	58	3.45	0% - 50%
		EG005T: Iron	7439-89-6	50	mg/kg	20900	25400	19.6	0% - 20%
ES2025256-001	STP-ORG2-1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	11	16	35.6	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	13	16	19.7	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	54	62	12.0	0% - 50%
		EG005T: Iron	7439-89-6	50	mg/kg	34100	30000	12.7	0% - 20%
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3169920)									
ES2025256-025	STP10-4	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	112	118	5.33	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	5	33.5	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	10	25.5	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	8	45.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	14	21.9	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	9	34	116	No Limit
		EG005T: Iron	7439-89-6	50	mg/kg	62200	62700	0.770	0% - 20%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 3175369)									
ES2025185-015	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	4.8	4.8	0.00	0% - 20%
ES2025256-002	CHAR-STP	EA001: pH (CaCl2)	----	0.1	pH Unit	7.7	7.7	0.00	0% - 20%
EA002: pH 1:5 (Soils) (QC Lot: 3169922)									
ES2025256-002	CHAR-STP	EA002: pH Value	----	0.1	pH Unit	8.2	8.3	0.00	0% - 20%
EA010: Conductivity (1:5) (QC Lot: 3169923)									
ES2025256-002	CHAR-STP	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	177	193	8.54	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3169924)									
ES2025256-003	CHAR-VAL	EA055: Moisture Content	----	0.1	%	3.6	3.6	0.00	0% - 20%
ES2025256-018	STP9-2	EA055: Moisture Content	----	0.1	%	11.9	12.8	7.32	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3169925)									
ES2025256-027	STP10-6	EA055: Moisture Content	----	0.1	%	6.6	6.8	2.87	No Limit
ED006: Exchangeable Cations on Alkaline Soils (QC Lot: 3175739)									
ES2025256-002	CHAR-STP	ED006: Exchangeable Calcium	----	0.2	meq/100g	4.2	4.5	6.69	0% - 20%
		ED006: Exchangeable Magnesium	----	0.2	meq/100g	<0.2	<0.2	0.00	No Limit
		ED006: Exchangeable Potassium	----	0.2	meq/100g	<0.2	<0.2	0.00	No Limit
		ED006: Exchangeable Sodium	----	0.2	meq/100g	<0.2	<0.2	0.00	No Limit
		ED006: Cation Exchange Capacity	----	0.2	meq/100g	4.4	4.7	6.63	0% - 20%
ED007: Exchangeable Cations (QC Lot: 3175750)									
ES2025256-003	CHAR-VAL	ED007: Exchangeable Calcium	----	0.1	meq/100g	2.5	2.5	0.00	0% - 20%
		ED007: Exchangeable Magnesium	----	0.1	meq/100g	0.8	0.8	0.00	No Limit
		ED007: Exchangeable Potassium	----	0.1	meq/100g	<0.1	<0.1	0.00	No Limit
		ED007: Exchangeable Sodium	----	0.1	meq/100g	<0.1	0.1	0.00	No Limit
		ED007: Cation Exchange Capacity	----	0.1	meq/100g	3.4	3.5	0.00	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3169918)									
ES2025256-017	STP9-1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2025256-001	STP-ORG2-1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3169921)									
ES2025256-027	STP10-6	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP004: Organic Matter (QC Lot: 3168457)									
ES2025256-002	CHAR-STP	EP004: Organic Matter	----	0.5	%	1.5	1.4	0.00	No Limit
		EP004: Total Organic Carbon	----	0.5	%	0.9	0.8	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3168569)									
ES2025256-001	STP-ORG2-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3168569) - continued									
ES2025256-001	STP-ORG2-1	EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025256-017	STP9-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	0.41	0.41	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	2.57	2.23	14.1	0% - 20%
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3168571)									
ES2025256-027	STP10-6	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3168571) - continued									
ES2025256-027	STP10-6	EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3168569)									
ES2025256-001	STP-ORG2-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025256-017	STP9-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3168569) - continued									
ES2025256-017	STP9-1	EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3168571)									
ES2025256-027	STP10-6	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3168568)									
ES2025256-001	STP-ORG2-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3168568) - continued									
ES2025256-001	STP-ORG2-1	EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2025256-017	STP9-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3168573)									
ES2025256-027	STP10-6	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3168573) - continued									
ES2025256-027	STP10-6	EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3168567)									
ES2025256-001	STP-ORG2-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025256-017	STP9-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3168572)									
ES2025256-027	STP10-6	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3169703)									
ES2025256-001	STP-ORG2-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2025256-017	STP9-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3169740)									
ES2025255-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2026185-002	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3168567)									
ES2025256-001	STP-ORG2-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3168567) - continued									
ES2025256-001	STP-ORG2-1	EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025256-017	STP9-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3168572)									
ES2025256-027	STP10-6	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3169703)									
ES2025256-001	STP-ORG2-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2025256-017	STP9-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3169740)									
ES2025255-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2026185-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3169703)									
ES2025256-001	STP-ORG2-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2025256-017	STP9-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3169740)									
ES2025255-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2026185-002	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 3169740) - continued									
ES2026185-002	Anonymous	EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3169697)									
ES2025697-004	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
ES2025697-003	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.006	0.00	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 3169698)									
ES2025697-004	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
ES2026219-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3168641)									
ES2025978-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
ES2025978-002	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3168641)									
ES2025978-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
ES2025978-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3168641)									
ES2025978-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3168641) - continued									
ES2025978-002	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3169919)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	124	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	88.3	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	109	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	118	70.0	130
EG005T: Iron	7439-89-6	50	mg/kg	<50	27922 mg/kg	117	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	96.3	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	96.0	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	86.3	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3169920)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	114	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	80.7	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	103	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	115	70.0	130
EG005T: Iron	7439-89-6	50	mg/kg	<50	27922 mg/kg	111	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	91.8	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	92.2	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	86.8	70.0	130
EA010: Conductivity (1:5) (QCLot: 3169923)								
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	1412 µS/cm	101	92.0	108
ED006: Exchangeable Cations on Alkaline Soils (QCLot: 3175739)								
ED006: Exchangeable Calcium	----	0.2	meq/100g	<0.2	2.5 meq/100g	104	80.0	110
ED006: Exchangeable Magnesium	----	0.2	meq/100g	<0.2	4.17 meq/100g	103	80.0	110
ED006: Exchangeable Potassium	----	0.2	meq/100g	<0.2	1.28 meq/100g	105	80.0	110
ED006: Exchangeable Sodium	----	0.2	meq/100g	<0.2	2.17 meq/100g	106	80.0	110
ED006: Cation Exchange Capacity	----	0.2	meq/100g	<0.2	----	----	----	----
ED007: Exchangeable Cations (QCLot: 3175750)								
ED007: Exchangeable Calcium	----	0.1	meq/100g	<0.1	1 meq/100g	92.0	75.8	120
ED007: Exchangeable Magnesium	----	0.1	meq/100g	<0.1	1.67 meq/100g	101	74.9	115
ED007: Exchangeable Potassium	----	0.1	meq/100g	<0.1	0.51 meq/100g	106	80.0	120
ED007: Exchangeable Sodium	----	0.1	meq/100g	<0.1	0.87 meq/100g	98.8	80.0	120
ED007: Cation Exchange Capacity	----	0.1	meq/100g	<0.1	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3169918)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	79.3	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3169921)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3169921) - continued								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	77.9	70.0	105
EP004: Organic Matter (QCLot: 3168457)								
EP004: Organic Matter	----	0.5	%	<0.5	2.53 %	86.2	82.0	98.0
EP004: Total Organic Carbon	----	0.5	%	<0.5	1.46 %	86.3	81.0	99.0
EP068A: Organochlorine Pesticides (OC) (QCLot: 3168569)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	105	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	103	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	101	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	102	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	97.9	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.3	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	87.2	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.7	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	90.8	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.4	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	91.0	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3168571)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.6	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	97.2	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.7	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	100	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	97.1	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.7	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.6	64.0	116

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3168571) - continued								
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	93.4	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	97.8	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.8	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.2	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	84.3	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	98.0	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	80.3	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3168569)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.0	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.3	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	106	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.9	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	98.7	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	95.0	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	91.4	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	96.8	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	96.4	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	95.8	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.9	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	102	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.0	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3168571)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	103	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.4	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	79.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	91.8	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.1	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	83.2	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	79.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	68.0	122

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3168571) - continued								
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	99.0	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	100	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	95.9	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	96.4	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	97.8	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3168568)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	97.0	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	101	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	102	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	102	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	104	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	106	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	109	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	107	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	94.6	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	97.1	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	93.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	101	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	101	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	98.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	95.4	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	96.3	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3168573)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	106	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	103	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	108	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	108	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	112	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	113	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	115	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	113	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	95.4	69.0	123

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3168573) - continued								
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	109	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	91.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	110	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	106	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	101	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	96.4	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	100	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3168567)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	94.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	93.4	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	86.2	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3168572)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	95.9	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	89.3	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	90.1	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3169703)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	95.4	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3169740)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	84.2	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3168567)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	92.8	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	91.7	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	75.1	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3168572)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	91.2	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	88.0	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	94.2	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3169703)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	96.9	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3169740)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	88.0	68.4	128
EP080: BTEXN (QCLot: 3169703)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	109	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	106	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	102	65.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 3169703) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	101	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	103	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	86.2	63.0	119
EP080: BTEXN (QCLot: 3169740)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	94.6	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	103	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	104	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	105	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	103	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	91.4	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3169697)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	93.6	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	91.5	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	92.7	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	90.9	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	86.1	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	89.6	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	91.6	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3169698)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	96.6	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3168632)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	75.9	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	80.0	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	75.6	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	80.7	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	79.7	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	79.7	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	95.8	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	84.2	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	84.2	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	80.2	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	84.7	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	79.4	65.2	113

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3168632) - continued								
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	83.4	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	79.0	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	77.5	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	89.7	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	88.4	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	90.9	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	102	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	85.2	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	105	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3168632)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	99.1	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	83.7	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	24.6	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	96.8	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	79.5	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	94.8	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	93.0	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	89.8	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	90.4	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	82.6	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	84.4	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	106	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	82.6	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	84.8	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	89.6	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	82.4	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	83.4	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	92.9	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	88.8	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3168633)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	85.7	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	92.5	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	84.8	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3168641)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	111	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3168633)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	83.7	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	76.2	62.5	110

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3168633) - continued								
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	87.6	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3168641)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	114	75.0	127
EP080: BTEXN (QCLot: 3168641)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	101	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	111	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	113	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	112	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	115	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	108	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3169919)							
ES2025256-001	STP-ORG2-1	EG005T: Arsenic	7440-38-2	50 mg/kg	101	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	84.9	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	126	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	107	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	87.1	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	86.4	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	83.8	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3169920)							
ES2025256-025	STP10-4	EG005T: Arsenic	7440-38-2	50 mg/kg	91.1	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	81.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	# 39.5	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	105	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	83.0	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	85.5	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	86.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3169918)							
ES2025256-001	STP-ORG2-1	EG035T: Mercury	7439-97-6	5 mg/kg	83.8	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3169921)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3169921) - continued							
ES2025256-027	STP10-6	EG035T: Mercury	7439-97-6	5 mg/kg	87.7	70.0	130
EP004: Organic Matter (QCLot: 3168457)							
ES2025256-002	CHAR-STP	EP004: Organic Matter	----	1.52 %	74.7	70.0	130
		EP004: Total Organic Carbon	----	0.88 %	75.3	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3168569)							
ES2025256-001	STP-ORG2-1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	100	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	107	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	84.7	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	89.2	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	96.1	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	101	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3168571)							
ES2025256-027	STP10-6	EP068: gamma-BHC	58-89-9	0.5 mg/kg	104	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	87.4	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	103	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	97.2	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	80.6	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	97.7	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3168569)							
ES2025256-001	STP-ORG2-1	EP068: Diazinon	333-41-5	0.5 mg/kg	87.6	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	77.7	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	95.4	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	79.8	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	82.1	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3168571)							
ES2025256-027	STP10-6	EP068: Diazinon	333-41-5	0.5 mg/kg	103	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	91.2	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	106	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	88.2	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	102	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3168568)							
ES2025256-001	STP-ORG2-1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	106	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	111	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3168573)							
ES2025256-027	STP10-6	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	105	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	108	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3168567)							
ES2025256-001	STP-ORG2-1	EP071: C10 - C14 Fraction	----	523 mg/kg	97.7	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	110	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	128	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3168572)							
ES2025256-027	STP10-6	EP071: C10 - C14 Fraction	----	523 mg/kg	104	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	109	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	119	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3169703)							
ES2025256-001	STP-ORG2-1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	84.9	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3169740)							
ES2025255-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	100	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3168567)							
ES2025256-001	STP-ORG2-1	EP071: >C10 - C16 Fraction	----	860 mg/kg	103	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	120	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	115	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3168572)							
ES2025256-027	STP10-6	EP071: >C10 - C16 Fraction	----	860 mg/kg	111	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	121	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	112	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3169703)							
ES2025256-001	STP-ORG2-1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	85.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3169740)							
ES2025255-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	97.7	70.0	130
EP080: BTEXN (QCLot: 3169703)							
ES2025256-001	STP-ORG2-1	EP080: Benzene	71-43-2	2.5 mg/kg	91.8	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	84.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	85.5	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	82.5	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	87.3	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	81.8	70.0	130
EP080: BTEXN (QCLot: 3169740)							
ES2025255-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	97.2	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	104	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	105	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080: BTEXN (QCLot: 3169740) - continued							
ES2025255-001	Anonymous	EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	105	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	104	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	89.7	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EG020F: Dissolved Metals by ICP-MS (QCLot: 3169697)							
ES2025697-004	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	126	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	130	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	130	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	128	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	127	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	128	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	130	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 3169698)							
ES2025697-004	Anonymous	EG035F: Mercury	7439-97-6	0.01 mg/L	98.5	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3168641)							
ES2025978-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	125	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3168641)							
ES2025978-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	123	70.0	130
EP080: BTEXN (QCLot: 3168641)							
ES2025978-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	113	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	113	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	116	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	114	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	118	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	78.9	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2025256**	Page	: 1 of 14
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 29-Jul-2020
Site	: ----	Issue Date	: 03-Aug-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty	No. of samples received	: 34
Order number	: ----	No. of samples analysed	: 34

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EG005(ED093)T: Total Metals by ICP-AES	ES2025256--025	STP10-4	**Chromium**	7440-47-3	39.5 %	70.0-130%	**Recovery less than lower data quality objective**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Pesticides by GCMS	0	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Pesticides by GCMS	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / *Container* / Client Sample ID(s)		*Sample Date*	*Extraction / Preparation*			*Analysis*		
			Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA001: pH in soil using 0.01M CaCl extract								
Soil Glass Jar - Unpreserved (EA001)								
CHAR-STP,	CHAR-VAL	**27-Jul-2020**	**03-Aug-2020**	03-Aug-2020	✓	**03-Aug-2020**	03-Aug-2020	✓
EA002: pH 1:5 (Soils)								
Soil Glass Jar - Unpreserved (EA002)								
CHAR-STP,	CHAR-VAL	**27-Jul-2020**	**30-Jul-2020**	03-Aug-2020	✓	**30-Jul-2020**	30-Jul-2020	✓
EA010: Conductivity (1:5)								
Soil Glass Jar - Unpreserved (EA010)								
CHAR-STP,	CHAR-VAL	**27-Jul-2020**	**30-Jul-2020**	03-Aug-2020	✓	**30-Jul-2020**	27-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
STP-ORG2-1,	CHAR-STP,	**27-Jul-2020**	**----**	----	----	**30-Jul-2020**	10-Aug-2020	✓
CHAR-VAL,	QC7							
Soil Glass Jar - Unpreserved (EA055)								
STP-ORG2-2,	STP-ORG2-3,	**28-Jul-2020**	**----**	----	----	**30-Jul-2020**	11-Aug-2020	✓
STP-ORG2-4,	STP-ORG2-5,							
STP-ORG2-6,	STP-ORG2-7,							
STP-ORG2-8,	STP-ORG2-9,							
STP-ORG2-10,	STP9-1,							
STP9-2,	STP9-3,							
STP9-4,	STP9-5,							
STP10-1,	STP10-2,							
STP10-3,	STP10-4,							
STP10-5,	STP10-6,							
QC8								
EA150: Soil Classification based on Particle Size								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA150H)								
CHAR-STP,	CHAR-VAL	**27-Jul-2020**	**----**	----	----	**03-Aug-2020**	23-Jan-2021	✓
EA152: Soil Particle Density								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA152)								
CHAR-STP,	CHAR-VAL	**27-Jul-2020**	**----**	----	----	**03-Aug-2020**	23-Jan-2021	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
STP8-1,	STP8-2,	**27-Jul-2020**	**----**	----	----	**30-Jul-2020**	23-Jan-2021	✓
STP8-3,	STP8-4							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
STP-ORG2-6,	STP-ORG2-7,	**28-Jul-2020**	**----**	----	----	**30-Jul-2020**	24-Jan-2021	✓
STP-ORG2-8,	STP-ORG2-9,							
STP-ORG2-10,	STP9-1,							
STP9-2,	STP9-3,							
STP9-4,	STP9-5							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
STP-ORG2-1		**27-Jul-2020**	**----**	----	----	**30-Jul-2020**	23-Jan-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
STP-ORG2-2,	STP-ORG2-3,	**28-Jul-2020**	**----**	----	----	**30-Jul-2020**	24-Jan-2021	✓
STP-ORG2-4,	STP-ORG2-5,							
STP10-1,	STP10-2,							
STP10-3,	STP10-4,							
STP10-5,	STP10-6							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP-ORG2-1	**27-Jul-2020**	**----**	----	----	**30-Jul-2020**	23-Jan-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP-ORG2-2, STP-ORG2-3, STP-ORG2-4, STP-ORG2-5, STP10-1, STP10-2, STP10-3, STP10-4, STP10-5, STP10-6	**28-Jul-2020**	**----**	----	----	**30-Jul-2020**	24-Jan-2021	✓
ED006: Exchangeable Cations on Alkaline Soils							
Soil Glass Jar - Unpreserved (ED006)							
CHAR-STP	**27-Jul-2020**	**03-Aug-2020**	24-Aug-2020	✓	**03-Aug-2020**	24-Aug-2020	✓
ED007: Exchangeable Cations							
Soil Glass Jar - Unpreserved (ED007)							
CHAR-VAL	**27-Jul-2020**	**03-Aug-2020**	24-Aug-2020	✓	**03-Aug-2020**	24-Aug-2020	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP-ORG2-1, CHAR-STP, CHAR-VAL, QC7	**27-Jul-2020**	**30-Jul-2020**	23-Jan-2021	✓	**30-Jul-2020**	23-Jan-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
STP-ORG2-2, STP-ORG2-3, STP-ORG2-4, STP-ORG2-5, STP-ORG2-6, STP-ORG2-7, STP-ORG2-8, STP-ORG2-9, STP-ORG2-10, STP9-1, STP9-2, STP9-3, STP9-4, STP9-5, STP10-1, STP10-2, STP10-3, STP10-4, STP10-5, STP10-6, QC8	**28-Jul-2020**	**30-Jul-2020**	24-Jan-2021	✓	**30-Jul-2020**	24-Jan-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
STP-ORG2-1,	QC7	**27-Jul-2020**	**30-Jul-2020**	24-Aug-2020	✓	**31-Jul-2020**	24-Aug-2020	✓
Soil Glass Jar - Unpreserved (EG035T)								
STP-ORG2-2,	STP-ORG2-3,	**28-Jul-2020**	**30-Jul-2020**	25-Aug-2020	✓	**31-Jul-2020**	25-Aug-2020	✓
STP-ORG2-4,	STP-ORG2-5,							
STP-ORG2-6,	STP-ORG2-7,							
STP-ORG2-8,	STP-ORG2-9,							
STP-ORG2-10,	STP9-1,							
STP9-2,	STP9-3,							
STP9-4,	STP9-5,							
STP10-1,	STP10-2,							
STP10-3,	STP10-4,							
STP10-5,	STP10-6,							
QC8								
EP004: Organic Matter								
Soil Glass Jar - Unpreserved (EP004)								
CHAR-STP,	CHAR-VAL	**27-Jul-2020**	**03-Aug-2020**	24-Aug-2020	✓	**03-Aug-2020**	24-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)								
Soil Glass Jar - Unpreserved (EP068)								
STP-ORG2-1,	QC7	**27-Jul-2020**	**30-Jul-2020**	10-Aug-2020	✓	**30-Jul-2020**	08-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)								
STP-ORG2-2,	STP-ORG2-3,	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**30-Jul-2020**	08-Sep-2020	✓
STP-ORG2-4,	STP-ORG2-5,							
STP-ORG2-6,	STP-ORG2-7,							
STP-ORG2-8,	STP-ORG2-9,							
STP-ORG2-10,	STP9-1,							
STP9-2,	STP9-3,							
STP9-4,	STP9-5,							
STP10-1,	STP10-2,							
STP10-3,	STP10-4,							
STP10-5,	STP10-6,							
QC8								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)								
Soil Glass Jar - Unpreserved (EP068)								
STP-ORG2-1,	QC7	**27-Jul-2020**	**30-Jul-2020**	10-Aug-2020	✓	**30-Jul-2020**	08-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)								
STP-ORG2-2,	STP-ORG2-3,	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**30-Jul-2020**	08-Sep-2020	✓
STP-ORG2-4,	STP-ORG2-5,							
STP-ORG2-6,	STP-ORG2-7,							
STP-ORG2-8,	STP-ORG2-9,							
STP-ORG2-10,	STP9-1,							
STP9-2,	STP9-3,							
STP9-4,	STP9-5,							
STP10-1,	STP10-2,							
STP10-3,	STP10-4,							
STP10-5,	STP10-6,							
QC8								
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM))								
STP-ORG2-1,	QC7	**27-Jul-2020**	**30-Jul-2020**	10-Aug-2020	✓	**30-Jul-2020**	08-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))								
STP-ORG2-2,	STP-ORG2-3,	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**30-Jul-2020**	08-Sep-2020	✓
STP-ORG2-4,	STP-ORG2-5,							
STP-ORG2-6,	STP-ORG2-7,							
STP-ORG2-8,	STP-ORG2-9,							
STP-ORG2-10,	STP9-1,							
STP9-2,	STP9-3,							
STP9-4,	STP9-5,							
STP10-1,	STP10-2,							
STP10-3,	STP10-4,							
STP10-5,	STP10-6,							
QC8								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP080)								
STP-ORG2-1,	QC7	**27-Jul-2020**	**30-Jul-2020**	10-Aug-2020	✓	**30-Jul-2020**	10-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)								
STP-ORG2-2,	STP-ORG2-3,	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**30-Jul-2020**	11-Aug-2020	✓
STP-ORG2-4,	STP-ORG2-5,							
STP-ORG2-6,	STP-ORG2-7,							
STP-ORG2-8,	STP-ORG2-9,							
STP-ORG2-10,	STP9-1,							
STP9-2,	STP9-3,							
STP9-4,	STP9-5,							
STP10-1,	STP10-2,							
STP10-3,	STP10-4,							
STP10-5,	STP10-6,							
QC8								
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Soil Glass Jar - Unpreserved (EP080)								
STP-ORG2-1,	QC7	**27-Jul-2020**	**30-Jul-2020**	10-Aug-2020	✓	**30-Jul-2020**	10-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)								
STP-ORG2-2,	STP-ORG2-3,	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**30-Jul-2020**	11-Aug-2020	✓
STP-ORG2-4,	STP-ORG2-5,							
STP-ORG2-6,	STP-ORG2-7,							
STP-ORG2-8,	STP-ORG2-9,							
STP-ORG2-10,	STP9-1,							
STP9-2,	STP9-3,							
STP9-4,	STP9-5,							
STP10-1,	STP10-2,							
STP10-3,	STP10-4,							
STP10-5,	STP10-6,							
QC8								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP-ORG2-1, QC7	27-Jul-2020	30-Jul-2020	10-Aug-2020	✓	30-Jul-2020	10-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP-ORG2-2, STP-ORG2-3, STP-ORG2-4, STP-ORG2-5, STP-ORG2-6, STP-ORG2-7, STP-ORG2-8, STP-ORG2-9, STP-ORG2-10, STP9-1, STP9-2, STP9-3, STP9-4, STP9-5, STP10-1, STP10-2, STP10-3, STP10-4, STP10-5, STP10-6, QC8	28-Jul-2020	30-Jul-2020	11-Aug-2020	✓	30-Jul-2020	11-Aug-2020	✓

Matrix: **SOLID**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP-ORG2-3 - SOLID, STP10-4 - SOLID, STP10-3 - SOLID, STP10-6 - SOLID	28-Jul-2020	----	----	----	30-Jul-2020	24-Jan-2021	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-F)							
RINSATE	28-Jul-2020	----	----	----	30-Jul-2020	24-Jan-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035F)							
RINSATE	28-Jul-2020	----	----	----	31-Jul-2020	11-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	28-Jul-2020	29-Jul-2020	04-Aug-2020	✓	31-Jul-2020	07-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	28-Jul-2020	29-Jul-2020	04-Aug-2020	✓	31-Jul-2020	07-Sep-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**28-Jul-2020**	**29-Jul-2020**	04-Aug-2020	✓	**31-Jul-2020**	07-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**28-Jul-2020**	**29-Jul-2020**	11-Aug-2020	✓	**29-Jul-2020**	11-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**28-Jul-2020**	**29-Jul-2020**	04-Aug-2020	✓	**31-Jul-2020**	07-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**28-Jul-2020**	**29-Jul-2020**	11-Aug-2020	✓	**29-Jul-2020**	11-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**28-Jul-2020**	**29-Jul-2020**	11-Aug-2020	✓	**29-Jul-2020**	11-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Electrical Conductivity (1:5)	EA010	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations	ED007	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations on Alkaline Soils	ED006	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	3	25	**12.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organic Matter	EP004	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	23	**13.04**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	23	**13.04**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH (1:5)	EA002	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	23	**13.04**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	25	**16.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	23	**13.04**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	31	**12.90**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Electrical Conductivity (1:5)	EA010	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations	ED007	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations on Alkaline Soils	ED006	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organic Matter	EP004	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	25	**8.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Electrical Conductivity (1:5)	EA010	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations	ED007	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations on Alkaline Soils	ED006	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organic Matter	EP004	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	25	**8.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Matrix Spikes (MS) - Continued							
Organic Matter	EP004	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	25	**8.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	3	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	3	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	3	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	3	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons (2011) 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM (2013) Schedule B(3)
pH (1:5)	EA002	SOIL	In house: Referenced to Rayment and Lyons 4A1 and APHA 4500H+. pH is determined on soil samples after a 1:5 soil/water leach. This method is compliant with NEPM (2013) Schedule B(3)
Electrical Conductivity (1:5)	EA010	SOIL	In house: Referenced to Rayment and Lyons 3A1 and APHA 2510. Conductivity is determined on soil samples using a 1:5 soil/water leach. This method is compliant with NEPM (2013) Schedule B(3)
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 6.1 and Table 1 (14 day holding time).
Particle Size Analysis by Hydrometer	EA150H	SOIL	Particle Size Analysis by Hydrometer according to AS1289.3.6.3 - 2003
Soil Particle Density	EA152	SOIL	Soil Particle Density by AS 1289.3.5.1-2006 : Methods of testing soils for engineering purposes - Soil classification tests - Determination of the soil particle density of a soil - Standard method
Asbestos Identification in Soils	EA200	SOIL	AS 4964 - 2004 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM 2013 with Confirmation of Identification by AS 4964 - 2004 Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Exchangeable Cations on Alkaline Soils	ED006	SOIL	In house: Referenced to Soil Survey Test Method C5. Soluble salts are removed from the sample prior to analysis. Cations are exchanged from the sample by contact with alcoholic ammonium chloride at pH 8.5. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil.
Exchangeable Cations	ED007	SOIL	In house: Referenced to Rayment & Lyons (2011) Method 15A1. Cations are exchanged from the sample by contact with Ammonium Chloride. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil. This method is compliant with NEPM (2013) Schedule B(3) (Method 301)
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Organic Matter	EP004	SOIL	In house: Referenced to AS1289.4.1.1 - 1997. Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (2013) Schedule B(3).

Analytical Methods	Method	Matrix	Method Descriptions
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270E Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270E. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260D. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.
Asbestos Identification in Bulk Solids	EA200	SOLID	In house: Referenced to AS 4964 - 2004 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270E Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260D Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Higginson 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM (2013) Schedule B(3) (Method 103)
Exchangeable Cations Preparation Method (Alkaline Soils)	ED006PR	SOIL	In house: Referenced to Rayment and Lyons 2011 method 15C1.
Exchangeable Cations Preparation Method	ED007PR	SOIL	In house: Referenced to Rayment & Higginson (1992) method 15A1. A 1M NH4Cl extraction by end over end tumbling at a ratio of 1:20. There is no pretreatment for soluble salts. Extracts can be run by ICP for cations.

Preparation Methods	Method	Matrix	Method Descriptions
1:5 solid / water leach for soluble analytes	EN34	SOIL	10 g of soil is mixed with 50 mL of reagent grade water and tumbled end over end for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis.
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Organic Matter	EP004-PR	SOIL	In house: Referenced to AS1289.4.1.1 - 1997. Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM (2013) Schedule B(3) (Method 105)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510B 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (2013) Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Delivering): ☐ PERTH ☐ BRISBANE ☐ NEWCASTLE ☐ SYDNEY ☐ CANBERRA ☐ ADELAIDE ☐ MELBOURNE ☐ BENDIGO ☐ MACKAY ☐ TOWNSVILLE ☐ GOLD COAST ☐ SUNSHINE COAST

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 1 of 1
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No:		
PM CONTACT No: 0417 647 498	Email Reports and invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com	Required TAT: 1 day	

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix (Soil, Water, WCM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: STP (S-26, S-12, EA200F)	VAI (S-26, S-12, EA200)	Characterisation (P-22)	TCLP Leachate (EN33)	ASLP Leachate (EN60)	Leachable As, Cr (EG020C)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD	Additional Information (Comments on any special requirements)
1	STP11-1	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
2	STP11-2	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
3	STP11-3	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
4	STP11-4	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
5	STP11-5	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
6	STP11-6	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
7	STP13-1	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
8	STP13-2	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
9	STP13-3	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
10	STP12-1	28/07/2020	S	1 x jar, 1 x 100ml bag		×								
11	STP12-2	28/07/2020	S	1 x jar, 1 x 100ml bag		×								
12	STP12-3	28/07/2020	S	1 x jar, 1 x 100ml bag		×								
13	STP12-4	28/07/2020	S	1 x jar, 1 x 100ml bag		×								
14	STP14-1	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
15	STP14-2	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
16	STP14-3	29/07/2020	S	1 x jar, 1 x 500ml bag	×									
17	SWR RINSATE	29/07/2020	W	4 x bottles							×			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished by Sampler	Sign:	Date / Time:	Received by	Sign: Kim ALS	Date / Time: 30.07.20 8.15am
Relinquished By	Sign:	Date / Time:	Received by	Sign:	Date / Time:
Relinquished By	Sign:	Date / Time:	Received by	Sign:	Date / Time:

Temperature Received:

Environmental Division
Sydney
Work Order Reference
ES2025648

Telephone : + 61-2-8784 8555

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By / Date: Asbestos
Relinquished By / Date:
Connote Courier:
WO No: ES2025648
Attach By PO Internal Sheet:

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2025648**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		

Dates

Date Samples Received	: 30-Jul-2020 08:25	Issue Date	: 30-Jul-2020
Client Requested Due Date	: 31-Jul-2020	Scheduled Reporting Date	: **03-Aug-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 1	Temperature	: 15.4 - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 16 / 16

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Sample RINSATE (ALS #17) was not received.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2025648-001	29-Jul-2020 00:00	STP11-1	✓	✓		✓	✓
ES2025648-002	29-Jul-2020 00:00	STP11-2	✓	✓		✓	✓
ES2025648-003	29-Jul-2020 00:00	STP11-3	✓	✓		✓	✓
ES2025648-004	29-Jul-2020 00:00	STP11-4	✓	✓		✓	✓
ES2025648-005	29-Jul-2020 00:00	STP11-5	✓	✓		✓	✓
ES2025648-006	29-Jul-2020 00:00	STP11-6	✓	✓		✓	✓
ES2025648-007	29-Jul-2020 00:00	STP13-1	✓	✓		✓	✓
ES2025648-008	29-Jul-2020 00:00	STP13-2	✓	✓		✓	✓
ES2025648-009	29-Jul-2020 00:00	STP13-3	✓	✓		✓	✓
ES2025648-010	28-Jul-2020 00:00	STP12-1	✓		✓	✓	✓
ES2025648-011	28-Jul-2020 00:00	STP12-2	✓		✓	✓	✓
ES2025648-012	28-Jul-2020 00:00	STP12-3	✓		✓	✓	✓
ES2025648-013	28-Jul-2020 00:00	STP12-4	✓		✓	✓	✓
ES2025648-014	29-Jul-2020 00:00	STP14-1	✓	✓		✓	✓
ES2025648-015	29-Jul-2020 00:00	STP14-2	✓	✓		✓	✓
ES2025648-016	29-Jul-2020 00:00	STP14-3	✓	✓		✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2025648**	Page	: 1 of 20
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 30-Jul-2020 08:25
Order number	: ----	Date Analysis Commenced	: 30-Jul-2020
C-O-C number	: ----	Issue Date	: 03-Aug-2020 17:35
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 16		
No. of samples analysed	: 16		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP11-1	STP11-2	STP11-3	STP11-4	STP11-5
			Client sampling date / time	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025648-001	ES2025648-002	ES2025648-003	ES2025648-004	ES2025648-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.7	9.9	9.4	8.0	9.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	582	746	728	680	558
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.582	0.746	0.728	0.680	0.558
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	7	10	7	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	66	93	92	74	106
Copper	7440-50-8	5	mg/kg	7	8	9	8	8
Lead	7439-92-1	5	mg/kg	10	11	12	11	11
Nickel	7440-02-0	2	mg/kg	6	5	5	5	5
Zinc	7440-66-6	5	mg/kg	33	20	27	22	25
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.06
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP11-1	STP11-2	STP11-3	STP11-4	STP11-5
			Client sampling date / time	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025648-001	ES2025648-002	ES2025648-003	ES2025648-004	ES2025648-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	**0.08**	<0.05	<0.05	<0.05	**0.11**
trans-Chlordane	5103-74-2	0.05	mg/kg	**0.08**	<0.05	<0.05	<0.05	**0.11**
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	**0.06**	<0.05	**0.06**	**0.12**	**0.11**
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.06**	<0.05	**0.06**	**0.12**	**0.17**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP11-1	STP11-2	STP11-3	STP11-4	STP11-5
				Client sampling date / time	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025648-001	ES2025648-002	ES2025648-003	ES2025648-004	ES2025648-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP11-1	STP11-2	STP11-3	STP11-4	STP11-5
				Client sampling date / time	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025648-001	ES2025648-002	ES2025648-003	ES2025648-004	ES2025648-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**81.4**	**88.6**	**72.5**	**82.5**	**76.6**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**90.1**	**73.8**	**62.5**	**62.4**	**60.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**77.3**	**73.4**	**79.5**	**81.4**	**79.3**
2-Chlorophenol-D4	93951-73-6	0.5	%		**80.6**	**80.6**	**83.6**	**84.7**	**84.6**
2.4.6-Tribromophenol	118-79-6	0.5	%		**71.9**	**69.4**	**71.4**	**71.1**	**72.1**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**91.9**	**91.6**	**91.5**	**92.7**	**94.0**
Anthracene-d10	1719-06-8	0.5	%		**96.9**	**95.6**	**95.5**	**99.0**	**97.6**
4-Terphenyl-d14	1718-51-0	0.5	%		**85.4**	**85.2**	**84.5**	**88.3**	**87.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**97.7**	**91.7**	**89.5**	**88.1**	**87.9**
Toluene-D8	2037-26-5	0.2	%		**109**	**105**	**97.4**	**94.5**	**95.0**
4-Bromofluorobenzene	460-00-4	0.2	%		**111**	**112**	**96.9**	**94.2**	**94.2**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP11-6	STP13-1	STP13-2	STP13-3	STP12-1
			Client sampling date / time	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025648-006	ES2025648-007	ES2025648-008	ES2025648-009	ES2025648-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.5	9.2	8.8	7.7	6.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	823	678	656	826	60.2
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	----
ø Weight Used for % Calculation	----	0.0001	kg	0.823	0.678	0.656	0.826	----
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	9	11	7	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	98	84	94	69	74
Copper	7440-50-8	5	mg/kg	10	10	9	8	<5
Lead	7439-92-1	5	mg/kg	12	12	12	11	11
Nickel	7440-02-0	2	mg/kg	6	6	5	6	2
Zinc	7440-66-6	5	mg/kg	27	30	26	30	8
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	0.13	0.40
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP11-6	STP13-1	STP13-2	STP13-3	STP12-1
				Client sampling date / time	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025648-006	ES2025648-007	ES2025648-008	ES2025648-009	ES2025648-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.07**	**0.07**	**0.06**	**0.10**	**0.41**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.07**	**0.07**	**0.06**	**0.23**	**0.81**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP11-6	STP13-1	STP13-2	STP13-3	STP12-1
			Client sampling date / time	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025648-006	ES2025648-007	ES2025648-008	ES2025648-009	ES2025648-010
				Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	**100**
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	**100**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP11-6	STP13-1	STP13-2	STP13-3	STP12-1
				Client sampling date / time	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00	28-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025648-006	ES2025648-007	ES2025648-008	ES2025648-009	ES2025648-010
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	**130**
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	**130**
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**77.8**	**73.9**	**83.8**	**87.0**	**81.7**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**88.8**	**69.4**	**79.7**	**80.8**	**96.0**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**79.2**	**78.6**	**74.9**	**79.5**	**77.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		**83.6**	**82.9**	**84.7**	**84.5**	**81.7**
2.4.6-Tribromophenol	118-79-6	0.5	%		**69.9**	**70.8**	**71.0**	**71.0**	**72.7**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**91.3**	**92.4**	**95.3**	**97.2**	**94.4**
Anthracene-d10	1719-06-8	0.5	%		**97.4**	**94.7**	**98.7**	**103**	**96.4**
4-Terphenyl-d14	1718-51-0	0.5	%		**86.2**	**85.8**	**88.4**	**90.3**	**87.1**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.3**	**97.0**	**108**	**97.5**	**98.2**
Toluene-D8	2037-26-5	0.2	%		**100**	**103**	**115**	**106**	**108**
4-Bromofluorobenzene	460-00-4	0.2	%		**105**	**104**	**116**	**106**	**107**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP12-2	STP12-3	STP12-4	STP14-1	STP14-2
			Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025648-011	ES2025648-012	ES2025648-013	ES2025648-014	ES2025648-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.6	8.3	7.3	11.2	13.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	68.2	70.6	93.7	577	646
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	----	----	----	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	----	----	----	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	----	----	----	0.577	0.646
ø Fibrous Asbestos >7mm	----	0.0004	g	----	----	----	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	7	<5	7	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	124	86	64	67	59
Copper	7440-50-8	5	mg/kg	6	<5	<5	14	14
Lead	7439-92-1	5	mg/kg	10	11	8	17	14
Nickel	7440-02-0	2	mg/kg	4	3	<2	6	5
Zinc	7440-66-6	5	mg/kg	14	10	9	52	48
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	0.26	0.34	0.26	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP12-2	STP12-3	STP12-4	STP14-1	STP14-2
			Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00
Compound	CAS Number	LOR	Unit	ES2025648-011	ES2025648-012	ES2025648-013	ES2025648-014	ES2025648-015
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	**0.46**	**0.33**	**0.26**	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.72**	**0.67**	**0.52**	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP12-2	STP12-3	STP12-4	STP14-1	STP14-2
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025648-011	ES2025648-012	ES2025648-013	ES2025648-014	ES2025648-015
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	**160**	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	**160**	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP12-2	STP12-3	STP12-4	STP14-1	STP14-2
				Client sampling date / time	28-Jul-2020 00:00	28-Jul-2020 00:00	28-Jul-2020 00:00	29-Jul-2020 00:00	29-Jul-2020 00:00
Compound	CAS Number	LOR	Unit		ES2025648-011	ES2025648-012	ES2025648-013	ES2025648-014	ES2025648-015
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		**100**	**200**	**120**	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	**180**	**110**	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		**100**	**380**	**230**	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**83.8**	**79.0**	**68.1**	**72.3**	**70.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**75.5**	**80.0**	**60.2**	**65.0**	**61.3**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**75.7**	**74.6**	**79.9**	**77.7**	**73.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**80.7**	**82.8**	**85.5**	**82.5**	**79.9**
2.4.6-Tribromophenol	118-79-6	0.5	%		**72.8**	**74.6**	**75.2**	**76.4**	**74.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**92.4**	**94.3**	**94.5**	**94.8**	**92.0**
Anthracene-d10	1719-06-8	0.5	%		**95.4**	**95.9**	**99.2**	**97.9**	**97.0**
4-Terphenyl-d14	1718-51-0	0.5	%		**84.5**	**86.7**	**86.6**	**86.7**	**84.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**96.7**	**93.8**	**96.3**	**98.6**	**93.8**
Toluene-D8	2037-26-5	0.2	%		**109**	**108**	**108**	**108**	**102**
4-Bromofluorobenzene	460-00-4	0.2	%		**108**	**106**	**107**	**110**	**106**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP14-3	----	----	----	----
			Client sampling date / time	29-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2025648-016	--------	--------	--------	--------
				Result	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**11.2**	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	----	----	----	----
Asbestos Type	1332-21-4	-	--	**-**	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	----	----	----	----
Sample weight (dry)	----	0.01	g	**684**	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**Yes**	----	----	----	----
Organic Fibre	----	0.1	g/kg	**No**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	----	----	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	<0.0004	----	----	----	----
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	<0.001	----	----	----	----
ø **Weight Used for % Calculation**	----	0.0001	kg	**0.684**	----	----	----	----
ø **Fibrous Asbestos >7mm**	----	0.0004	g	<0.0004	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**8**	----	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg	**60**	----	----	----	----
Copper	7440-50-8	5	mg/kg	**12**	----	----	----	----
Lead	7439-92-1	5	mg/kg	**14**	----	----	----	----
Nickel	7440-02-0	2	mg/kg	**5**	----	----	----	----
Zinc	7440-66-6	5	mg/kg	**49**	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP14-3	----	----	----	----
			Client sampling date / time	29-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2025648-016	--------	--------	--------	--------
				Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP14-3	----	----	----	----
				Client sampling date / time	29-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025648-016	--------	--------	--------	--------
					Result	----	----	----	----
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	----	----	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		**150**	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		**150**	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP14-3	----	----	----	----
				Client sampling date / time	29-Jul-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2025648-016	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		**200**	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		**200**	----	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**74.2**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**66.7**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**75.4**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**80.5**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**79.0**	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**92.7**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**94.6**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**85.0**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**101**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%		**104**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**110**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP11-1 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP11-2 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP11-3 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP11-4 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP11-5 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP11-6 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP13-1 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP13-2 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP13-3 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP12-1 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP12-2 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP12-3 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP12-4 - 28-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP14-1 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP14-2 - 29-Jul-2020 00:00	Mid brown soil.
EA200: Description	STP14-3 - 29-Jul-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2025648**	Page	: 1 of 10
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 30-Jul-2020
Order number	: ----	Date Analysis Commenced	: 30-Jul-2020
C-O-C number	: ----	Issue Date	: 03-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 16		
No. of samples analysed	: 16		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3171354)									
ES2025648-001	STP11-1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	66	60	10.7	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	5	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	7	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	8	13.4	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	33	20	49.2	No Limit
ES2025648-011	STP12-2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	124	131	5.24	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	3	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	13	19.1	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	14	13	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3171355)									
ES2025648-003	STP11-3	EA055: Moisture Content	----	0.1	%	9.4	9.1	2.32	No Limit
ES2025648-014	STP14-1	EA055: Moisture Content	----	0.1	%	11.2	11.1	0.930	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3171353)									
ES2025648-011	STP12-2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3171287)									
ES2025648-001	STP11-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3171287) - continued									
ES2025648-001	STP11-1	EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.08	0.07	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.06	0.06	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025648-011	STP12-2	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	0.26	0.19	31.4	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.46	0.40	12.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3171287)									
ES2025648-001	STP11-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3171287) - continued									
ES2025648-001	STP11-1	EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2025648-011	STP12-2	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3171286)									
ES2025648-001	STP11-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3171286) - continued									
ES2025648-001	STP11-1	EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2025648-011	STP12-2	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3171208)									
ES2025648-001	STP11-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3171208) - continued									
ES2025648-011	STP12-2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3171285)									
ES2025648-001	STP11-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025648-011	STP12-2	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3171208)									
ES2025648-001	STP11-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2025648-011	STP12-2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3171285)									
ES2025648-001	STP11-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2025648-011	STP12-2	EP071: >C16 - C34 Fraction	----	100	mg/kg	100	100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080: BTEXN (QC Lot: 3171208)									
ES2025648-001	STP11-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2025648-011	STP12-2	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3171354)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	112	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	107	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	130	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	109	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	127	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	118	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	107	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3171353)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	89.0	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3171287)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	104	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.7	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	100	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	102	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.2	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.7	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.3	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	96.0	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.7	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	101	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.3	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	98.9	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	101	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	90.9	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3171287)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	80.4	62.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3171287) - continued								
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	83.5	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	80.1	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	106	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	86.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.0	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.7	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.1	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	82.7	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	108	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	79.4	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	79.6	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	94.3	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	88.8	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3171286)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	87.2	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	90.1	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	90.9	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	91.6	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	92.5	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	93.3	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	95.3	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	93.2	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	83.6	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	86.6	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	81.8	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	89.9	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	88.1	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	91.6	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	88.8	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	91.3	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3171208)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	99.8	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3171285)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3171285) - continued								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	111	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	105	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	111	71.0	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3171208)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	103	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3171285)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	102	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	103	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	116	63.0	131
EP080: BTEXN (QCLot: 3171208)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	92.3	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	103	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	101	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	107	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	107	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3171354)							
ES2025648-001	STP11-1	EG005T: Arsenic	7440-38-2	50 mg/kg	83.6	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	86.5	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	124	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	90.9	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	87.4	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	87.9	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	79.6	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3171353)							
ES2025648-001	STP11-1	EG035T: Mercury	7439-97-6	5 mg/kg	88.9	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3171287)							
ES2025648-001	STP11-1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	80.9	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	85.1	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3171287) - continued							
ES2025648-001	STP11-1	EP068: Aldrin	309-00-2	0.5 mg/kg	81.4	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	108	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	87.2	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	85.7	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3171287)							
ES2025648-001	STP11-1	EP068: Diazinon	333-41-5	0.5 mg/kg	77.3	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	91.4	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	94.0	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	82.5	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	72.8	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3171286)							
ES2025648-001	STP11-1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	86.9	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	88.6	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3171208)							
ES2025648-001	STP11-1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	115	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3171285)							
ES2025648-001	STP11-1	EP071: C10 - C14 Fraction	----	523 mg/kg	99.6	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	110	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	130	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3171208)							
ES2025648-001	STP11-1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	116	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3171285)							
ES2025648-001	STP11-1	EP071: >C10 - C16 Fraction	----	860 mg/kg	108	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	116	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	130	52.0	132
EP080: BTEXN (QCLot: 3171208)							
ES2025648-001	STP11-1	EP080: Benzene	71-43-2	2.5 mg/kg	93.7	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	99.1	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	100	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	100	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	103	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	99.3	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2025648**	Page	: 1 of 8
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 30-Jul-2020
Site	: ----	Issue Date	: 03-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch	No. of samples received	: 16
Order number	: ----	No. of samples analysed	: 16

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

Matrix: **SOIL**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Total Mercury by FIMS	1	20	5.00	10.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / *Container* / Client Sample ID(s)	*Sample Date*	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**----**	----	----	**30-Jul-2020**	11-Aug-2020	✓
Soil Glass Jar - Unpreserved (EA055)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**----**	----	----	**30-Jul-2020**	12-Aug-2020	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**----**	----	----	**31-Jul-2020**	24-Jan-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**----**	----	----	**31-Jul-2020**	25-Jan-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**----**	----	----	**31-Jul-2020**	25-Jan-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**30-Jul-2020**	24-Jan-2021	✓	**30-Jul-2020**	24-Jan-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**30-Jul-2020**	25-Jan-2021	✓	**30-Jul-2020**	25-Jan-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**30-Jul-2020**	25-Aug-2020	✓	**31-Jul-2020**	25-Aug-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**30-Jul-2020**	26-Aug-2020	✓	**31-Jul-2020**	26-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**31-Jul-2020**	08-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**30-Jul-2020**	12-Aug-2020	✓	**31-Jul-2020**	08-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**31-Jul-2020**	08-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**30-Jul-2020**	12-Aug-2020	✓	**31-Jul-2020**	08-Sep-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**31-Jul-2020**	08-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**30-Jul-2020**	12-Aug-2020	✓	**31-Jul-2020**	08-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**31-Jul-2020**	11-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**30-Jul-2020**	12-Aug-2020	✓	**31-Jul-2020**	12-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**31-Jul-2020**	11-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**30-Jul-2020**	12-Aug-2020	✓	**31-Jul-2020**	12-Aug-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP12-1, STP12-2, STP12-3, STP12-4	**28-Jul-2020**	**30-Jul-2020**	11-Aug-2020	✓	**31-Jul-2020**	11-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP11-1, STP11-2, STP11-3, STP11-4, STP11-5, STP11-6, STP13-1, STP13-2, STP13-3, STP14-1, STP14-2, STP14-3	**29-Jul-2020**	**30-Jul-2020**	12-Aug-2020	✓	**31-Jul-2020**	12-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 6.1 and Table 1 (14 day holding time).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 - 2004 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM 2013 with Confirmation of Identification by AS 4964 - 2004 Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270E Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270E. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260D. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.

Preparation Methods	Method	Matrix	Method Descriptions
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

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SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

Environmental Division
Sydney
Work Order Reference
ES2026818

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CLIENT: SLR Consulting	**LABORATORY:** ALS
PROJECT: John Stokes Square	**LABORATORY ADDRESS:**
PROJECT NUMBER: 580.10679	**SAMPLER:** Sarah Doherty/Gemma Sherridan/James Murdoch
PROJECT MANAGER: Sarah Doherty	**SAMPLER CONTACT No:**
PM CONTACT No: 0417 647 498	**Email Reports and Invoices to:** sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com; j

Turnaround Time (TAT)

☐ Standard TAT

☒ Non Standard or Urgent TAT

Required TAT: 1 day

COC Number

1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No EA200/EA200F for any of the QC samples - S-26 & S-12 analysis only for QC17, QC9, QC10, QC11

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Charaterisation (P-22)	TCLP Leachate (EN33)	ASLP Leachate (EN60)	Leachable As, Cr (EG020C)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	STP15-1	4/08/2020	S	1 x bag, 1 x jar	x									
2	STP15-2	4/08/2020	S	1 x bag, 1 x jar	x									
3	STP15-3	4/08/2020	S	1 x bag, 1 x jar	x									ACM
4	STP15-4	4/08/2020	S	1 x bag, 1 x jar	x									
5	STP15-5	4/08/2020	S	1 x bag, 1 x jar	x									ACM
6	STP15-6	4/08/2020	S	1 x bag, 1 x jar	x									
7	QC17	4/08/2020	S	1 x ~~bag~~, 1 x jar	x									
8	STP7-8	4/08/2020	S	1 x bag									x	
9	STP7-9	4/08/2020	S	1 x bag									x	
10	STP7-10	4/08/2020	S	1 x bag									x	
11	STP7-12	4/08/2020	S	1 x bag									x	
12	STP7-13	4/08/2020	S	1 x bag									x	

Subcon / Forward Lab / Split WO
Lab / Courier: Newcastle
Organised By: Date: Asbestos
Report Format:
Courier Courier:
WO: ES2026818
Attach By WO Internal Sheet:

| | | |

| | | |

78 STP15-3 S (Solid) 1 x bag

79 STP15-5 S (Solid) 1 x bag

SLR

| | | |

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2026818**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 5
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: 4	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		

Dates

Date Samples Received	: 07-Aug-2020 08:30	Issue Date	: 07-Aug-2020
Client Requested Due Date	: 10-Aug-2020	Scheduled Reporting Date	: **10-Aug-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 3	Temperature	: 16.0 - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 79 / 43

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- This is an updated SRN which indicates the new scheduled release date for this work order.
- **The final report will be completed by the scheduled reporting date listed in this SRN. A Preliminary report will be available on 10/08/20 (for Asbestos only) with the exception of the rest of analysis.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method Client sample ID	Sample Container Received	Preferred Sample Container for Analysis
Dissolved Mercury by FIMS : EG035F		
RINSATE 04/08/2020	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
RINSATE 05/08/2020	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
Dissolved Metals by ICP-MS - Suite A : EG020A-F		
RINSATE 04/08/2020	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
RINSATE 05/08/2020	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered

Any sample identifications that cannot be displayed entirely in the analysis summary table will be listed below.

ES2026818-076 : [04-Aug-2020] : RINSATE - 04/08/2020
ES2026818-077 : [05-Aug-2020] : RINSATE - 05/08/2020

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2026818-001	04-Aug-2020 00:00	STP15-1		✓	✓		✓	✓
ES2026818-002	04-Aug-2020 00:00	STP15-2		✓	✓		✓	✓
ES2026818-003	04-Aug-2020 00:00	STP15-3		✓	✓		✓	✓
ES2026818-004	04-Aug-2020 00:00	STP15-4		✓	✓		✓	✓
ES2026818-005	04-Aug-2020 00:00	STP15-5		✓	✓		✓	✓
ES2026818-006	04-Aug-2020 00:00	STP15-6		✓	✓		✓	✓
ES2026818-007	04-Aug-2020 00:00	QC17		✓			✓	✓
ES2026818-008	04-Aug-2020 00:00	STP7-8	✓					
ES2026818-009	04-Aug-2020 00:00	STP7-9	✓					
ES2026818-010	04-Aug-2020 00:00	STP7-10	✓					
ES2026818-011	04-Aug-2020 00:00	STP7-12	✓					
ES2026818-012	04-Aug-2020 00:00	STP7-13	✓					
ES2026818-013	04-Aug-2020 00:00	STP7-14	✓					
ES2026818-014	05-Aug-2020 00:00	V84		✓		✓	✓	✓
ES2026818-015	05-Aug-2020 00:00	V85	✓					
ES2026818-016	05-Aug-2020 00:00	V86		✓		✓	✓	✓
ES2026818-017	05-Aug-2020 00:00	V87	✓					
ES2026818-018	05-Aug-2020 00:00	V88		✓		✓	✓	✓
ES2026818-019	05-Aug-2020 00:00	V89	✓					
ES2026818-020	05-Aug-2020 00:00	V90		✓		✓	✓	✓
ES2026818-021	05-Aug-2020 00:00	V91	✓					
ES2026818-022	05-Aug-2020 00:00	V92		✓		✓	✓	✓
ES2026818-023	05-Aug-2020 00:00	V93	✓					
ES2026818-024	05-Aug-2020 00:00	V94		✓		✓	✓	✓

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2026818-025	05-Aug-2020 00:00	V95	✓					
ES2026818-026	05-Aug-2020 00:00	V96		✓		✓	✓	✓
ES2026818-027	05-Aug-2020 00:00	V97	✓					
ES2026818-028	05-Aug-2020 00:00	V98		✓		✓	✓	✓
ES2026818-029	05-Aug-2020 00:00	V99	✓					
ES2026818-030	05-Aug-2020 00:00	V100		✓		✓	✓	✓
ES2026818-031	05-Aug-2020 00:00	V101	✓					
ES2026818-032	05-Aug-2020 00:00	V102		✓		✓	✓	✓
ES2026818-033	05-Aug-2020 00:00	V103	✓					
ES2026818-034	05-Aug-2020 00:00	V104		✓		✓	✓	✓
ES2026818-035	05-Aug-2020 00:00	V105	✓					
ES2026818-036	05-Aug-2020 00:00	V107	✓					
ES2026818-037	05-Aug-2020 00:00	V108		✓		✓	✓	✓
ES2026818-038	05-Aug-2020 00:00	V109	✓					
ES2026818-039	05-Aug-2020 00:00	V110		✓		✓	✓	✓
ES2026818-040	05-Aug-2020 00:00	V111	✓					
ES2026818-041	05-Aug-2020 00:00	V112		✓		✓	✓	✓
ES2026818-042	05-Aug-2020 00:00	V113	✓					
ES2026818-043	05-Aug-2020 00:00	V114		✓		✓	✓	✓
ES2026818-044	05-Aug-2020 00:00	V115	✓					
ES2026818-045	05-Aug-2020 00:00	V116		✓		✓	✓	✓
ES2026818-046	05-Aug-2020 00:00	V117	✓					
ES2026818-047	05-Aug-2020 00:00	V118		✓		✓	✓	✓
ES2026818-048	05-Aug-2020 00:00	V119	✓					
ES2026818-049	05-Aug-2020 00:00	V120		✓		✓	✓	✓
ES2026818-050	05-Aug-2020 00:00	V121	✓					
ES2026818-051	05-Aug-2020 00:00	V122		✓		✓	✓	✓
ES2026818-052	05-Aug-2020 00:00	V123	✓					
ES2026818-053	05-Aug-2020 00:00	V124		✓		✓	✓	✓
ES2026818-054	05-Aug-2020 00:00	V125	✓					
ES2026818-055	05-Aug-2020 00:00	V126		✓		✓	✓	✓
ES2026818-056	05-Aug-2020 00:00	V127	✓					
ES2026818-057	05-Aug-2020 00:00	V128		✓		✓	✓	✓
ES2026818-058	05-Aug-2020 00:00	V129	✓					
ES2026818-059	05-Aug-2020 00:00	V130		✓		✓	✓	✓
ES2026818-060	05-Aug-2020 00:00	V131	✓					
ES2026818-061	05-Aug-2020 00:00	V132		✓		✓	✓	✓
ES2026818-062	05-Aug-2020 00:00	V133	✓					
ES2026818-063	05-Aug-2020 00:00	V134		✓		✓	✓	✓
ES2026818-064	05-Aug-2020 00:00	V135	✓					
ES2026818-065	05-Aug-2020 00:00	V136		✓		✓	✓	✓

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2026818-066	05-Aug-2020 00:00	V137	✓					
ES2026818-067	05-Aug-2020 00:00	V138		✓		✓	✓	✓
ES2026818-068	05-Aug-2020 00:00	V139	✓					
ES2026818-069	05-Aug-2020 00:00	V140		✓		✓	✓	✓
ES2026818-070	05-Aug-2020 00:00	V141	✓					
ES2026818-071	05-Aug-2020 00:00	V142		✓		✓	✓	✓
ES2026818-072	05-Aug-2020 00:00	V143	✓					
ES2026818-073	05-Aug-2020 00:00	QC9		✓			✓	✓
ES2026818-074	05-Aug-2020 00:00	QC10		✓			✓	✓
ES2026818-075	05-Aug-2020 00:00	QC11		✓			✓	✓

Matrix: **SOLID**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	SOLID - EA200B Asbestos Identification in Bulk Solids (Excluding
ES2026818-078	04-Aug-2020 00:00	STP15-3 ACM	✓
ES2026818-079	04-Aug-2020 00:00	STP15-5 ACM	✓

Matrix: **WATER**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	WATER - W-05 TRH/BTEXN/8 Metals
ES2026818-076	04-Aug-2020 00:00	RINSATE 04/08/2020	✓
ES2026818-077	05-Aug-2020 00:00	RINSATE 05/08/2020	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-12 OC/OP Pesticides
ES2026818-076	04-Aug-2020 00:00	RINSATE 04/08/2020	✓
ES2026818-077	05-Aug-2020 00:00	RINSATE 05/08/2020	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2026818**	Page	: 1 of 42
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 07-Aug-2020 08:30
Order number	: ----	Date Analysis Commenced	: 07-Aug-2020
C-O-C number	: 4	Issue Date	: 10-Aug-2020 16:56
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 79		
No. of samples analysed	: 43		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP15-1	STP15-2	STP15-3	STP15-4	STP15-5
			Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2026818-001	ES2026818-002	ES2026818-003	ES2026818-004	ES2026818-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.0	9.0	7.0	6.0	6.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	836	742	784	760	571
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.836	0.742	0.784	0.760	0.571
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	5	5	<5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	99	144	125	76	136
Copper	7440-50-8	5	mg/kg	7	6	7	9	7
Lead	7439-92-1	5	mg/kg	11	11	10	12	12
Nickel	7440-02-0	2	mg/kg	5	6	5	6	5
Zinc	7440-66-6	5	mg/kg	16	14	26	44	15
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.06
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-1	STP15-2	STP15-3	STP15-4	STP15-5
				Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-001	ES2026818-002	ES2026818-003	ES2026818-004	ES2026818-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	**0.19**	**0.52**	**0.37**	**0.07**
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	**0.19**	**0.45**	**0.32**	**0.07**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	**0.07**	**0.05**	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.11**	**0.33**	**0.21**	**0.13**	**0.41**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.11**	**0.33**	**0.21**	**0.13**	**0.47**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-1	STP15-2	STP15-3	STP15-4	STP15-5
				Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-001	ES2026818-002	ES2026818-003	ES2026818-004	ES2026818-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-1	STP15-2	STP15-3	STP15-4	STP15-5
				Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00	04-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-001	ES2026818-002	ES2026818-003	ES2026818-004	ES2026818-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**101**	**88.7**	**84.0**	**94.6**	**96.2**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**74.4**	**83.8**	**66.0**	**85.9**	**90.3**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**96.7**	**93.7**	**91.2**	**93.4**	**98.3**
2-Chlorophenol-D4	93951-73-6	0.5	%		**91.5**	**88.6**	**85.3**	**87.8**	**91.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**73.2**	**72.6**	**56.6**	**52.6**	**65.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**98.9**	**103**	**100**	**104**	**103**
Anthracene-d10	1719-06-8	0.5	%		**98.5**	**99.7**	**94.8**	**99.3**	**102**
4-Terphenyl-d14	1718-51-0	0.5	%		**93.0**	**92.2**	**87.2**	**91.9**	**93.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**93.2**	**95.3**	**93.8**	**97.6**	**94.8**
Toluene-D8	2037-26-5	0.2	%		**96.8**	**95.8**	**94.6**	**98.6**	**97.7**
4-Bromofluorobenzene	460-00-4	0.2	%		**97.0**	**98.8**	**97.2**	**101**	**98.2**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-6	QC17	V84	V86	V88
				Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-006	ES2026818-007	ES2026818-014	ES2026818-016	ES2026818-018
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		5.9	8.0	4.0	2.6	2.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No*	----	Yes	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	----	No	No	No
Asbestos Type	1332-21-4	-	--		Ch + Am	----	Ch + Am	-	-
Sample weight (dry)	----	0.01	g		783	----	81.2	112	120
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	----	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	----	No	No	No
Organic Fibre	----	0.1	g/kg		No	----	No	No	No
EA200N: Asbestos Quantification (non-NATA)									
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g		0.0197	----	----	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)		0.002	----	----	----	----
ø Weight Used for % Calculation	----	0.0001	kg		0.783	----	----	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g		<0.0004	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		6	6	38	6	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		96	123	50	160	77
Copper	7440-50-8	5	mg/kg		8	8	18	<5	6
Lead	7439-92-1	5	mg/kg		11	15	12	10	10
Nickel	7440-02-0	2	mg/kg		5	5	5	4	7
Zinc	7440-66-6	5	mg/kg		16	19	26	<5	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-6	QC17	V84	V86	V88
				Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-006	ES2026818-007	ES2026818-014	ES2026818-016	ES2026818-018
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.07**	**0.09**	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.07**	**0.09**	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.31**	**0.20**	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.31**	**0.20**	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-6	QC17	V84	V86	V88
				Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-006	ES2026818-007	ES2026818-014	ES2026818-016	ES2026818-018
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-6	QC17	V84	V86	V88
				Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-006	ES2026818-007	ES2026818-014	ES2026818-016	ES2026818-018
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**91.3**	**98.0**	**95.7**	**126**	**102**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**80.7**	**96.9**	**65.9**	**63.7**	**69.8**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**97.6**	**87.3**	**98.7**	**96.5**	**86.6**
2-Chlorophenol-D4	93951-73-6	0.5	%		**92.8**	**84.6**	**93.0**	**92.1**	**81.5**
2.4.6-Tribromophenol	118-79-6	0.5	%		**65.2**	**70.2**	**53.1**	**60.7**	**54.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**101**	**96.8**	**96.4**	**98.7**	**95.5**
Anthracene-d10	1719-06-8	0.5	%		**102**	**92.6**	**103**	**101**	**89.7**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.4**	**83.5**	**97.0**	**101**	**83.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.8**	**97.8**	**93.9**	**95.0**	**98.5**
Toluene-D8	2037-26-5	0.2	%		**98.4**	**100**	**94.7**	**94.6**	**102**
4-Bromofluorobenzene	460-00-4	0.2	%		**98.8**	**101**	**95.1**	**97.2**	**103**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V90	V92	V94	V96	V98
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-020	ES2026818-022	ES2026818-024	ES2026818-026	ES2026818-028
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		3.9	3.7	4.7	6.3	5.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		95.5	95.1	93.8	79.3	90.1
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		7	7	6	15	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		97	108	85	60	78
Copper	7440-50-8	5	mg/kg		10	9	8	15	7
Lead	7439-92-1	5	mg/kg		11	12	10	23	9
Nickel	7440-02-0	2	mg/kg		8	7	8	6	7
Zinc	7440-66-6	5	mg/kg		6	<5	<5	39	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V90	V92	V94	V96	V98
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-020	ES2026818-022	ES2026818-024	ES2026818-026	ES2026818-028
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V90	V92	V94	V96	V98
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-020	ES2026818-022	ES2026818-024	ES2026818-026	ES2026818-028
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V90	V92	V94	V96	V98
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-020	ES2026818-022	ES2026818-024	ES2026818-026	ES2026818-028
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**98.5**	**103**	**88.5**	**92.4**	**93.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**98.7**	**75.3**	**68.4**	**78.0**	**72.0**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**99.1**	**97.1**	**91.8**	**99.2**	**92.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**91.4**	**90.9**	**86.7**	**94.2**	**87.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**54.4**	**48.9**	**52.8**	**56.5**	**67.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**101**	**98.8**	**100**	**98.1**	**103**
Anthracene-d10	1719-06-8	0.5	%		**97.8**	**101**	**91.8**	**104**	**98.0**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.4**	**97.4**	**92.1**	**105**	**95.3**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**93.6**	**93.9**	**98.0**	**97.9**	**94.9**
Toluene-D8	2037-26-5	0.2	%		**97.8**	**94.9**	**97.0**	**97.1**	**94.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**98.6**	**96.4**	**100**	**99.3**	**95.5**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V100	V102	V104	V108	V110
			Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2026818-030	ES2026818-032	ES2026818-034	ES2026818-037	ES2026818-039
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.0	3.8	5.7	3.9	3.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	80.5	77.7	89.7	102	103
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	<5	5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	65	85	46	89	66
Copper	7440-50-8	5	mg/kg	9	6	5	8	10
Lead	7439-92-1	5	mg/kg	9	11	7	10	10
Nickel	7440-02-0	2	mg/kg	7	6	5	7	8
Zinc	7440-66-6	5	mg/kg	11	<5	<5	6	15
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.15
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.15
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.26
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V100	V102	V104	V108	V110
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-030	ES2026818-032	ES2026818-034	ES2026818-037	ES2026818-039
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.26**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V100	V102	V104	V108	V110
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-030	ES2026818-032	ES2026818-034	ES2026818-037	ES2026818-039
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V100	V102	V104	V108	V110
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-030	ES2026818-032	ES2026818-034	ES2026818-037	ES2026818-039
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**95.2**	**97.2**	**103**	**95.0**	**102**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**89.0**	**79.5**	**77.7**	**67.8**	**107**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**92.2**	**92.9**	**93.2**	**89.2**	**88.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**86.1**	**87.0**	**87.7**	**82.7**	**84.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**54.2**	**52.2**	**53.3**	**57.5**	**53.2**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**103**	**104**	**104**	**97.0**	**100**
Anthracene-d10	1719-06-8	0.5	%		**94.2**	**97.5**	**98.6**	**91.7**	**93.0**
4-Terphenyl-d14	1718-51-0	0.5	%		**92.5**	**95.4**	**95.5**	**88.3**	**91.5**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.7**	**95.8**	**93.7**	**94.0**	**97.3**
Toluene-D8	2037-26-5	0.2	%		**94.3**	**96.5**	**95.1**	**93.8**	**98.2**
4-Bromofluorobenzene	460-00-4	0.2	%		**94.0**	**97.0**	**97.4**	**96.0**	**100.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V112	V114	V116	V118	V120
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-041	ES2026818-043	ES2026818-045	ES2026818-047	ES2026818-049
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		2.9	2.6	1.4	2.7	<1.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		86.6	97.0	97.2	108	98.5
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		6	6	6	7	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		82	44	125	85	34
Copper	7440-50-8	5	mg/kg		9	10	9	10	7
Lead	7439-92-1	5	mg/kg		11	10	11	13	9
Nickel	7440-02-0	2	mg/kg		7	9	8	8	4
Zinc	7440-66-6	5	mg/kg		10	9	6	18	34
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		0.35	<0.05	0.07	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		0.35	<0.05	0.07	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		0.50	<0.05	0.09	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V112	V114	V116	V118	V120
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-041	ES2026818-043	ES2026818-045	ES2026818-047	ES2026818-049
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		**0.50**	<0.05	**0.09**	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V112	V114	V116	V118	V120
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-041	ES2026818-043	ES2026818-045	ES2026818-047	ES2026818-049
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V112	V114	V116	V118	V120
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-041	ES2026818-043	ES2026818-045	ES2026818-047	ES2026818-049
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**90.3**	**95.8**	**95.8**	**95.0**	**103**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**104**	**107**	**109**	**112**	**113**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**99.3**	**96.3**	**94.0**	**98.2**	**95.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		**94.5**	**89.9**	**89.8**	**94.0**	**89.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**59.6**	**51.5**	**50.8**	**50.5**	**49.2**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**103**	**103**	**96.8**	**100**	**103**
Anthracene-d10	1719-06-8	0.5	%		**101**	**101**	**93.9**	**102**	**94.9**
4-Terphenyl-d14	1718-51-0	0.5	%		**86.3**	**86.8**	**84.8**	**88.5**	**86.9**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**98.6**	**107**	**101**	**105**	**104**
Toluene-D8	2037-26-5	0.2	%		**113**	**116**	**109**	**111**	**114**
4-Bromofluorobenzene	460-00-4	0.2	%		**107**	**114**	**106**	**110**	**113**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V122	V124	V126	V128	V130
			Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2026818-051	ES2026818-053	ES2026818-055	ES2026818-057	ES2026818-059
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.5	2.2	1.6	1.4	2.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	95.7	102	116	77.0	76.6
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	5	9	6	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	84	138	92	90	71
Copper	7440-50-8	5	mg/kg	8	8	9	10	8
Lead	7439-92-1	5	mg/kg	11	12	13	12	10
Nickel	7440-02-0	2	mg/kg	8	7	7	8	7
Zinc	7440-66-6	5	mg/kg	<5	12	101	10	13
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	0.21	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	0.21	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	0.06	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V122	V124	V126	V128	V130
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-051	ES2026818-053	ES2026818-055	ES2026818-057	ES2026818-059
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	**0.06**	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V122	V124	V126	V128	V130
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-051	ES2026818-053	ES2026818-055	ES2026818-057	ES2026818-059
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V122	V124	V126	V128	V130
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-051	ES2026818-053	ES2026818-055	ES2026818-057	ES2026818-059
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**107**	**102**	**92.5**	**97.4**	**93.8**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**109**	**108**	**95.4**	**93.8**	**78.8**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**95.2**	**96.8**	**95.4**	**96.3**	**90.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**88.7**	**91.9**	**88.9**	**90.0**	**88.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**49.2**	**52.2**	**48.0**	**48.2**	**51.5**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**102**	**102**	**103**	**95.4**	**104**
Anthracene-d10	1719-06-8	0.5	%		**97.1**	**98.8**	**98.9**	**100**	**96.6**
4-Terphenyl-d14	1718-51-0	0.5	%		**86.4**	**87.8**	**88.4**	**88.6**	**87.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**102**	**104**	**106**	**104**	**110**
Toluene-D8	2037-26-5	0.2	%		**110**	**112**	**112**	**109**	**118**
4-Bromofluorobenzene	460-00-4	0.2	%		**104**	**106**	**108**	**105**	**114**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V132	V134	V136	V138	V140
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-061	ES2026818-063	ES2026818-065	ES2026818-067	ES2026818-069
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		<1.0	4.2	4.7	1.3	6.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		109	85.6	84.5	94.2	84.5
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		5	6	<5	5	9
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		94	86	21	68	144
Copper	7440-50-8	5	mg/kg		8	8	<5	6	7
Lead	7439-92-1	5	mg/kg		11	11	5	8	13
Nickel	7440-02-0	2	mg/kg		6	8	4	5	6
Zinc	7440-66-6	5	mg/kg		8	<5	8	88	23
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V132	V134	V136	V138	V140
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-061	ES2026818-063	ES2026818-065	ES2026818-067	ES2026818-069
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V132	V134	V136	V138	V140
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-061	ES2026818-063	ES2026818-065	ES2026818-067	ES2026818-069
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V132	V134	V136	V138	V140
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026818-061	ES2026818-063	ES2026818-065	ES2026818-067	ES2026818-069
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**93.8**	**90.6**	**95.0**	**92.2**	**97.9**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**99.4**	**82.4**	**99.3**	**84.4**	**106**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**94.9**	**91.3**	**91.7**	**88.6**	**94.9**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.7**	**85.3**	**89.2**	**83.4**	**89.5**
2.4.6-Tribromophenol	118-79-6	0.5	%		**49.9**	**51.7**	**48.4**	**53.8**	**50.2**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**99.7**	**100**	**102**	**101**	**104**
Anthracene-d10	1719-06-8	0.5	%		**101**	**94.5**	**92.6**	**90.0**	**98.6**
4-Terphenyl-d14	1718-51-0	0.5	%		**88.2**	**85.0**	**87.9**	**83.5**	**92.0**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**99.6**	**108**	**102**	**114**	**103**
Toluene-D8	2037-26-5	0.2	%		**106**	**109**	**103**	**115**	**106**
4-Bromofluorobenzene	460-00-4	0.2	%		**104**	**107**	**99.8**	**112**	**102**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V142	QC9	QC10	QC11	----
			Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	----
Compound	CAS Number	LOR	Unit	ES2026818-071	ES2026818-073	ES2026818-074	ES2026818-075	--------
				Result	Result	Result	Result	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.3	2.4	2.9	2.0	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	----	----
Asbestos Type	1332-21-4	-	--	-	----	----	----	----
Sample weight (dry)	----	0.01	g	87.4	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	----	----
Organic Fibre	----	0.1	g/kg	No	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	5	5	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg	64	137	81	64	----
Copper	7440-50-8	5	mg/kg	8	8	9	8	----
Lead	7439-92-1	5	mg/kg	9	11	10	9	----
Nickel	7440-02-0	2	mg/kg	7	7	7	7	----
Zinc	7440-66-6	5	mg/kg	6	<5	15	16	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	0.11	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.11	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.17	0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V142	QC9	QC10	QC11	----
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	----
Compound	CAS Number	LOR	Unit		ES2026818-071	ES2026818-073	ES2026818-074	ES2026818-075	--------
					Result	Result	Result	Result	----
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	**0.17**	**0.05**	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V142	QC9	QC10	QC11	----
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	----
Compound	CAS Number	LOR	Unit		ES2026818-071	ES2026818-073	ES2026818-074	ES2026818-075	--------
					Result	Result	Result	Result	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V142	QC9	QC10	QC11	----
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	----
Compound	CAS Number	LOR	Unit		ES2026818-071	ES2026818-073	ES2026818-074	ES2026818-075	--------
					Result	Result	Result	Result	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**101**	**111**	**97.4**	**96.6**	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**104**	**120**	**107**	**107**	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**92.2**	**92.6**	**91.3**	**91.6**	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**88.4**	**89.1**	**85.7**	**87.4**	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**61.1**	**58.5**	**52.5**	**57.7**	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**102**	**102**	**102**	**103**	----
Anthracene-d10	1719-06-8	0.5	%		**93.3**	**90.6**	**95.2**	**96.4**	----
4-Terphenyl-d14	1718-51-0	0.5	%		**89.8**	**89.8**	**90.2**	**88.5**	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**106**	**109**	**104**	**110**	----
Toluene-D8	2037-26-5	0.2	%		**110**	**108**	**107**	**109**	----
4-Bromofluorobenzene	460-00-4	0.2	%		**105**	**103**	**102**	**107**	----

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)				Client sample ID	STP15-3 ACM	STP15-5 ACM	----	----	----
				Client sampling date / time	04-Aug-2020 00:00	04-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2026818-078	ES2026818-079	--------	--------	--------
					Result	Result	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		**Yes**	**Yes**	----	----	----
Asbestos Type	1332-21-4	-	--		**Ch**	**Ch + Am**	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres		**N/A**	**N/A**	----	----	----
Sample weight (dry)	----	0.01	g		**19.4**	**12.4**	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	----	----	----
Organic Fibre	----	0.1	g/kg		**No**	**No**	----	----	----
APPROVED IDENTIFIER:	----	-	--		**A. SMYLIE**	**A. SMYLIE**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	RINSATE 04/08/2020	RINSATE 05/08/2020	----	----	----
			Client sampling date / time	04-Aug-2020 00:00	05-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2026818-076	ES2026818-077	--------	--------	--------
				Result	Result	----	----	----
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	<0.5	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	<0.5	----	----	----
beta-BHC	319-85-7	0.5	µg/L	<0.5	<0.5	----	----	----
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<0.5	----	----	----
delta-BHC	319-86-8	0.5	µg/L	<0.5	<0.5	----	----	----
Heptachlor	76-44-8	0.5	µg/L	<0.5	<0.5	----	----	----
Aldrin	309-00-2	0.5	µg/L	<0.5	<0.5	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	<0.5	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	<0.5	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	<0.5	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	<0.5	----	----	----
Dieldrin	60-57-1	0.5	µg/L	<0.5	<0.5	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L	<0.5	<0.5	----	----	----
Endrin	72-20-8	0.5	µg/L	<0.5	<0.5	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	<0.5	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L	<0.5	<0.5	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	<0.5	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	<0.5	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L	<2.0	<2.0	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	----	----	----
Methoxychlor	72-43-5	2.0	µg/L	<2.0	<2.0	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	<0.5	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L	<0.5	<0.5	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE 04/08/2020	RINSATE 05/08/2020	----	----	----
				Client sampling date / time	04-Aug-2020 00:00	05-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2026818-076	ES2026818-077	--------	--------	--------
					Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.5	µg/L		<0.5	<0.5	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	<0.5	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	<0.5	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	<2.0	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	<0.5	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	<0.5	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	<0.5	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	<2.0	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	<0.5	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	<0.5	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	<0.5	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	<2.0	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	<0.5	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	<0.5	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	<0.5	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	<0.5	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	<0.5	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	<0.5	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	<0.5	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	<100	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	<20	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE 04/08/2020	RINSATE 05/08/2020	----	----	----
				Client sampling date / time	04-Aug-2020 00:00	05-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2026818-076	ES2026818-077	--------	--------	--------
					Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	<100	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	----	----
Toluene	108-88-3	2	µg/L		<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	<2	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**74.4**	**75.9**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**72.0**	**70.1**	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**112**	**119**	----	----	----
Toluene-D8	2037-26-5	2	%		**112**	**107**	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**105**	**102**	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP15-1 - 04-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-2 - 04-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-3 - 04-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-4 - 04-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-5 - 04-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-6 - 04-Aug-2020 00:00	Mid brown soil containing two fragments of fibrous asbestos fibre board approximately 10x5x1mm.
EA200: Description	V84 - 05-Aug-2020 00:00	Mid brown soil containing several fragments of fibrous asbestos fibre board approximately 10x5x1mm.
EA200: Description	V86 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V88 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V90 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V92 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V94 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V96 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V98 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V100 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V102 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V104 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V108 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V110 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V112 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V114 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V116 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V118 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V120 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V122 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V124 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V126 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V128 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V130 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V132 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V134 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V136 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V138 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V140 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V142 - 05-Aug-2020 00:00	Mid brown soil.

Sub-Matrix: **SOLID**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		

Sub-Matrix: **SOLID**

Method: Compound	*Client sample ID - Client sampling date / time*	*Analytical Results*
EA200: Description	STP15-3ACM - 04-Aug-2020 00:00	One piece of asbestos cement sheeting approximately 50x50x5mm.
EA200: Description	STP15-5ACM - 04-Aug-2020 00:00	Two pieces of asbestos cement sheeting approximately 70x50x5mm.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2026818**	Page	: 1 of 23
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 07-Aug-2020
Order number	: ----	Date Analysis Commenced	: 07-Aug-2020
C-O-C number	: 4	Issue Date	: 10-Aug-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 79		
No. of samples analysed	: 43		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3188100)									
ES2026818-001	STP15-1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	99	86	13.9	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	5	6	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	10	38.3	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	11	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	16	20	27.0	No Limit
ES2026818-018	V88	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	77	72	7.05	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	7	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	6	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	8	16.2	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3188102)									
ES2026818-039	V110	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	66	60	8.04	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	8	8	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	10	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	15	16	0.00	No Limit
ES2026818-059	V130	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	71	81	12.7	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	6	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3188102) - continued									
ES2026818-059	V130	EG005T: Arsenic	7440-38-2	5	mg/kg	5	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	8	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	13	13	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3188103)									
ES2026818-002	STP15-2	EA055: Moisture Content	----	0.1	%	9.0	8.4	7.37	No Limit
ES2026818-024	V94	EA055: Moisture Content	----	0.1	%	4.7	5.2	9.71	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3188104)									
ES2026818-043	V114	EA055: Moisture Content	----	0.1	%	2.6	1.7	38.9	No Limit
ES2026818-065	V136	EA055: Moisture Content	----	0.1	%	4.7	5.0	5.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3188099)									
ES2026818-001	STP15-1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2026818-018	V88	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3188101)									
ES2026818-039	V110	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2026818-059	V130	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3186808)									
ES2026818-001	STP15-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.11	0.10	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2026818-020	V90	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3186808) - continued									
ES2026818-020	V90	EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3186811)									
ES2026818-041	V112	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.35	0.36	4.80	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.50	0.51	3.26	0% - 50%
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3186811) - continued									
ES2026818-041	V112	EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2026818-061	V132	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3186808)									
ES2026818-001	STP15-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3186808) - continued									
ES2026818-001	STP15-1	EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2026818-020	V90	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3186811)									
ES2026818-041	V112	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3186811) - continued									
ES2026818-041	V112	EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2026818-061	V132	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3186807)									
ES2026818-001	STP15-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3186807) - continued									
ES2026818-001	STP15-1	EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2026818-020	V90	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3186810)									
ES2026818-041	V112	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3186810) - continued									
ES2026818-041	V112	EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2026818-061	V132	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3186806)									
ES2026818-001	STP15-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2026818-020	V90	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3186809)									
ES2026818-041	V112	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2026818-061	V132	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187855)									
ES2026818-001	STP15-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187855) - continued									
ES2026818-020	V90	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187856)									
ES2026818-041	V112	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2026818-061	V132	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3186806)									
ES2026818-001	STP15-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2026818-020	V90	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3186809)									
ES2026818-041	V112	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2026818-061	V132	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3187855)									
ES2026818-001	STP15-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2026818-020	V90	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3187856)									
ES2026818-041	V112	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2026818-061	V132	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3187855)									
ES2026818-001	STP15-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2026818-020	V90	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 3187856)									
ES2026818-041	V112	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2026818-061	V132	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3187313)									
ES2026818-076	RINSATE 04/08/2020	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 3187314)									
ES2026818-077	RINSATE 05/08/2020	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187675)									
ES2027581-003	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
ES2024748-002	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3187675)									
ES2027581-003	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
ES2024748-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3187675)									
ES2027581-003	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3187675) - continued									
ES2027581-003	Anonymous	EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit
ES2024748-002	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188100)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	112	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	84.8	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	130	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	117	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	115	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	115	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	103	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188102)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	111	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	101	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	128	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	118	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	119	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	119	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	109	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3188099)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	95.9	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3188101)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	78.1	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3186808)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	92.1	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	109	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	106	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.3	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.1	67.0	123

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3186808) - continued								
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.9	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.4	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	93.3	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	96.0	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	88.0	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3186811)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.8	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	103	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	99.9	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	100	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	101	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.6	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	102	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	100	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	101	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	100	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	99.0	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.0	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	105	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	95.1	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.0	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	101	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	98.5	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	96.6	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3186808)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	114	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	108	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	72.8	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.7	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	89.7	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	82.3	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.4	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.7	69.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3186808) - continued								
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	81.0	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	76.4	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.0	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	71.2	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3186811)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.2	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	# 53.9	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.7	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.7	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	103	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	95.4	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	97.3	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	103	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	93.7	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	97.8	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.0	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	101	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	98.2	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	102	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	71.4	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3186807)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	98.1	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	94.6	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	94.9	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	99.5	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	99.0	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	97.5	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	94.1	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	98.4	74.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3186807) - continued								
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	89.1	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	96.6	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	88.7	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	93.6	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	94.3	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	83.7	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	86.1	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	89.6	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3186810)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	89.6	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	97.5	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	94.5	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	96.5	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	95.4	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	93.9	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	98.0	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	97.5	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	90.6	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	98.3	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	91.9	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	90.7	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	91.8	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	87.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	88.1	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	87.4	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3186806)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	93.4	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	93.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	97.9	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3186809)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	93.0	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	92.6	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	91.2	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187855)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	106	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187856)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187856) - continued								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	78.9	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3186806)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	98.0	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	91.7	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	117	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3186809)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	97.4	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	97.2	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	84.0	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187855)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	107	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187856)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	77.4	68.4	128
EP080: BTEXN (QCLot: 3187855)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	102	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	98.5	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	98.6	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	98.4	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	100.0	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	90.7	63.0	119
EP080: BTEXN (QCLot: 3187856)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	100	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	97.5	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	102	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	103	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	104	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	92.0	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3187313)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	91.8	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	90.8	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	91.4	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	89.0	81.0	111

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3187313) - continued								
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	88.6	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	85.4	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	89.0	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3187314)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	93.0	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3186624)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	82.2	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	81.0	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	85.9	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	81.8	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	85.9	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	104	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	96.7	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	81.4	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	79.8	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	83.0	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	79.2	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	78.8	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	79.8	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	88.3	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	80.2	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	78.7	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	102	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	89.9	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	92.7	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	88.7	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	93.1	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3186624)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	89.4	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	103	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	46.5	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	89.8	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	81.4	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	86.1	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	77.0	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	81.1	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	78.4	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	81.1	75.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3186624) - continued								
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	73.8	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	77.9	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	92.9	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	77.8	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	77.7	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	80.6	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	78.2	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	91.4	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	102	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3186625)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	85.1	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	87.0	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	91.5	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187675)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	99.3	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3186625)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	90.7	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	79.6	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	80.6	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187675)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	98.9	75.0	127
EP080: BTEXN (QCLot: 3187675)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	109	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	107	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	100	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	105	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	103	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	104	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188100)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188100) - continued							
ES2026818-001	STP15-1	EG005T: Arsenic	7440-38-2	50 mg/kg	77.7	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	96.4	70.0	130
		EG005T: Chromium	7440-47-3	60 mg/kg	121	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	103	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	95.8	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	97.8	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	93.8	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188102)							
ES2026818-039	V110	EG005T: Arsenic	7440-38-2	50 mg/kg	86.3	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	106	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	70.0	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	110	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	106	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	108	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	106	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3188099)							
ES2026818-001	STP15-1	EG035T: Mercury	7439-97-6	5 mg/kg	77.7	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3188101)							
ES2026818-039	V110	EG035T: Mercury	7439-97-6	5 mg/kg	72.5	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3186808)							
ES2026818-001	STP15-1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	87.7	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	97.6	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	87.3	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	104	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	112	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	90.0	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3186811)							
ES2026818-041	V112	EP068: gamma-BHC	58-89-9	0.5 mg/kg	101	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	90.8	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	90.6	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	75.9	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	77.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	76.0	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3186808)							
ES2026818-001	STP15-1	EP068: Diazinon	333-41-5	0.5 mg/kg	110	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	119	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	113	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3186808) - continued							
ES2026818-001	STP15-1	EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	86.6	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	86.0	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3186811)							
ES2026818-041	V112	EP068: Diazinon	333-41-5	0.5 mg/kg	90.5	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	90.5	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	90.9	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	90.2	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	96.2	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3186807)							
ES2026818-001	STP15-1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	93.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	98.1	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3186810)							
ES2026818-041	V112	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	102	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	101	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3186806)							
ES2026818-001	STP15-1	EP071: C10 - C14 Fraction	----	523 mg/kg	84.4	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	104	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	127	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3186809)							
ES2026818-041	V112	EP071: C10 - C14 Fraction	----	523 mg/kg	84.2	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	87.2	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	120	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187855)							
ES2026818-001	STP15-1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	110	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187856)							
ES2026818-041	V112	EP080: C6 - C9 Fraction	----	32.5 mg/kg	78.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3186806)							
ES2026818-001	STP15-1	EP071: >C10 - C16 Fraction	----	860 mg/kg	88.5	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	120	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	110	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3186809)							
ES2026818-041	V112	EP071: >C10 - C16 Fraction	----	860 mg/kg	91.1	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	100	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	99.8	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187855)							
ES2026818-001	STP15-1						

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187855) - continued							
ES2026818-001	STP15-1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	110	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187856)							
ES2026818-041	V112	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	74.7	70.0	130
EP080: BTEXN (QCLot: 3187855)							
ES2026818-001	STP15-1	EP080: Benzene	71-43-2	2.5 mg/kg	102	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	96.8	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	99.4	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	98.9	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	98.6	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	90.0	70.0	130
EP080: BTEXN (QCLot: 3187856)							
ES2026818-041	V112	EP080: Benzene	71-43-2	2.5 mg/kg	104	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	103	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	108	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	108	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	106	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	96.2	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3187313)							
ES2026818-077	RINSATE 05/08/2020	EG020A-F: Arsenic	7440-38-2	1 mg/L	91.8	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	96.7	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	81.6	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	96.4	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	99.9	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	94.4	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	93.7	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 3187314)							
ES2026818-076	RINSATE 04/08/2020	EG035F: Mercury	7439-97-6	0.01 mg/L	97.8	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187675)							
ES2024748-002	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	109	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187675)							
ES2024748-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	106	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080: BTEXN (QCLot: 3187675)							
ES2024748-002	Anonymous	EP080: Benzene	71-43-2	25 µg/L	109	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	103	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	102	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	102	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	104	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	94.3	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2026818**	Page	: 1 of 16
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 07-Aug-2020
Site	: ----	Issue Date	: 10-Aug-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty	No. of samples received	: 79
Order number	: ----	No. of samples analysed	: 43

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Laboratory Control outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP068B: Organophosphorus Pesticides (OP)	QC-3186811-002	----	**Monocrotophos**	6923-22-4	53.9 %	54.0-126%	**Recovery less than lower control limit**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Pesticides by GCMS	0	4	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	4	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Pesticides by GCMS	0	4	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	4	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17	**04-Aug-2020**	**----**	----	----	**08-Aug-2020**	18-Aug-2020	✓
Soil Glass Jar - Unpreserved (EA055)							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C) - Continued								
V84,	V86,	**05-Aug-2020**	**----**	----	----	**08-Aug-2020**	19-Aug-2020	✓
V88,	V90,							
V92,	V94,							
V96,	V98,							
V100,	V102,							
V104,	V108,							
V110,	V112,							
V114,	V116,							
V118,	V120,							
V122,	V124,							
V126,	V128,							
V130,	V132,							
V134,	V136,							
V138,	V140,							
V142,	QC9,							
QC10,	QC11							
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
V84,	V86,	**05-Aug-2020**	**----**	----	----	**08-Aug-2020**	01-Feb-2021	✓
V88,	V90,							
V92,	V94,							
V96,	V98,							
V100,	V102,							
V104,	V108,							
V110,	V112,							
V114,	V116,							
V118,	V120,							
V122,	V124,							
V126,	V132,							
V134,	V136,							
V138,	V140,							
V142								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
STP15-1,	STP15-2,	**04-Aug-2020**	**----**	----	----	**08-Aug-2020**	31-Jan-2021	✓
STP15-3,	STP15-4,							
STP15-5,	STP15-6							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
V128,	V130	**05-Aug-2020**	**----**	----	----	**08-Aug-2020**	01-Feb-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200N: Asbestos Quantification (non-NATA)								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)								
STP15-1,	STP15-2,	**04-Aug-2020**	**----**	----	----	**08-Aug-2020**	31-Jan-2021	✓
STP15-3,	STP15-4,							
STP15-5,	STP15-6							
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
STP15-1,	STP15-2,	**04-Aug-2020**	**08-Aug-2020**	31-Jan-2021	✓	**10-Aug-2020**	31-Jan-2021	✓
STP15-3,	STP15-4,							
STP15-5,	STP15-6,							
QC17								
Soil Glass Jar - Unpreserved (EG005T)								
V84,	V86,	**05-Aug-2020**	**08-Aug-2020**	01-Feb-2021	✓	**10-Aug-2020**	01-Feb-2021	✓
V88,	V90,							
V92,	V94,							
V96,	V98,							
V100,	V102,							
V104,	V108,							
V110,	V112,							
V114,	V116,							
V118,	V120,							
V122,	V124,							
V126,	V128,							
V130,	V132,							
V134,	V136,							
V138,	V140,							
V142,	QC9,							
QC10,	QC11							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17	**04-Aug-2020**	**08-Aug-2020**	01-Sep-2020	✓	**10-Aug-2020**	01-Sep-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
V84, V86, V88, V90, V92, V94, V96, V98, V100, V102, V104, V108, V110, V112, V114, V116, V118, V120, V122, V124, V126, V128, V130, V132, V134, V136, V138, V140, V142, QC9, QC10, QC11	**05-Aug-2020**	**08-Aug-2020**	02-Sep-2020	✓	**10-Aug-2020**	02-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17	**04-Aug-2020**	**08-Aug-2020**	18-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V84, V86, V88, V90, V92, V94, V96, V98, V100, V102, V104, V108, V110, V112, V114, V116, V118, V120, V122, V124, V126, V128, V130, V132, V134, V136, V138, V140, V142, QC9, QC10, QC11	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17	**04-Aug-2020**	**08-Aug-2020**	18-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V84, V86, V88, V90, V92, V94, V96, V98, V100, V102, V104, V108, V110, V112, V114, V116, V118, V120, V122, V124, V126, V128, V130, V132, V134, V136, V138, V140, V142, QC9, QC10, QC11	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17	**04-Aug-2020**	**08-Aug-2020**	18-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
V84, V86, V88, V90, V92, V94, V96, V98, V100, V102, V104, V108, V110, V112, V114, V116, V118, V120, V122, V124, V126, V128, V130, V132, V134, V136, V138, V140, V142, QC9, QC10, QC11	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17	**04-Aug-2020**	**08-Aug-2020**	18-Aug-2020	✓	**08-Aug-2020**	18-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V84, V86, V88, V90, V92, V94, V96, V98, V100, V102, V104, V108, V110, V112, V114, V116, V118, V120, V122, V124, V126, V128, V130, V132, V134, V136, V138, V140, V142, QC9, QC10, QC11	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	19-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17	**04-Aug-2020**	**08-Aug-2020**	18-Aug-2020	✓	**08-Aug-2020**	18-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V84, V86, V88, V90, V92, V94, V96, V98, V100, V102, V104, V108, V110, V112, V114, V116, V118, V120, V122, V124, V126, V128, V130, V132, V134, V136, V138, V140, V142, QC9, QC10, QC11	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	19-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP15-1, STP15-2, STP15-3, STP15-4, STP15-5, STP15-6, QC17	**04-Aug-2020**	**08-Aug-2020**	18-Aug-2020	✓	**08-Aug-2020**	18-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V84, V86, V88, V90, V92, V94, V96, V98, V100, V102, V104, V108, V110, V112, V114, V116, V118, V120, V122, V124, V126, V128, V130, V132, V134, V136, V138, V140, V142, QC9, QC10, QC11	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	19-Aug-2020	✓

Matrix: **SOLID**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP15-3 - ACM, STP15-5 - ACM	**04-Aug-2020**	**----**	----	----	**08-Aug-2020**	31-Jan-2021	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-F)							
RINSATE - 04/08/2020	**04-Aug-2020**	**----**	----	----	**07-Aug-2020**	31-Jan-2021	✓
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-F)							
RINSATE - 05/08/2020	**05-Aug-2020**	**----**	----	----	**07-Aug-2020**	01-Feb-2021	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035F) RINSATE - 04/08/2020	**04-Aug-2020**	**----**	----	----	**10-Aug-2020**	18-Aug-2020	✓
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035F) RINSATE - 05/08/2020	**05-Aug-2020**	**----**	----	----	**10-Aug-2020**	19-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068) RINSATE - 04/08/2020	**04-Aug-2020**	**07-Aug-2020**	11-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
Amber Glass Bottle - Unpreserved (EP068) RINSATE - 05/08/2020	**05-Aug-2020**	**07-Aug-2020**	12-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068) RINSATE - 04/08/2020	**04-Aug-2020**	**07-Aug-2020**	11-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
Amber Glass Bottle - Unpreserved (EP068) RINSATE - 05/08/2020	**05-Aug-2020**	**07-Aug-2020**	12-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071) RINSATE - 04/08/2020	**04-Aug-2020**	**07-Aug-2020**	11-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
Amber Glass Bottle - Unpreserved (EP071) RINSATE - 05/08/2020	**05-Aug-2020**	**07-Aug-2020**	12-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080) RINSATE - 04/08/2020	**04-Aug-2020**	**07-Aug-2020**	18-Aug-2020	✓	**07-Aug-2020**	18-Aug-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080) RINSATE - 05/08/2020	**05-Aug-2020**	**07-Aug-2020**	19-Aug-2020	✓	**07-Aug-2020**	19-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071) RINSATE - 04/08/2020	**04-Aug-2020**	**07-Aug-2020**	11-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
Amber Glass Bottle - Unpreserved (EP071) RINSATE - 05/08/2020	**05-Aug-2020**	**07-Aug-2020**	12-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080) RINSATE - 04/08/2020	**04-Aug-2020**	**07-Aug-2020**	18-Aug-2020	✓	**07-Aug-2020**	18-Aug-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080) RINSATE - 05/08/2020	**05-Aug-2020**	**07-Aug-2020**	19-Aug-2020	✓	**07-Aug-2020**	19-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080) RINSATE - 04/08/2020	**04-Aug-2020**	**07-Aug-2020**	18-Aug-2020	✓	**07-Aug-2020**	18-Aug-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080) RINSATE - 05/08/2020	**05-Aug-2020**	**07-Aug-2020**	19-Aug-2020	✓	**07-Aug-2020**	19-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	4	39	10.26	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	4	39	10.26	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	39	10.26	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	39	10.26	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	39	5.13	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	1	3	33.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	4	25.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	4	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
TRH - Semivolatile Fraction	EP071	0	4	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	4	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	4	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Asbestos Identification in Bulk Solids	EA200	SOLID	In house: Referenced to AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

10.8. prelim
11.8. Final

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Sarah Doherty

PM CONTACT No: 0417 647 498

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No EA200/EA200F for any of the QC samples

Environmental Division Sydney

Work Order Reference

ES2026823

Telephone : + 61-2-8784 8555

PROJECT OFFICE: ☐ ☐ ☐ ☐ ☐ ☒ ☐ ☐ ☐ ☐ ☐

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch

SAMPLER CONTACT No:

Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com; j

Turnaround Time (TAT): ☐ Standard TAT ☒ Non Standard or Urgent TAT

Required TAT: 1 day

COC Number: 1 of 1

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Characterisation (P-22)	TCLP Leachate (EN33)	ASLP Leachate (EN60)	Leachable As, Cr (EG020C)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	STP16-1	5/08/2020	S	1 x bag, 1 x jar	x									
2	STP16-2	5/08/2020	S	1 x bag, 1 x jar	x									
3	STP16-3	5/08/2020	S	1 x bag, 1 x jar	x									
4	STP17-1	5/08/2020	S	1 x bag, 1 x jar	x									
5	STP17-2	5/08/2020	S	1 x bag, 1 x jar	x									
6	STP17-3	5/08/2020	S	1 x bag, 1 x jar	x									
7	STP17-4	5/08/2020	S	1 x bag, 1 x jar	x									suspected ACM fragment included in soil sample
8	STP17-5	5/08/2020	S	1 x bag, 1 x jar	x									
9	RINSATE	6/08/2020	W	4 x bottles								x		
10	V106	6/08/2020	S	1 x bag, 1 x jar		x								
11	V144	6/08/2020	S	1 x bag, 1 x jar		x								
12	V145	5/08/2020	S	1 x bag, 1 x jar										
13	V146	5/08/2020	S	1 x bag, 1 x jar		x								
14	V147	5/08/2020	S	1 x bag, 1 x jar										
15	V148	5/08/2020	S	1 x bag, 1 x jar		x								

Subcon / Forward Lab / Split WO

Lab Analysis: Newcastle

Originated By Date: Asbestos

Relinquished By Date:

Courier Courier:

WO No: ES2026823

Attach By PO Internal Sheet:

TAT

SLR

| | | |

SLR

36	V169	6/08/2020	S	1 x bag, 1 x jar									
37	V170	6/08/2020	S	1 x bag, 1 x jar		x							
38	V171	6/08/2020	S	1 x bag, 1 x jar									
39	V172	6/08/2020	S	1 x bag, 1 x jar		x							
40	V173	6/08/2020	S	1 x bag, 1 x jar									
41	V174	6/08/2020	S	1 x bag, 1 x jar		x							
42	V175	6/08/2020	S	1 x bag, 1 x jar									
43	QC12	5/08/2020	S	1 x jar		x							
44	QC13	6/08/2020	S	1 x jar		x							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign ✓ Kim_ALS	Date / Time 07.08.20 8.30 am
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time

Temperature Received:

45 STP17-S S (solid) 1 x bag

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2026823**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 4
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		

Dates

Date Samples Received	: 07-Aug-2020 08:30	Issue Date	: 07-Aug-2020
Client Requested Due Date	: 10-Aug-2020	Scheduled Reporting Date	: **11-Aug-2020**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: 3	Temperature	: 23.4' C - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 45 / 29

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **The final report will be completed by the scheduled reporting date listed in this SRN. A Preliminary report will be available on 10/08/20 (for Asbetos only) with the exception of the rest of analysis.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method / Client sample ID	Sample Container Received	Preferred Sample Container for Analysis
Dissolved Mercury by FIMS : EG035F		
RINSATE	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
Dissolved Metals by ICP-MS - Suite A : EG020A-F		
RINSATE	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2026823-001	05-Aug-2020 00:00	STP16-1	✓	✓		✓	✓
ES2026823-002	05-Aug-2020 00:00	STP16-2	✓	✓		✓	✓
ES2026823-003	05-Aug-2020 00:00	STP16-3	✓	✓		✓	✓
ES2026823-004	05-Aug-2020 00:00	STP17-1	✓	✓		✓	✓
ES2026823-005	05-Aug-2020 00:00	STP17-2	✓	✓		✓	✓
ES2026823-006	05-Aug-2020 00:00	STP17-3	✓	✓		✓	✓
ES2026823-007	05-Aug-2020 00:00	STP17-4	✓	✓		✓	✓
ES2026823-008	05-Aug-2020 00:00	STP17-5	✓	✓		✓	✓
ES2026823-010	06-Aug-2020 00:00	V106	✓		✓	✓	✓
ES2026823-011	06-Aug-2020 00:00	V144	✓		✓	✓	✓
ES2026823-013	05-Aug-2020 00:00	V146	✓		✓	✓	✓
ES2026823-015	05-Aug-2020 00:00	V148	✓		✓	✓	✓
ES2026823-017	05-Aug-2020 00:00	V150	✓		✓	✓	✓
ES2026823-019	05-Aug-2020 00:00	V152	✓		✓	✓	✓
ES2026823-021	05-Aug-2020 00:00	V154	✓		✓	✓	✓
ES2026823-023	05-Aug-2020 00:00	V156	✓		✓	✓	✓
ES2026823-025	05-Aug-2020 00:00	V158	✓		✓	✓	✓
ES2026823-027	05-Aug-2020 00:00	V160	✓		✓	✓	✓
ES2026823-029	05-Aug-2020 00:00	V162	✓		✓	✓	✓
ES2026823-031	06-Aug-2020 00:00	V164	✓		✓	✓	✓
ES2026823-033	06-Aug-2020 00:00	V166	✓		✓	✓	✓
ES2026823-035	06-Aug-2020 00:00	V168	✓		✓	✓	✓
ES2026823-037	06-Aug-2020 00:00	V170	✓		✓	✓	✓
ES2026823-039	06-Aug-2020 00:00	V172	✓		✓	✓	✓
ES2026823-041	06-Aug-2020 00:00	V174	✓		✓	✓	✓
ES2026823-043	05-Aug-2020 00:00	QC12	✓			✓	✓
ES2026823-044	06-Aug-2020 00:00	QC13	✓			✓	✓

Matrix: **SOIL**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	(On Hold) SOIL No analysis requested
ES2026823-012	05-Aug-2020 00:00	V145	✓
ES2026823-014	05-Aug-2020 00:00	V147	✓
ES2026823-016	05-Aug-2020 00:00	V149	✓
ES2026823-018	05-Aug-2020 00:00	V151	✓
ES2026823-020	05-Aug-2020 00:00	V153	✓
ES2026823-022	06-Aug-2020 00:00	V155	✓
ES2026823-024	05-Aug-2020 00:00	V157	✓
ES2026823-026	05-Aug-2020 00:00	V159	✓
ES2026823-028	05-Aug-2020 00:00	V161	✓
ES2026823-030	06-Aug-2020 00:00	V163	✓
ES2026823-032	06-Aug-2020 00:00	V165	✓
ES2026823-034	06-Aug-2020 00:00	V167	✓
ES2026823-036	06-Aug-2020 00:00	V169	✓
ES2026823-038	06-Aug-2020 00:00	V171	✓
ES2026823-040	06-Aug-2020 00:00	V173	✓
ES2026823-042	06-Aug-2020 00:00	V175	✓

Matrix: **SOLID**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	SOLID - EA200B Asbestos Identification in Bulk Solids (Excluding
ES2026823-045	05-Aug-2020 00:00	STP17-5 ACM	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-05 TRH/BTEXN/8 Metals	WATER - W-12 OC/OP Pesticides
ES2026823-009	06-Aug-2020 00:00	RINSATE	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2026823**	Page	: 1 of 33
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 07-Aug-2020 08:30
Order number	: ----	Date Analysis Commenced	: 07-Aug-2020
C-O-C number	: ----	Issue Date	: 11-Aug-2020 15:15
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 45		
No. of samples analysed	: 29		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP16-1	STP16-2	STP16-3	STP17-1	STP17-2
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-001	ES2026823-002	ES2026823-003	ES2026823-004	ES2026823-005
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		8.6	6.0	9.3	7.9	8.3
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No*	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	Ch + Am	-	-	-
Sample weight (dry)	----	0.01	g		698	792	672	835	773
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EA200N: Asbestos Quantification (non-NATA)									
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g		<0.0004	0.0088	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)		<0.001	0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg		0.698	0.792	0.672	0.835	0.773
ø Fibrous Asbestos >7mm	----	0.0004	g		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		7	6	6	6	7
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		54	35	70	76	69
Copper	7440-50-8	5	mg/kg		10	14	9	9	9
Lead	7439-92-1	5	mg/kg		11	10	11	11	11
Nickel	7440-02-0	2	mg/kg		5	5	4	4	4
Zinc	7440-66-6	5	mg/kg		41	37	44	32	42
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	0.06	<0.05	<0.05	0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP16-1	STP16-2	STP16-3	STP17-1	STP17-2
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-001	ES2026823-002	ES2026823-003	ES2026823-004	ES2026823-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.22**	**0.35**	**0.21**	**0.21**	**0.35**
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.22**	**0.35**	**0.21**	**0.21**	**0.30**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.05**
Dieldrin	60-57-1	0.05	mg/kg		**0.47**	**0.68**	**0.43**	**0.42**	**0.46**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.47**	**0.74**	**0.43**	**0.42**	**0.51**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP16-1	STP16-2	STP16-3	STP17-1	STP17-2
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-001	ES2026823-002	ES2026823-003	ES2026823-004	ES2026823-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP16-1	STP16-2	STP16-3	STP17-1	STP17-2
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-001	ES2026823-002	ES2026823-003	ES2026823-004	ES2026823-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**92.3**	**102**	**107**	**110**	**103**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**109**	**125**	**129**	**123**	**124**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**81.1**	**81.5**	**86.5**	**80.1**	**86.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		**88.1**	**88.8**	**85.7**	**87.6**	**86.2**
2.4.6-Tribromophenol	118-79-6	0.5	%		**73.2**	**71.5**	**65.5**	**67.4**	**63.5**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**104**	**105**	**103**	**99.5**	**99.6**
Anthracene-d10	1719-06-8	0.5	%		**100**	**101**	**99.3**	**100**	**101**
4-Terphenyl-d14	1718-51-0	0.5	%		**85.4**	**87.7**	**83.8**	**89.2**	**86.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**87.2**	**89.6**	**84.8**	**86.5**	**85.1**
Toluene-D8	2037-26-5	0.2	%		**90.1**	**92.2**	**88.1**	**90.3**	**86.7**
4-Bromofluorobenzene	460-00-4	0.2	%		**98.8**	**99.9**	**95.6**	**99.9**	**96.7**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP17-3	STP17-4	STP17-5	V106	V144
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-006	ES2026823-007	ES2026823-008	ES2026823-010	ES2026823-011
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		8.6	10.0	9.1	9.3	1.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No*	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		Ch + Am	-	-	-	-
Sample weight (dry)	----	0.01	g		723	749	741	73.0	76.0
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EA200N: Asbestos Quantification (non-NATA)									
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g		0.0004	<0.0004	<0.0004	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)		<0.001	<0.001	<0.001	----	----
ø Weight Used for % Calculation	----	0.0001	kg		0.723	0.749	0.741	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g		<0.0004	<0.0004	<0.0004	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		6	5	7	<5	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		84	107	50	101	53
Copper	7440-50-8	5	mg/kg		8	7	11	7	10
Lead	7439-92-1	5	mg/kg		12	10	12	10	20
Nickel	7440-02-0	2	mg/kg		5	5	5	6	6
Zinc	7440-66-6	5	mg/kg		31	24	52	<5	262
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		0.05	<0.05	0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP17-3	STP17-4	STP17-5	V106	V144
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-006	ES2026823-007	ES2026823-008	ES2026823-010	ES2026823-011
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.17**	**0.09**	**0.20**	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.17**	**0.09**	**0.20**	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.32**	**0.13**	**0.54**	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.37**	**0.13**	**0.59**	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP17-3	STP17-4	STP17-5	V106	V144
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-006	ES2026823-007	ES2026823-008	ES2026823-010	ES2026823-011
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP17-3	STP17-4	STP17-5	V106	V144
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-006	ES2026823-007	ES2026823-008	ES2026823-010	ES2026823-011
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**101**	**100**	**93.9**	**100**	**100**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**121**	**120**	**113**	**118**	**118**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**83.6**	**82.0**	**84.4**	**90.1**	**87.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.5**	**86.5**	**87.0**	**91.1**	**89.6**
2.4.6-Tribromophenol	118-79-6	0.5	%		**67.4**	**62.8**	**48.3**	**48.7**	**51.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**103**	**102**	**98.2**	**104**	**104**
Anthracene-d10	1719-06-8	0.5	%		**102**	**98.0**	**97.7**	**99.2**	**101**
4-Terphenyl-d14	1718-51-0	0.5	%		**92.9**	**83.6**	**81.9**	**85.5**	**87.1**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**85.8**	**85.2**	**84.0**	**84.0**	**89.5**
Toluene-D8	2037-26-5	0.2	%		**90.6**	**87.8**	**92.0**	**87.9**	**94.1**
4-Bromofluorobenzene	460-00-4	0.2	%		**97.6**	**96.9**	**100**	**97.4**	**104**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V146	V148	V150	V152	V154
			Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2026823-013	ES2026823-015	ES2026823-017	ES2026823-019	ES2026823-021
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.4	1.1	1.8	1.3	1.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	81.3	108	111	96.7	76.3
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	5	<5	5	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	48	40	39	53	90
Copper	7440-50-8	5	mg/kg	9	7	6	8	8
Lead	7439-92-1	5	mg/kg	9	8	8	10	12
Nickel	7440-02-0	2	mg/kg	6	6	5	7	6
Zinc	7440-66-6	5	mg/kg	12	16	43	10	25
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	0.22	<0.05	<0.05	<0.05	0.24
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V146	V148	V150	V152	V154
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-013	ES2026823-015	ES2026823-017	ES2026823-019	ES2026823-021
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		**0.22**	<0.05	<0.05	<0.05	**0.24**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V146	V148	V150	V152	V154
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-013	ES2026823-015	ES2026823-017	ES2026823-019	ES2026823-021
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V146	V148	V150	V152	V154
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-013	ES2026823-015	ES2026823-017	ES2026823-019	ES2026823-021
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**95.9**	**94.2**	**104**	**107**	**92.9**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**112**	**106**	**114**	**116**	**104**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**88.8**	**86.4**	**87.0**	**88.8**	**87.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.1**	**83.4**	**88.6**	**88.5**	**87.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**54.6**	**57.2**	**61.7**	**58.4**	**51.1**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**102**	**99.9**	**102**	**103**	**96.3**
Anthracene-d10	1719-06-8	0.5	%		**99.9**	**93.0**	**98.1**	**98.8**	**95.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**84.9**	**80.8**	**91.9**	**93.5**	**83.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**88.8**	**87.7**	**92.0**	**91.6**	**92.5**
Toluene-D8	2037-26-5	0.2	%		**89.6**	**91.8**	**93.9**	**96.4**	**94.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**99.3**	**98.7**	**103**	**107**	**103**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V156	V158	V160	V162	V164
			Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2026823-023	ES2026823-025	ES2026823-027	ES2026823-029	ES2026823-031
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	1.4	1.5	2.7	1.9	3.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	89.6	106	101	95.2	77.1
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	6	6	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	52	48	43	30	32
Copper	7440-50-8	5	mg/kg	8	8	6	7	8
Lead	7439-92-1	5	mg/kg	10	10	8	7	9
Nickel	7440-02-0	2	mg/kg	6	7	6	5	5
Zinc	7440-66-6	5	mg/kg	20	11	7	16	16
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	0.14	<0.05	0.18	0.20
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.14	<0.05	0.18	0.20
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.26	<0.05	0.90	0.47
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V156	V158	V160	V162	V164
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-023	ES2026823-025	ES2026823-027	ES2026823-029	ES2026823-031
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	**0.26**	<0.05	**0.95**	**0.47**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V156	V158	V160	V162	V164
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-023	ES2026823-025	ES2026823-027	ES2026823-029	ES2026823-031
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V156	V158	V160	V162	V164
				Client sampling date / time	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	05-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-023	ES2026823-025	ES2026823-027	ES2026823-029	ES2026823-031
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**92.1**	**102**	**109**	**106**	**97.3**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**103**	**117**	**125**	**121**	**112**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**88.1**	**88.5**	**91.1**	**89.1**	**88.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**86.9**	**86.3**	**88.4**	**87.6**	**88.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**63.8**	**63.2**	**65.2**	**63.9**	**66.2**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**98.4**	**101**	**103**	**101**	**98.6**
Anthracene-d10	1719-06-8	0.5	%		**96.4**	**96.7**	**99.3**	**96.7**	**90.4**
4-Terphenyl-d14	1718-51-0	0.5	%		**85.1**	**85.2**	**87.4**	**84.9**	**83.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**93.1**	**98.7**	**92.6**	**92.3**	**89.0**
Toluene-D8	2037-26-5	0.2	%		**90.1**	**95.5**	**96.5**	**93.4**	**90.3**
4-Bromofluorobenzene	460-00-4	0.2	%		**101**	**104**	**106**	**102**	**99.5**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V166	V168	V170	V172	V174
				Client sampling date / time	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-033	ES2026823-035	ES2026823-037	ES2026823-039	ES2026823-041
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		4.8	7.2	3.5	5.8	1.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	Yes
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	Ch + Am
Sample weight (dry)	----	0.01	g		93.3	84.3	88.1	78.6	34.4
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	<5	6	6
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		82	51	42	91	53
Copper	7440-50-8	5	mg/kg		8	8	13	8	7
Lead	7439-92-1	5	mg/kg		9	10	10	11	10
Nickel	7440-02-0	2	mg/kg		7	7	6	6	6
Zinc	7440-66-6	5	mg/kg		<5	19	29	14	17
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	0.07	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	0.30	0.16	0.06
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	0.30	0.16	0.06
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	0.60	0.18	0.07
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V166	V168	V170	V172	V174
				Client sampling date / time	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-033	ES2026823-035	ES2026823-037	ES2026823-039	ES2026823-041
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	**0.60**	**0.18**	**0.07**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V166	V168	V170	V172	V174
				Client sampling date / time	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-033	ES2026823-035	ES2026823-037	ES2026823-039	ES2026823-041
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V166	V168	V170	V172	V174
				Client sampling date / time	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00	06-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2026823-033	ES2026823-035	ES2026823-037	ES2026823-039	ES2026823-041
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**117**	**87.7**	**89.4**	**88.3**	**98.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**81.1**	**67.7**	**76.8**	**93.5**	**85.7**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**91.6**	**88.5**	**89.5**	**87.7**	**82.6**
2-Chlorophenol-D4	93951-73-6	0.5	%		**91.2**	**87.8**	**89.2**	**88.5**	**82.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**57.7**	**61.6**	**61.5**	**58.7**	**56.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**102**	**104**	**101**	**103**	**100.0**
Anthracene-d10	1719-06-8	0.5	%		**102**	**98.4**	**98.4**	**95.9**	**96.3**
4-Terphenyl-d14	1718-51-0	0.5	%		**89.8**	**86.0**	**85.9**	**86.1**	**84.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**90.8**	**91.7**	**93.7**	**89.8**	**91.7**
Toluene-D8	2037-26-5	0.2	%		**107**	**102**	**104**	**106**	**106**
4-Bromofluorobenzene	460-00-4	0.2	%		**101**	**97.7**	**102**	**102**	**105**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC12	QC13	----	----	----
				Client sampling date / time	05-Aug-2020 00:00	06-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2026823-043	ES2026823-044	--------	--------	--------
					Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		1.4	3.5	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		5	6	----	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg		85	47	----	----	----
Copper	7440-50-8	5	mg/kg		6	13	----	----	----
Lead	7439-92-1	5	mg/kg		13	11	----	----	----
Nickel	7440-02-0	2	mg/kg		6	6	----	----	----
Zinc	7440-66-6	5	mg/kg		6	32	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	----	----	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	----	----	----
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	0.05	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	0.26	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	0.26	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	0.47	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	----	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC12	QC13	----	----	----
				Client sampling date / time	05-Aug-2020 00:00	06-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2026823-043	ES2026823-044	--------	--------	--------
					Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	**0.47**	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	----	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	----	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	----	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	----	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	----	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	----	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC12	QC13	----	----	----
				Client sampling date / time	05-Aug-2020 00:00	06-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2026823-043	ES2026823-044	--------	--------	--------
					Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	----	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC12	QC13	----	----	----
				Client sampling date / time	05-Aug-2020 00:00	06-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2026823-043	ES2026823-044	--------	--------	--------
					Result	Result	----	----	----
EP080: BTEXN - Continued									
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**88.3**	**88.2**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**78.5**	**74.2**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**87.8**	**87.8**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**86.5**	**85.4**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**58.5**	**54.5**	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**101**	**99.8**	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**96.2**	**94.6**	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**86.0**	**83.6**	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**92.2**	**93.5**	----	----	----
Toluene-D8	2037-26-5	0.2	%		**109**	**110**	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**105**	**107**	----	----	----

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)				Client sample ID	STP17-5 ACM	----	----	----	----
				Client sampling date / time	05-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2026823-045	--------	--------	--------	--------
					Result	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	----	----	----	----
Asbestos Type	1332-21-4	-	--		**-**	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	----	----	----	----
Sample weight (dry)	----	0.01	g		**0.92**	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	----	----	----	----
Organic Fibre	----	0.1	g/kg		**No**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--		**A. SMYLIE**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	06-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2026823-009	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	06-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2026823-009	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	06-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2026823-009	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**96.5**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**71.3**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**110**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**108**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**106**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP16-1 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP16-2 - 05-Aug-2020 00:00	Mid brown soil containing one piece of degraded asbestos fibre board approximately 5x5x2mm.
EA200: Description	STP16-3 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP17-1 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP17-2 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP17-3 - 05-Aug-2020 00:00	Mid brown soil containing one asbestos fibre bundle approximately 5x1x1mm.
EA200: Description	STP17-4 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP17-5 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V106 - 06-Aug-2020 00:00	Mid brown soil.
EA200: Description	V144 - 06-Aug-2020 00:00	Mid brown soil.
EA200: Description	V146 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V148 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V150 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V152 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V154 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V156 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V158 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V160 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V162 - 05-Aug-2020 00:00	Mid brown soil.
EA200: Description	V164 - 06-Aug-2020 00:00	Mid brown soil.
EA200: Description	V166 - 06-Aug-2020 00:00	Mid brown soil.
EA200: Description	V168 - 06-Aug-2020 00:00	Mid brown soil.
EA200: Description	V170 - 06-Aug-2020 00:00	Mid brown soil.
EA200: Description	V172 - 06-Aug-2020 00:00	Mid brown soil.
EA200: Description	V174 - 06-Aug-2020 00:00	Mid brown soil containing several fragments of degraded asbestos fibre board approximately 5x5x2mm and several loose asbestos fibre bundles.

Sub-Matrix: **SOLID**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	STP17-5ACM - 05-Aug-2020 00:00	Three pieces of vinyl tile.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2026823**	Page	: 1 of 22
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 07-Aug-2020
Order number	: ----	Date Analysis Commenced	: 07-Aug-2020
C-O-C number	: ----	Issue Date	: 11-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 45		
No. of samples analysed	: 29		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3188106)									
ES2026823-001	STP16-1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	54	63	15.1	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	5	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	8	20.4	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	12	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	41	34	18.6	No Limit
ES2026823-013	V146	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	48	54	11.8	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	6	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	9	8	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	12	11	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3188108)									
ES2026823-033	V166	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	82	79	3.31	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	8	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	9	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	8	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
ES2027449-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	18	20	6.37	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	5	3	42.2	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3188108) - continued									
ES2027449-002	Anonymous	EG005T: Arsenic	7440-38-2	5	mg/kg	6	7	15.4	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	13	8	41.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	20	16	21.8	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	15	14	7.82	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3188111)									
ES2026823-003	STP16-3	EA055: Moisture Content	----	0.1	%	9.3	8.9	4.27	No Limit
ES2026823-019	V152	EA055: Moisture Content	----	0.1	%	1.3	1.3	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3188112)									
ES2026823-037	V170	EA055: Moisture Content	----	0.1	%	3.5	3.8	7.96	No Limit
ES2027449-005	Anonymous	EA055: Moisture Content	----	0.1	%	13.9	12.9	7.75	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3188105)									
ES2026823-001	STP16-1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2026823-013	V146	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3188107)									
ES2026823-033	V166	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2027449-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3187197)									
ES2026823-001	STP16-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.22	0.16	30.6	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.47	0.40	14.5	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2026823-013	V146	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3187197) - continued									
ES2026823-013	V146	EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.06	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.22	0.45	68.7	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3187280)									
ES2026823-033	V166	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3187280) - continued									
ES2026823-033	V166	EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3187197)									
ES2026823-001	STP16-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2026823-013	V146	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3187197) - continued									
ES2026823-013	V146	EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3187280)									
ES2026823-033	V166	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3187196)									
ES2026823-001	STP16-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3187196) - continued									
ES2026823-001	STP16-1	EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2026823-013	V146	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3187279)									
ES2027452-004	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3187279) - continued									
ES2027452-004	Anonymous	EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2026823-033	V166	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187195)									
ES2026823-001	STP16-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2026823-013	V146	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187278)									
ES2027452-004	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	580	630	9.06	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	90	120	23.1	No Limit
ES2026823-033	V166	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187861)									
ES2026823-001	STP16-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187861) - continued									
ES2026823-013	V146	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187867)									
ES2026823-033	V166	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2027452-004	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3187195)									
ES2026823-001	STP16-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2026823-013	V146	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3187278)									
ES2027452-004	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	520	510	2.65	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	210	270	23.8	No Limit
ES2026823-033	V166	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3187861)									
ES2026823-001	STP16-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2026823-013	V146	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3187867)									
ES2026823-033	V166	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2027452-004	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3187861)									
ES2026823-001	STP16-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2026823-013	V146	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3187867)									
ES2026823-033	V166	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2027452-004	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3187313)									
ES2026818-076	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 3187314)									
ES2026818-077	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3187675)									
ES2027581-003	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
ES2024748-002	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3187675)									
ES2027581-003	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
ES2024748-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3187675)									
ES2027581-003	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3187675) - continued									
ES2027581-003	Anonymous	EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit
ES2024748-002	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188106)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	110	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	97.8	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	116	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	117	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	118	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	122	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	110	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188108)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	103	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	96.1	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	109	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	111	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	111	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	113	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	101	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3188105)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	86.1	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3188107)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	94.5	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3187197)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	97.8	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	102	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	99.8	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	101	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.2	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	98.5	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.7	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	99.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	97.8	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.1	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	67.0	123

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3187197) - continued								
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	97.3	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	92.1	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.7	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	98.1	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	97.9	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	95.6	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3187280)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	100	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	103	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.4	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.4	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	85.4	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	80.0	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.6	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	76.5	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	79.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.3	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	79.6	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	76.1	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	82.2	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	79.5	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3187197)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	96.1	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	61.2	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.4	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	102	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	95.1	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.5	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	100	69.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3187197) - continued								
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	102	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	90.4	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	92.7	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	99.6	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	96.7	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.4	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3187280)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	80.0	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	79.2	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	67.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.5	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	83.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	78.4	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.9	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.8	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	82.6	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	83.9	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.2	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	82.2	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.1	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3187196)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	91.0	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	96.4	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	99.4	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	96.7	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	97.6	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	99.5	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	94.1	74.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3187196) - continued								
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	94.5	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	96.2	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	100	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	101	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	93.2	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	87.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	87.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	85.6	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3187279)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	95.9	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	96.4	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	92.7	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	99.1	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	94.9	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	95.9	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	93.9	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	94.0	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	92.9	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	99.4	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	94.5	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	92.6	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	90.0	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	90.3	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	95.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	94.3	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187195)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	99.1	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	96.4	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	110	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187278)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	100	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	97.4	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	113	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187861)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	83.9	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187867)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187867) - continued								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	90.5	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187195)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	104	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	105	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	105	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187278)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	105	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	107	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	109	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187861)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	83.3	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187867)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	95.8	68.4	128
EP080: BTEXN (QCLot: 3187861)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	87.2	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	93.1	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	88.5	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	91.9	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	92.0	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	93.1	63.0	119
EP080: BTEXN (QCLot: 3187867)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	92.3	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	96.7	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	95.0	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	97.9	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	96.9	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	80.5	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3187313)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	91.8	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	90.8	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	91.4	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	89.0	81.0	111

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3187313) - continued								
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	88.6	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	85.4	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	89.0	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3187314)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	93.0	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3187219)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	70.7	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	74.0	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	95.1	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	85.7	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	85.9	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	80.8	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	92.8	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	93.4	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	89.9	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	86.6	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	90.5	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	88.2	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	91.4	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	104	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	87.3	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	92.7	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	101	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	97.9	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	106	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	77.6	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	96.4	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3187219)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	97.5	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	101	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	36.2	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	74.2	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	101	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	87.7	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	105	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	83.3	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	81.3	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	76.9	75.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3187219) - continued								
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	103	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	88.4	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	98.8	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	92.1	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	98.2	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	95.6	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	100	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	106	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	86.6	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187220)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	75.4	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	99.4	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	96.3	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187675)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	99.3	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187220)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	91.7	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	75.1	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	84.9	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187675)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	98.9	75.0	127
EP080: BTEXN (QCLot: 3187675)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	109	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	107	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	100	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	105	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	103	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	104	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188106)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188106) - continued							
ES2026823-001	STP16-1	EG005T: Arsenic	7440-38-2	50 mg/kg	72.7	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	87.6	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	85.6	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	91.9	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	87.5	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	87.6	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	93.7	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3188108)							
ES2026823-033	V166	EG005T: Arsenic	7440-38-2	50 mg/kg	71.3	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.3	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	82.8	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	96.7	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	93.3	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	94.6	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	93.5	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3188105)							
ES2026823-001	STP16-1	EG035T: Mercury	7439-97-6	5 mg/kg	77.0	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3188107)							
ES2026823-033	V166	EG035T: Mercury	7439-97-6	5 mg/kg	84.6	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3187197)							
ES2026823-001	STP16-1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	104	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	96.9	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	89.3	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	74.7	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	78.0	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	87.1	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3187280)							
ES2026823-033	V166	EP068: gamma-BHC	58-89-9	0.5 mg/kg	120	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	104	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	88.9	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	97.0	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	76.3	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	91.2	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3187197)							
ES2026823-001	STP16-1	EP068: Diazinon	333-41-5	0.5 mg/kg	96.0	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	96.0	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	93.3	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3187197) - continued							
ES2026823-001	STP16-1	EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	91.8	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	82.8	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3187280)							
ES2026823-033	V166	EP068: Diazinon	333-41-5	0.5 mg/kg	86.3	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	89.9	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	70.8	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	86.0	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	86.1	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3187196)							
ES2026823-001	STP16-1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	99.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	101	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3187279)							
ES2026823-033	V166	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	101	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	103	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187195)							
ES2026823-001	STP16-1	EP071: C10 - C14 Fraction	----	523 mg/kg	88.6	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	76.2	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	70.2	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187278)							
ES2026823-033	V166	EP071: C10 - C14 Fraction	----	523 mg/kg	79.4	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	72.4	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	67.4	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187861)							
ES2026823-001	STP16-1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	117	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187867)							
ES2026823-033	V166	EP080: C6 - C9 Fraction	----	32.5 mg/kg	98.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187195)							
ES2026823-001	STP16-1	EP071: >C10 - C16 Fraction	----	860 mg/kg	88.7	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	73.0	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	62.5	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187278)							
ES2026823-033	V166	EP071: >C10 - C16 Fraction	----	860 mg/kg	79.5	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	73.8	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	52.4	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187861)							
ES2026823-001	STP16-1						

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187861) - continued							
ES2026823-001	STP16-1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	122	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187867)							
ES2026823-033	V166	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	97.3	70.0	130
EP080: BTEXN (QCLot: 3187861)							
ES2026823-001	STP16-1	EP080: Benzene	71-43-2	2.5 mg/kg	82.2	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	86.3	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	85.0	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	86.8	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	88.3	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	96.7	70.0	130
EP080: BTEXN (QCLot: 3187867)							
ES2026823-033	V166	EP080: Benzene	71-43-2	2.5 mg/kg	92.1	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	100	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	100	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	101	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	100	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	81.1	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3187313)							
ES2026818-077	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	91.8	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	96.7	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	81.6	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	96.4	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	99.9	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	94.4	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	93.7	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 3187314)							
ES2026818-076	Anonymous	EG035F: Mercury	7439-97-6	0.01 mg/L	97.8	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3187675)							
ES2024748-002	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	109	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3187675)							
ES2024748-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	106	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080: BTEXN (QCLot: 3187675)							
ES2024748-002	Anonymous	EP080: Benzene	71-43-2	25 µg/L	109	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	103	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	102	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	102	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	104	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	94.3	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2026823**	Page	: 1 of 12
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 07-Aug-2020
Site	: ----	Issue Date	: 11-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch	No. of samples received	: 45
Order number	: ----	No. of samples analysed	: 29

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count QC	Count Regular	Rate (%) Actual	Rate (%) Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
Pesticides by GCMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Pesticides by GCMS	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Evaluation	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**----**	----	----	**08-Aug-2020**	19-Aug-2020	✓
Soil Glass Jar - Unpreserved (EA055)							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**----**	----	----	**08-Aug-2020**	20-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
V146, V148, V150, V152, V154, V156, V158, V160, V162	**05-Aug-2020**	**----**	----	----	**08-Aug-2020**	01-Feb-2021	✓
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
V106, V144, V164, V166, V168, V170, V172, V174	**06-Aug-2020**	**----**	----	----	**08-Aug-2020**	02-Feb-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5	**05-Aug-2020**	**----**	----	----	**08-Aug-2020**	01-Feb-2021	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5	**05-Aug-2020**	**----**	----	----	**08-Aug-2020**	01-Feb-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**08-Aug-2020**	01-Feb-2021	✓	**10-Aug-2020**	01-Feb-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**08-Aug-2020**	02-Feb-2021	✓	**10-Aug-2020**	02-Feb-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**08-Aug-2020**	02-Sep-2020	✓	**10-Aug-2020**	02-Sep-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**08-Aug-2020**	03-Sep-2020	✓	**10-Aug-2020**	03-Sep-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**08-Aug-2020**	20-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**08-Aug-2020**	20-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**08-Aug-2020**	20-Aug-2020	✓	**08-Aug-2020**	17-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	19-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**08-Aug-2020**	20-Aug-2020	✓	**08-Aug-2020**	20-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	19-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**08-Aug-2020**	20-Aug-2020	✓	**08-Aug-2020**	20-Aug-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP16-1, STP16-2, STP16-3, STP17-1, STP17-2, STP17-3, STP17-4, STP17-5, V146, V148, V150, V152, V154, V156, V158, V160, V162, QC12	**05-Aug-2020**	**08-Aug-2020**	19-Aug-2020	✓	**08-Aug-2020**	19-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
V106, V144, V164, V166, V168, V170, V172, V174, QC13	**06-Aug-2020**	**08-Aug-2020**	20-Aug-2020	✓	**08-Aug-2020**	20-Aug-2020	✓

Matrix: **SOLID**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP17-5 - ACM	**05-Aug-2020**	**----**	----	----	**08-Aug-2020**	01-Feb-2021	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-F)							
RINSATE	**06-Aug-2020**	**----**	----	----	**07-Aug-2020**	02-Feb-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035F)							
RINSATE	**06-Aug-2020**	**----**	----	----	**10-Aug-2020**	20-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**06-Aug-2020**	**07-Aug-2020**	13-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**06-Aug-2020**	**07-Aug-2020**	13-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**06-Aug-2020**	**07-Aug-2020**	13-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**06-Aug-2020**	**07-Aug-2020**	20-Aug-2020	✓	**07-Aug-2020**	20-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**06-Aug-2020**	**07-Aug-2020**	13-Aug-2020	✓	**08-Aug-2020**	16-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**06-Aug-2020**	**07-Aug-2020**	20-Aug-2020	✓	**07-Aug-2020**	20-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**06-Aug-2020**	**07-Aug-2020**	20-Aug-2020	✓	**07-Aug-2020**	20-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	4	32	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	27	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	32	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	32	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	27	7.41	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	27	7.41	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	27	7.41	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	32	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	1	3	33.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	4	25.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
TRH - Semivolatile Fraction	EP071	0	1	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Asbestos Identification in Bulk Solids	EA200	SOLID	In house: Referenced to AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

12.8.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 12, 175 Eagle Terrace, Spring Hill QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes QLD 4227
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ AUCKLAND: 64 Beach Road, Auckland 1010 NZ
- ☐ CANBERRA: GPO 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay QLD 4740
- ☐ MACKAY: 21 River Street, Mackay QLD 4740
- ☐ PERTH: Ground Floor, 503 Murray street, Perth, WA 6000
- ☐ NELSON: 6 Bronte Street, Port Nelson, 7010 NZ
- ☒ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Sarah Doherty

PM CONTACT No: 0417 647 498

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

Environmental Division Sydney
Work Order Reference
ES2027007

Telephone : +61-2-8784 8555

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch

SAMPLER CONTACT No:

Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com; jmcdowell@slrconsulting.com

Turnaround Time (TAT)

☐ Standard TAT

☒ Non Standard or Urgent TAT

Required TAT: 1 day

COC Number: 1 of 1

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Charaterisation (P-22)	TCLP Leachate (EN33)	ASLP Leachate (EN60)	Leachable As, Cr (EG020C)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-32)	HOLD
1	STP18-1	10/08/2020	S	1 x bag, 1 x jar	x								
2	STP18-2	10/08/2020	S	1 x bag, 1 x jar	x								
3	STP18-3	10/08/2020	S	1 x bag, 1 x jar	x								
4	STP18-4	10/08/2020	S	1 x bag, 1 x jar	x								
5	STP18-5	10/08/2020	S	1 x bag, 1 x jar	x								
6	STP18-6	10/08/2020	S	1 x bag, 1 x jar	x								
7	RINSATE	10/08/2020	S	1 x bag, 1 x jar								x	

Additional Information (Comment on any gross contamination or specific requirements)

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By / Date: Asbestos
Relinquished By / Date:
Connote / Courier:
WO No: ES2027007
Attach By PO / Internal Sheet:

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

Kim - ALS
11.08.20
10.40am

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2027007**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		

Dates

Date Samples Received	: 11-Aug-2020 10:40	Issue Date	: 11-Aug-2020
Client Requested Due Date	: 12-Aug-2020	Scheduled Reporting Date	: **12-Aug-2020**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: 1	Temperature	: 34.5' C - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 7 / 7

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2027007-001	10-Aug-2020 00:00	STP18-1	✓	✓	✓	✓
ES2027007-002	10-Aug-2020 00:00	STP18-2	✓	✓	✓	✓
ES2027007-003	10-Aug-2020 00:00	STP18-3	✓	✓	✓	✓
ES2027007-004	10-Aug-2020 00:00	STP18-4	✓	✓	✓	✓
ES2027007-005	10-Aug-2020 00:00	STP18-5	✓	✓	✓	✓
ES2027007-006	10-Aug-2020 00:00	STP18-6	✓	✓	✓	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-05 TRH/BTEXN/8 Metals	WATER - W-12 OC/OP Pesticides
ES2027007-007	10-Aug-2020 00:00	RINSATE	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

J Mcdowell

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2027007**	Page	: 1 of 15
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 11-Aug-2020 10:40
Order number	: ----	Date Analysis Commenced	: 11-Aug-2020
C-O-C number	: ----	Issue Date	: 12-Aug-2020 18:20
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 7		
No. of samples analysed	: 7		

ilac-MRA NATA

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005: Poor precision was obtained for Chromium on sample ES2027007-1. Results have been confirmed by re-extraction and re-analysis.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.

- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP18-1	STP18-2	STP18-3	STP18-4	STP18-5
			Client sampling date / time	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2027007-001	ES2027007-002	ES2027007-003	ES2027007-004	ES2027007-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.5	7.2	8.0	8.6	8.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	925	826	817	719	852
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.925	0.826	0.817	0.719	0.852
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	5	6	7	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	75	85	134	124	112
Copper	7440-50-8	5	mg/kg	6	7	8	6	6
Lead	7439-92-1	5	mg/kg	12	10	11	10	11
Nickel	7440-02-0	2	mg/kg	5	5	5	5	5
Zinc	7440-66-6	5	mg/kg	12	11	11	13	6
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP18-1	STP18-2	STP18-3	STP18-4	STP18-5
				Client sampling date / time	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2027007-001	ES2027007-002	ES2027007-003	ES2027007-004	ES2027007-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	**0.08**	**0.06**	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	**0.08**	**0.06**	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.06**	**0.11**	**0.15**	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.06**	**0.11**	**0.15**	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP18-1	STP18-2	STP18-3	STP18-4	STP18-5
				Client sampling date / time	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2027007-001	ES2027007-002	ES2027007-003	ES2027007-004	ES2027007-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP18-1	STP18-2	STP18-3	STP18-4	STP18-5
				Client sampling date / time	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00	10-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2027007-001	ES2027007-002	ES2027007-003	ES2027007-004	ES2027007-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**93.5**	**94.7**	**102**	**80.4**	**90.7**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**88.2**	**60.5**	**72.6**	**73.3**	**105**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**83.1**	**83.4**	**84.1**	**83.3**	**81.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**86.8**	**87.9**	**87.8**	**86.7**	**84.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**63.2**	**64.6**	**61.2**	**60.8**	**60.1**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**99.1**	**101**	**101**	**99.3**	**100**
Anthracene-d10	1719-06-8	0.5	%		**93.2**	**94.6**	**95.1**	**94.1**	**94.4**
4-Terphenyl-d14	1718-51-0	0.5	%		**93.9**	**97.9**	**96.3**	**95.2**	**96.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**98.5**	**92.0**	**88.7**	**88.1**	**92.4**
Toluene-D8	2037-26-5	0.2	%		**107**	**98.4**	**93.4**	**92.1**	**98.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**103**	**93.3**	**86.9**	**86.8**	**91.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP18-6	----	----	----	----
			Client sampling date / time	10-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2027007-006	--------	--------	--------	--------
				Result	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**8.6**	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	----	----	----	----
Asbestos Type	1332-21-4	-	--	**-**	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	----	----	----	----
Sample weight (dry)	----	0.01	g	**838**	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	----	----	----	----
Organic Fibre	----	0.1	g/kg	**No**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	----	----	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	<0.0004	----	----	----	----
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	<0.001	----	----	----	----
ø **Weight Used for % Calculation**	----	0.0001	kg	**0.838**	----	----	----	----
ø **Fibrous Asbestos >7mm**	----	0.0004	g	<0.0004	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**7**	----	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg	**110**	----	----	----	----
Copper	7440-50-8	5	mg/kg	**6**	----	----	----	----
Lead	7439-92-1	5	mg/kg	**11**	----	----	----	----
Nickel	7440-02-0	2	mg/kg	**6**	----	----	----	----
Zinc	7440-66-6	5	mg/kg	**8**	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP18-6	----	----	----	----
			Client sampling date / time	10-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2027007-006	--------	--------	--------	--------
				Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP18-6	----	----	----	----
				Client sampling date / time	10-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2027007-006	--------	--------	--------	--------
					Result	----	----	----	----
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	----	----	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP18-6	----	----	----	----
				Client sampling date / time	10-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2027007-006	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	----	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**88.4**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**77.5**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**82.9**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**85.2**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**59.8**	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**100**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**96.1**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**95.1**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**86.8**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%		**89.4**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**84.1**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	10-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2027007-007	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	10-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2027007-007	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	10-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2027007-007	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**70.9**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**88.8**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**95.1**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**101**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**103**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP18-1 - 10-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP18-2 - 10-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP18-3 - 10-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP18-4 - 10-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP18-5 - 10-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP18-6 - 10-Aug-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2027007**	Page	: 1 of 12
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 11-Aug-2020
Order number	: ----	Date Analysis Commenced	: 11-Aug-2020
C-O-C number	: ----	Issue Date	: 12-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
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General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3192691)									
ES2027007-001	STP18-1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	75	# 122	47.4	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	5	6	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	8	40.7	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	11	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	12	14	15.4	No Limit
ES2027142-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	13	13	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	13	14	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	20	20	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	23	22	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	58	52	12.0	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3192694)									
ES2027007-003	STP18-3	EA055: Moisture Content	----	0.1	%	8.0	7.2	10.9	No Limit
ES2027142-002	Anonymous	EA055: Moisture Content	----	0.1	%	16.6	17.2	4.03	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3192690)									
ES2027007-001	STP18-1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2027142-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3191969)									
ES2027007-001	STP18-1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3191969) - continued									
ES2027007-001	STP18-1	EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.06	0.06	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3191969)									
ES2027007-001	STP18-1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3191968)									
ES2027007-001	STP18-1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3191968) - continued									
ES2027007-001	STP18-1	EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3191967)									
ES2027007-001	STP18-1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3193327)									
ES2027007-001	STP18-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3191967)									
ES2027007-001	STP18-1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3193327)									
ES2027007-001	STP18-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3193327)									
ES2027007-001	STP18-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3193861)									
ES2027007-007	RINSATE	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3192460)									
ES2027805-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3192460)									
ES2027805-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3192460)									
ES2027805-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3192691)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	114	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	100	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	123	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	108	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	106	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	110	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	97.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3192690)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	99.5	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3191969)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	100	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	77.8	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.1	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.1	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	85.1	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.6	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	99.5	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	98.5	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	102	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	103	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	96.4	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3191969)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	108	62.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3191969) - continued								
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	98.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	89.8	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	80.8	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.1	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	79.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	77.9	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	88.4	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	101	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3191968)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	96.3	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	98.9	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	93.7	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	90.8	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	98.7	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	94.1	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	91.4	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	95.4	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	94.7	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	97.0	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	92.7	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	95.5	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	93.2	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	95.2	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	95.8	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	91.8	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3191967)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	102	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	106	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	109	71.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3193327)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	87.6	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3191967)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	107	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	104	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	105	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3193327)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	91.0	68.4	128
EP080: BTEXN (QCLot: 3193327)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	81.9	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	84.9	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	83.2	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	85.0	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	86.3	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	83.7	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3193861)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	93.2	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	93.2	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	90.2	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	89.6	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	91.3	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	93.8	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	91.2	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3193862)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	95.9	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3192629)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	99.7	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	102	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	100	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	106	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	98.0	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	96.3	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	103	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	95.9	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	88.1	64.1	110

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3192629) - continued								
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	92.0	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	89.6	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	98.1	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	96.2	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	105	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	96.9	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	92.8	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	81.9	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	91.1	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	100	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	103	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	89.3	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3192629)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	96.9	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	94.3	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	24.7	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	98.2	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	98.0	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	92.3	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	94.2	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	96.8	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	100	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	99.2	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	101	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	100	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	103	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	89.8	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	82.2	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	92.8	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	102	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	103	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	94.0	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3192460)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	102	75.0	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3192627)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	62.9	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	73.1	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	71.4	56.0	121

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3192460)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	102	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3192627)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	65.0	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	69.6	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	61.9	61.5	121
EP080: BTEXN (QCLot: 3192460)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	92.9	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	97.0	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	98.2	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	98.2	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	99.3	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	96.2	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3192691)							
ES2027007-001	STP18-1	EG005T: Arsenic	7440-38-2	50 mg/kg	80.8	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	92.4	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	100	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	96.8	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	91.6	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	95.6	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	90.0	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3192690)							
ES2027007-001	STP18-1	EG035T: Mercury	7439-97-6	5 mg/kg	81.6	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3191969)							
ES2027007-001	STP18-1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	77.0	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	75.4	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	76.8	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	94.6	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	80.2	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	79.3	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3191969)							
ES2027007-001	STP18-1	EP068: Diazinon	333-41-5	0.5 mg/kg	85.3	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	73.4	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	93.3	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	74.1	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	85.3	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3191968)							
ES2027007-001	STP18-1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	99.1	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	99.3	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3191967)							
ES2027007-001	STP18-1	EP071: C10 - C14 Fraction	----	523 mg/kg	87.0	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	100	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	103	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3193327)							
ES2027007-001	STP18-1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	86.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3191967)							
ES2027007-001	STP18-1	EP071: >C10 - C16 Fraction	----	860 mg/kg	94.6	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	102	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	93.5	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3193327)							
ES2027007-001	STP18-1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	84.1	70.0	130
EP080: BTEXN (QCLot: 3193327)							
ES2027007-001	STP18-1	EP080: Benzene	71-43-2	2.5 mg/kg	82.1	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	87.2	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	85.2	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	85.9	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	87.4	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	80.2	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035F: Dissolved Mercury by FIMS (QCLot: 3193862)							
ES2027007-007	RINSATE	EG035F: Mercury	7439-97-6	0.01 mg/L	99.0	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3192460)							
ES2027805-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	109	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3192460)							

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3192460) - continued							
ES2027805-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	109	70.0	130
EP080: BTEXN (QCLot: 3192460)							
ES2027805-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	94.4	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	99.5	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	103	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	101	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	105	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	105	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2027007**	Page	: 1 of 8
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 11-Aug-2020
Site	: ----	Issue Date	: 12-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch	No. of samples received	: 7
Order number	: ----	No. of samples analysed	: 7

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	ES2027007--001	STP18-1	**Chromium**	7440-47-3	47.4 %	0% - 20%	**RPD exceeds LOR based limits**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Dissolved Mercury by FIMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Dissolved Metals by ICP-MS - Suite A	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / *Container* / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**----**	----	----	**11-Aug-2020**	24-Aug-2020	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**----**	----	----	**12-Aug-2020**	06-Feb-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**----**	----	----	**12-Aug-2020**	06-Feb-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	06-Feb-2021	✓	**11-Aug-2020**	06-Feb-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	07-Sep-2020	✓	**12-Aug-2020**	07-Sep-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	20-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	20-Sep-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	20-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	24-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**12-Aug-2020**	20-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	24-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**12-Aug-2020**	20-Sep-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP18-1, STP18-2, STP18-3, STP18-4, STP18-5, STP18-6	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	24-Aug-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Filtered; Lab-acidified (EG020A-F)							
RINSATE	**10-Aug-2020**	**----**	----	----	**12-Aug-2020**	06-Feb-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Filtered; Lab-acidified (EG035F)							
RINSATE	**10-Aug-2020**	**----**	----	----	**12-Aug-2020**	07-Sep-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**10-Aug-2020**	**11-Aug-2020**	17-Aug-2020	✓	**12-Aug-2020**	20-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**10-Aug-2020**	**11-Aug-2020**	17-Aug-2020	✓	**12-Aug-2020**	20-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**10-Aug-2020**	**11-Aug-2020**	17-Aug-2020	✓	**12-Aug-2020**	20-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	24-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**10-Aug-2020**	**11-Aug-2020**	17-Aug-2020	✓	**12-Aug-2020**	20-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	24-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**10-Aug-2020**	**11-Aug-2020**	24-Aug-2020	✓	**11-Aug-2020**	24-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	1	6	16.67	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	6	16.67	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	6	16.67	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	100.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	3	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
TRH - Semivolatile Fraction	EP071	0	3	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	3	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	3	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

14.8.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Sarah Doherty

PM CONTACT No: 0417 647 498

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

Same day TAT if possible please, otherwise ASAP. Thank you

Environmental Division
Sydney
Work Order Reference
ES2027013

Telephone : +61-2-8784 8555

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ CANBERRA: GPO 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: Ground Floor, 503 Murray Street, Perth WA 6000
- ☐ NELSON, 5 D'Urgue Street, Port Nelson, 7010 NZ
- ☒ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch

SAMPLER CONTACT No:

Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com; jmcdowell@slrconsulting.com

Turnaround Time (TAT)

- ☐ Standard TAT
- ☒ Non Standard or Urgent TAT

Required TAT: Same day

COC Number 1 of 1

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD
1	STP10A-1	11/08/2020	S	1 x bag				x				
2	STP10A-2	11/08/2020	S	1 x bag				x				
3	STP10A-3	11/08/2020	S	1 x bag				x				
4	STP10A-4	11/08/2020	S	1 x bag				x				
5	STP10A-5	11/08/2020	S	1 x bag				x				
6	STP10A-6	11/08/2020	S	1 x bag				x				
7	V84A	11/08/2020	S	1 x bag			x					
8	V85A	11/08/2020	S	1 x bag			x					

Additional Information *(Comment on any gross contamination or specific requirements)*

Subcon / Forward Lab / Split WO
Lab Analysis: Newcastle
Organised By: Date: Asbestos 1-8
Relinquished By: Date:
Courier: ES2027013
WO No.:
Attach By PO: Internal Sheet:

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign: Kim - ALS	Date / Time: 14.08.20 8.30am
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time

Temperature Received:

TAT

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2027013**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: 680.10679	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		

Dates

Date Samples Received	: 12-Aug-2020 08:30	Issue Date	: 12-Aug-2020
Client Requested Due Date	: 12-Aug-2020	Scheduled Reporting Date	: **14-Aug-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 33.3
Receipt Detail	:	No. of samples received / analysed	: 8 / 8

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200G Asbestos Identification in Soils -
ES2027013-001	11-Aug-2020 00:00	STP10A-1	✓	
ES2027013-002	11-Aug-2020 00:00	STP10A-2	✓	
ES2027013-003	11-Aug-2020 00:00	STP10A-3	✓	
ES2027013-004	11-Aug-2020 00:00	STP10A-4	✓	
ES2027013-005	11-Aug-2020 00:00	STP10A-5	✓	
ES2027013-006	11-Aug-2020 00:00	STP10A-6	✓	
ES2027013-007	11-Aug-2020 00:00	V84A		✓
ES2027013-008	11-Aug-2020 00:00	V85A		✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

J Mcdowell

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2027013**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 12-Aug-2020 08:30
Order number	: 680.10679	Date Analysis Commenced	: 13-Aug-2020
C-O-C number	: ----	Issue Date	: 14-Aug-2020 11:00
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 8		
No. of samples analysed	: 8		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP10A-1	STP10A-2	STP10A-3	STP10A-4	STP10A-5
			Client sampling date / time	11-Aug-2020 00:00	11-Aug-2020 00:00	11-Aug-2020 00:00	11-Aug-2020 00:00	11-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2027013-001	ES2027013-002	ES2027013-003	ES2027013-004	ES2027013-005
				Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**-**	**-**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g	**815**	**822**	**807**	**853**	**804**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø **Weight Used for % Calculation**	----	0.0001	kg	**0.815**	**0.822**	**0.807**	**0.853**	**0.804**
ø **Fibrous Asbestos >7mm**	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP10A-6	V84A	V85A	----	----
			Client sampling date / time	11-Aug-2020 00:00	11-Aug-2020 00:00	11-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2027013-006	ES2027013-007	ES2027013-008	--------	--------
				Result	Result	Result	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**----**	**----**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**----**	**----**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**----**	**----**
Sample weight (dry)	----	0.01	g	**873**	**78.8**	**88.6**	**----**	**----**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**Yes**	**No**	**----**	**----**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**----**	**----**
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**----**	**----**
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	<0.0004	**----**	**----**	**----**	**----**
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	<0.001	**----**	**----**	**----**	**----**
ø **Weight Used for % Calculation**	----	0.0001	kg	**0.873**	**----**	**----**	**----**	**----**
ø **Fibrous Asbestos >7mm**	----	0.0004	g	<0.0004	**----**	**----**	**----**	**----**

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP10A-1 - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP10A-2 - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP10A-3 - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP10A-4 - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP10A-5 - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP10A-6 - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	V84A - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	V85A - 11-Aug-2020 00:00	Mid brown soil.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2027013**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 12-Aug-2020
Order number	: 680.10679	Date Analysis Commenced	: 13-Aug-2020
C-O-C number	: ----	Issue Date	: 14-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 8		
No. of samples analysed	: 8		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2027013**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 12-Aug-2020
Site	: ----	Issue Date	: 14-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch	No. of samples received	: 8
Order number	: 680.10679	No. of samples analysed	: 8

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
V84A,	V85A	**11-Aug-2020**	**----**	----	----	**13-Aug-2020**	07-Feb-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
STP10A-1,	STP10A-2,	**11-Aug-2020**	**----**	----	----	**13-Aug-2020**	07-Feb-2021	✓
STP10A-3,	STP10A-4,							
STP10A-5,	STP10A-6							
EA200N: Asbestos Quantification (non-NATA)								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)								
STP10A-1,	STP10A-2,	**11-Aug-2020**	**----**	----	----	**13-Aug-2020**	07-Feb-2021	✓
STP10A-3,	STP10A-4,							
STP10A-5,	STP10A-6							

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).

17.08.20

SLR

CHAIN OF CUSTODY DOCUMENT

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Sarah Doherty

PM CONTACT No: 0417 647 498

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No EA200 analysis for QC15, QC16 (S-26 & S-12 analysis only)

Environmental Division
Sydney
Work Order Reference
ES2028010

Telephone : + 61-2-8784 8555

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch

SAMPLER CONTACT No:

Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com; jmcdowell@slrconsulting.com

Turnaround Time (TAT): ☐ Standard TAT ☒ Non Standard or Urgent TAT — Required TAT: 1-day

COC Number: 1 of 1

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM ect)	Containers and Preservatives	REQUESTED ANALYSIS: STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	V161A	11/08/2020	S	1 x bag			x						
2	V173A	11/08/2020	S	1 x bag			x						
3	V174A	11/08/2020	S	1 x bag			x						
4	V175A	11/08/2020	S	1 x bag			x						
5	VP01	12/08/2020	S	1 x bag			x						
6	VP02	12/08/2020	S	1 x bag								x	
7	VP03	12/08/2020	S	1 x bag			x						
8	VP04	12/08/2020	S	1 x bag								x	
9	VP05	12/08/2020	S	1 x bag			x						
10	VP06	12/08/2020	S	1 x bag								x	
11	VP07	12/08/2020	S	1 x bag			x						
12	VP08	12/08/2020	S	1 x bag								x	
13	VS01	12/08/2020	S	1 x bag			x						
14	VS02	12/08/2020	S	1 x bag			x						
15	VS03	12/08/2020	S	1 x bag			x						

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle Asbestos
Organised By / Date:
Relinquished By / Date:
Courier / Courier:
WO No: ES2028010
Attach PO / Internal Sheet:

| | | |

SLR

| | | |

SLR

56	V211	12/08/2020	S	1 x bag, 1 x jar									
57	V212	12/08/2020	S	1 x bag, 1 x jar		x							
58	V213	12/08/2020	S	1 x bag, 1 x jar									
59	V214	12/08/2020	S	1 x bag, 1 x jar		x							
60	V215	12/08/2020	S	1 x bag, 1 x jar									
61	QC15	12/08/2020	S	1 x jar		x							No EA200 analysis
62	QC16	12/08/2020	S	1 x jar		x							No EA200 analysis
63	RINSATE	12/08/2020	S	4 x bottles								x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign	Date / Time	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2028010**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 5
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		

Dates

Date Samples Received	: 12-Aug-2020 08:58	Issue Date	: 13-Aug-2020
Client Requested Due Date	: 14-Aug-2020	Scheduled Reporting Date	: **17-Aug-2020**

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: 2	Temperature	: ----
Receipt Detail	:	No. of samples received / analysed	: 62 / 39

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Sample V203 (ALS #48) was not received.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method Client sample ID	Sample Container Received	Preferred Sample Container for Analysis
Dissolved Mercury by FIMS : EG035F		
RINSATE	- Clear Plastic Bottle - Unfiltered; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
Dissolved Metals by ICP-MS - Suite A : EG020A-F		
RINSATE	- Clear Plastic Bottle - Unfiltered; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200 Asbestos Identification in Soils -	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2028010-001	11-Aug-2020 00:00	V161A				✓		
ES2028010-002	11-Aug-2020 00:00	V173A				✓		
ES2028010-003	11-Aug-2020 00:00	V174A				✓		
ES2028010-004	11-Aug-2020 00:00	V175A				✓		
ES2028010-005	12-Aug-2020 00:00	VP01			✓			
ES2028010-006	12-Aug-2020 00:00	VP02	✓					
ES2028010-007	12-Aug-2020 00:00	VP03			✓			
ES2028010-008	12-Aug-2020 00:00	VP04	✓					
ES2028010-009	12-Aug-2020 00:00	VP05			✓			
ES2028010-010	12-Aug-2020 00:00	VP06	✓					
ES2028010-011	12-Aug-2020 00:00	VP07			✓			
ES2028010-012	12-Aug-2020 00:00	VP08	✓					
ES2028010-013	12-Aug-2020 00:00	VS01				✓		
ES2028010-014	12-Aug-2020 00:00	VS02				✓		
ES2028010-015	12-Aug-2020 00:00	VS03				✓		
ES2028010-016	12-Aug-2020 00:00	VS04				✓		
ES2028010-017	12-Aug-2020 00:00	VS05				✓		
ES2028010-018	12-Aug-2020 00:00	VS06				✓		
ES2028010-019	12-Aug-2020 00:00	VS07				✓		
ES2028010-020	12-Aug-2020 00:00	VS08				✓		
ES2028010-021	12-Aug-2020 00:00	V176		✓		✓	✓	✓
ES2028010-022	12-Aug-2020 00:00	V177	✓					
ES2028010-023	12-Aug-2020 00:00	V178		✓		✓	✓	✓
ES2028010-024	12-Aug-2020 00:00	V179	✓					
ES2028010-025	12-Aug-2020 00:00	V180		✓		✓	✓	✓
ES2028010-026	12-Aug-2020 00:00	V181	✓					
ES2028010-027	12-Aug-2020 00:00	V182		✓		✓	✓	✓
ES2028010-028	12-Aug-2020 00:00	V183	✓					
ES2028010-029	12-Aug-2020 00:00	V184		✓		✓	✓	✓
ES2028010-030	12-Aug-2020 00:00	V185	✓					

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200 Asbestos Identification in Soils -	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2028010-031	12-Aug-2020 00:00	V186		✓		✓	✓	✓
ES2028010-032	12-Aug-2020 00:00	V187	✓					
ES2028010-033	12-Aug-2020 00:00	V188		✓		✓	✓	✓
ES2028010-034	12-Aug-2020 00:00	V189	✓					
ES2028010-035	12-Aug-2020 00:00	V190		✓		✓	✓	✓
ES2028010-036	12-Aug-2020 00:00	V191	✓					
ES2028010-037	12-Aug-2020 00:00	V192		✓		✓	✓	✓
ES2028010-038	12-Aug-2020 00:00	V193	✓					
ES2028010-039	12-Aug-2020 00:00	V194		✓		✓	✓	✓
ES2028010-040	12-Aug-2020 00:00	V195	✓					
ES2028010-041	12-Aug-2020 00:00	V196		✓		✓	✓	✓
ES2028010-042	12-Aug-2020 00:00	V197	✓					
ES2028010-043	12-Aug-2020 00:00	V198		✓		✓	✓	✓
ES2028010-044	12-Aug-2020 00:00	V199	✓					
ES2028010-045	12-Aug-2020 00:00	V200		✓		✓	✓	✓
ES2028010-046	12-Aug-2020 00:00	V201	✓					
ES2028010-047	12-Aug-2020 00:00	V202		✓		✓	✓	✓
ES2028010-049	12-Aug-2020 00:00	V204		✓		✓	✓	✓
ES2028010-050	12-Aug-2020 00:00	V205	✓					
ES2028010-051	12-Aug-2020 00:00	V206		✓		✓	✓	✓
ES2028010-052	12-Aug-2020 00:00	V207	✓					
ES2028010-053	12-Aug-2020 00:00	V208		✓		✓	✓	✓
ES2028010-054	12-Aug-2020 00:00	V209	✓					
ES2028010-055	12-Aug-2020 00:00	V210		✓		✓	✓	✓
ES2028010-056	12-Aug-2020 00:00	V211	✓					
ES2028010-057	12-Aug-2020 00:00	V212		✓		✓	✓	✓
ES2028010-058	12-Aug-2020 00:00	V213	✓					
ES2028010-059	12-Aug-2020 00:00	V214		✓		✓	✓	✓
ES2028010-060	12-Aug-2020 00:00	V215	✓					
ES2028010-061	12-Aug-2020 00:00	QC15		✓			✓	✓
ES2028010-062	12-Aug-2020 00:00	QC16		✓			✓	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-05 TRH/BTEXN/8 Metals
ES2028010-063	12-Aug-2020 00:00	RINSATE	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-12 OC/OP Pesticides
ES2028010-063	12-Aug-2020 00:00	RINSATE	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

J Mcdowell

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2028010**	Page	: 1 of 30
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 12-Aug-2020 08:58
Order number	: ----	Date Analysis Commenced	: 13-Aug-2020
C-O-C number	: ----	Issue Date	: 17-Aug-2020 15:39
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 62		
No. of samples analysed	: 39		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V161A	V173A	V174A	V175A	VP01
				Client sampling date / time	11-Aug-2020 00:00	11-Aug-2020 00:00	11-Aug-2020 00:00	11-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-001	ES2028010-002	ES2028010-003	ES2028010-004	ES2028010-005
					Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--		**-**	**-**	**-**	**-**	**-**
Sample weight (dry)	----	0.01	g		**71.3**	**65.3**	**61.5**	**72.6**	**67.6**
APPROVED IDENTIFIER:	----	-	--		**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	VP03	VP05	VP07	VS01	VS02
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-007	ES2028010-009	ES2028010-011	ES2028010-013	ES2028010-014
					Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--		**-**	**-**	**-**	**-**	**-**
Sample weight (dry)	----	0.01	g		**76.4**	**74.6**	**67.0**	**83.8**	**82.4**
APPROVED IDENTIFIER:	----	-	--		**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	VS03	VS04	VS05	VS06	VS07
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-015	ES2028010-016	ES2028010-017	ES2028010-018	ES2028010-019
					Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--		**-**	**-**	**-**	**-**	**-**
Sample weight (dry)	----	0.01	g		**101**	**84.4**	**99.2**	**94.3**	**102**
APPROVED IDENTIFIER:	----	-	--		**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	VS08	V176	V178	V180	V182
			Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2028010-020	ES2028010-021	ES2028010-023	ES2028010-025	ES2028010-027
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	----	2.4	4.4	8.2	2.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	89.9	90.5	85.3	71.1	96.2
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	Yes	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	----	7	6	7	7
Cadmium	7440-43-9	1	mg/kg	----	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	----	91	81	88	117
Copper	7440-50-8	5	mg/kg	----	8	9	7	8
Lead	7439-92-1	5	mg/kg	----	11	10	11	13
Nickel	7440-02-0	2	mg/kg	----	7	7	7	9
Zinc	7440-66-6	5	mg/kg	----	9	7	<5	5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	----	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	----	0.06	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	0.07	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	----	0.07	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	----	0.16	0.05	<0.05	0.08
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	VS08	V176	V178	V180	V182
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-020	ES2028010-021	ES2028010-023	ES2028010-025	ES2028010-027
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		----	**0.22**	**0.05**	<0.05	**0.08**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	VS08	V176	V178	V180	V182
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-020	ES2028010-021	ES2028010-023	ES2028010-025	ES2028010-027
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		----	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		----	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		----	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		----	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		----	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	VS08	V176	V178	V180	V182
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-020	ES2028010-021	ES2028010-023	ES2028010-025	ES2028010-027
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		----	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		----	**83.1**	**74.9**	**85.7**	**88.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		----	**87.5**	**71.8**	**76.1**	**84.7**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	**92.8**	**89.1**	**75.4**	**87.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		----	**95.0**	**92.4**	**75.4**	**90.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		----	**55.9**	**66.4**	**62.1**	**56.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	**111**	**106**	**97.4**	**112**
Anthracene-d10	1719-06-8	0.5	%		----	**107**	**102**	**94.4**	**103**
4-Terphenyl-d14	1718-51-0	0.5	%		----	**95.6**	**91.8**	**86.3**	**92.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	**104**	**97.3**	**103**	**109**
Toluene-D8	2037-26-5	0.2	%		----	**104**	**89.0**	**103**	**108**
4-Bromofluorobenzene	460-00-4	0.2	%		----	**109**	**97.4**	**108**	**114**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V184	V186	V188	V190	V192
			Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2028010-029	ES2028010-031	ES2028010-033	ES2028010-035	ES2028010-037
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	1.7	2.0	3.3	1.8	3.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No*
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	Ch
Sample weight (dry)	----	0.01	g	95.2	100	113	82.4	79.6
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	7	7	6	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	123	94	69	104	72
Copper	7440-50-8	5	mg/kg	9	10	9	7	19
Lead	7439-92-1	5	mg/kg	14	12	12	11	36
Nickel	7440-02-0	2	mg/kg	7	7	7	6	8
Zinc	7440-66-6	5	mg/kg	22	20	38	7	97
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	0.08	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V184	V186	V188	V190	V192
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-029	ES2028010-031	ES2028010-033	ES2028010-035	ES2028010-037
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		**0.08**	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V184	V186	V188	V190	V192
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-029	ES2028010-031	ES2028010-033	ES2028010-035	ES2028010-037
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V184	V186	V188	V190	V192
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-029	ES2028010-031	ES2028010-033	ES2028010-035	ES2028010-037
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**96.0**	**67.9**	**106**	**92.8**	**103**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**85.6**	**66.5**	**87.2**	**76.5**	**97.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**91.0**	**87.8**	**90.6**	**86.4**	**91.1**
2-Chlorophenol-D4	93951-73-6	0.5	%		**93.8**	**91.6**	**92.2**	**90.6**	**96.6**
2.4.6-Tribromophenol	118-79-6	0.5	%		**56.5**	**60.2**	**64.8**	**54.9**	**67.0**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**110**	**111**	**110**	**110**	**114**
Anthracene-d10	1719-06-8	0.5	%		**110**	**104**	**103**	**106**	**108**
4-Terphenyl-d14	1718-51-0	0.5	%		**98.4**	**95.1**	**93.1**	**94.9**	**97.7**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**102**	**114**	**115**	**109**	**108**
Toluene-D8	2037-26-5	0.2	%		**96.6**	**109**	**115**	**107**	**106**
4-Bromofluorobenzene	460-00-4	0.2	%		**105**	**118**	**123**	**114**	**112**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V194	V196	V198	V200	V202
			Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2028010-039	ES2028010-041	ES2028010-043	ES2028010-045	ES2028010-047
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	2.1	1.9	1.6	2.4	2.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	109	57.9	90.2	121	73.7
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	Yes	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	<5	6	5	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	121	41	42	47	57
Copper	7440-50-8	5	mg/kg	10	8	8	7	10
Lead	7439-92-1	5	mg/kg	14	12	10	9	10
Nickel	7440-02-0	2	mg/kg	7	7	6	6	6
Zinc	7440-66-6	5	mg/kg	31	25	50	9	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V194	V196	V198	V200	V202
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-039	ES2028010-041	ES2028010-043	ES2028010-045	ES2028010-047
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	**0.05**	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V194	V196	V198	V200	V202
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-039	ES2028010-041	ES2028010-043	ES2028010-045	ES2028010-047
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V194	V196	V198	V200	V202
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-039	ES2028010-041	ES2028010-043	ES2028010-045	ES2028010-047
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**84.4**	**90.2**	**107**	**112**	**115**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**85.5**	**93.4**	**135**	**120**	**93.2**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**91.1**	**90.8**	**87.8**	**89.8**	**84.3**
2-Chlorophenol-D4	93951-73-6	0.5	%		**93.6**	**94.6**	**91.0**	**93.4**	**85.2**
2.4.6-Tribromophenol	118-79-6	0.5	%		**56.8**	**65.7**	**61.7**	**60.5**	**47.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**110**	**117**	**112**	**112**	**109**
Anthracene-d10	1719-06-8	0.5	%		**106**	**105**	**108**	**106**	**92.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**95.4**	**98.6**	**92.9**	**94.0**	**87.0**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**102**	**96.9**	**102**	**106**	**97.9**
Toluene-D8	2037-26-5	0.2	%		**97.8**	**94.2**	**96.8**	**108**	**91.7**
4-Bromofluorobenzene	460-00-4	0.2	%		**105**	**99.7**	**89.4**	**111**	**95.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V204	V206	V208	V210	V212
			Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2028010-049	ES2028010-051	ES2028010-053	ES2028010-055	ES2028010-057
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	2.6	2.0	10.6	7.0	1.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	81.3	94.5	100	73.2	81.5
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	7	7	6	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	82	75	160	106	90
Copper	7440-50-8	5	mg/kg	12	10	6	7	11
Lead	7439-92-1	5	mg/kg	10	11	12	10	9
Nickel	7440-02-0	2	mg/kg	10	9	6	7	5
Zinc	7440-66-6	5	mg/kg	6	8	<5	<5	7
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	0.06	0.06	<0.05	<0.05	0.09
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V204	V206	V208	V210	V212
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-049	ES2028010-051	ES2028010-053	ES2028010-055	ES2028010-057
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		**0.06**	**0.06**	<0.05	<0.05	**0.09**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V204	V206	V208	V210	V212
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-049	ES2028010-051	ES2028010-053	ES2028010-055	ES2028010-057
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V204	V206	V208	V210	V212
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028010-049	ES2028010-051	ES2028010-053	ES2028010-055	ES2028010-057
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**127**	**124**	**106**	**113**	**138**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**102**	**95.4**	**91.1**	**94.1**	**134**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**89.5**	**90.7**	**88.1**	**88.8**	**90.5**
2-Chlorophenol-D4	93951-73-6	0.5	%		**93.4**	**94.8**	**92.3**	**91.9**	**92.7**
2.4.6-Tribromophenol	118-79-6	0.5	%		**60.9**	**58.6**	**68.4**	**65.0**	**40.2**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**108**	**118**	**112**	**107**	**112**
Anthracene-d10	1719-06-8	0.5	%		**109**	**107**	**104**	**108**	**106**
4-Terphenyl-d14	1718-51-0	0.5	%		**94.5**	**95.6**	**94.8**	**94.8**	**96.9**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**88.8**	**106**	**96.2**	**97.8**	**110**
Toluene-D8	2037-26-5	0.2	%		**79.6**	**103**	**94.4**	**93.6**	**108**
4-Bromofluorobenzene	460-00-4	0.2	%		**85.7**	**104**	**106**	**100**	**111**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V214	QC15	QC16	----	----
			Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2028010-059	ES2028010-061	ES2028010-062	--------	--------
				Result	Result	Result	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.6	1.4	7.0	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	----	----
Asbestos Type	1332-21-4	-	--	-	----	----	----	----
Sample weight (dry)	----	0.01	g	83.7	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	----	----
Organic Fibre	----	0.1	g/kg	No	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	6	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	80	111	66	----	----
Copper	7440-50-8	5	mg/kg	9	8	8	----	----
Lead	7439-92-1	5	mg/kg	9	9	10	----	----
Nickel	7440-02-0	2	mg/kg	8	6	8	----	----
Zinc	7440-66-6	5	mg/kg	5	8	<5	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V214	QC15	QC16	----	----
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2028010-059	ES2028010-061	ES2028010-062	--------	--------
					Result	Result	Result	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	V214	QC15	QC16	----	----
			Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2028010-059	ES2028010-061	ES2028010-062	--------	--------
				Result	Result	Result	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	V214	QC15	QC16	----	----
				Client sampling date / time	12-Aug-2020 00:00	12-Aug-2020 00:00	12-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2028010-059	ES2028010-061	ES2028010-062	--------	--------
					Result	Result	Result	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**111**	**101**	**94.7**	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**106**	**111**	**100**	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**87.0**	**91.4**	**88.7**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.7**	**87.8**	**84.5**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**61.4**	**52.1**	**58.1**	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**105**	**102**	**102**	----	----
Anthracene-d10	1719-06-8	0.5	%		**101**	**89.7**	**86.5**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**89.9**	**97.5**	**93.0**	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**107**	**94.0**	**95.4**	----	----
Toluene-D8	2037-26-5	0.2	%		**102**	**95.1**	**101**	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**108**	**98.4**	**102**	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	12-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2028010-063	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	12-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2028010-063	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RINSATE	----	----	----	----
				Client sampling date / time	12-Aug-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2028010-063	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**93.2**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**91.4**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**91.9**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**111**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**122**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	VP01 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VP03 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VP05 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VP07 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V161A - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	V173A - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	V174A - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	V175A - 11-Aug-2020 00:00	Mid brown soil.
EA200: Description	VS01 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VS02 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VS03 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VS04 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VS05 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VS06 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VS07 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	VS08 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V176 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V178 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V180 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V182 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V184 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V186 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V188 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V190 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V192 - 12-Aug-2020 00:00	Mid brown soil containing three loose asbestos fibre bundles approximately 3x3x1mm.
EA200: Description	V194 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V196 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V198 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V200 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V202 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V204 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V206 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V208 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V210 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V212 - 12-Aug-2020 00:00	Mid brown soil.
EA200: Description	V214 - 12-Aug-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2028010**	Page	: 1 of 20
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 12-Aug-2020
Order number	: ----	Date Analysis Commenced	: 13-Aug-2020
C-O-C number	: ----	Issue Date	: 17-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 62		
No. of samples analysed	: 39		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3200111)									
ES2028010-021	V176	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	91	82	10.6	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	8	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	9	12.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	10	11.8	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	9	11	12.3	No Limit
ES2028010-041	V196	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	41	49	19.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	7	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	8	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	11	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	25	25	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3200113)									
ES2028010-061	QC15	EG005T: Chromium	7440-47-3	2	mg/kg	111	108	3.03	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
ES2028010-061	QC15	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	6	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	8	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	9	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	8	6	23.9	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3200114)									
ES2028010-025	V180	EA055: Moisture Content	----	0.1	%	8.2	8.7	6.78	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3200114) - continued									
ES2028010-047	V202	EA055: Moisture Content	----	0.1	%	2.1	2.1	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3200115)									
ES2028218-001	Anonymous	EA055: Moisture Content	----	0.1	%	8.8	8.6	2.79	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3200110)									
ES2028010-021	V176	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2028010-041	V196	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3200112)									
ES2028010-061	QC15	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3197802)									
ES2028010-021	V176	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	0.06	0.09	45.8	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.07	0.09	20.6	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.16	0.24	39.3	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2028010-041	V196	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3197802) - continued									
ES2028010-041	V196	EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3199058)									
ES2028010-061	QC15	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3197802)									
ES2028010-021	V176	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3197802) - continued									
ES2028010-021	V176	EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2028010-041	V196	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3199058)									
ES2028010-061	QC15	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3199058) - continued									
ES2028010-061	QC15	EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3197801)									
ES2028010-021	V176	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2028010-041	V196	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3197801) - continued									
ES2028010-041	V196	EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3199057)									
ES2028010-061	QC15	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3197800)									
ES2028010-021	V176	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2028010-041	V196	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3197800) - continued									
ES2028010-041	V196	EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3198924)									
ES2028010-021	V176	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2028010-041	V196	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3198925)									
ES2028010-061	QC15	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3199056)									
ES2028010-061	QC15	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3197800)									
ES2028010-021	V176	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2028010-041	V196	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3198924)									
ES2028010-021	V176	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2028010-041	V196	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3198925)									
ES2028010-061	QC15	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3199056)									
ES2028010-061	QC15	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080: BTEXN (QC Lot: 3198924)									
ES2028010-021	V176	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2028010-041	V196	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3198924) - continued									
ES2028010-041	V196	EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3198925)									
ES2028010-061	QC15	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3198214)									
ES2028010-063	RINSATE	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3200038)									
ME2001284-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3200038)									
ME2001284-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3200038)									
ME2001284-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3200111)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	124	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	113	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	129	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	117	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	130	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	126	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	117	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3200113)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	113	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	111	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	129	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	116	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	108	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	109	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	92.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3200110)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	78.5	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3200112)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	77.3	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3197802)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	77.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	80.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	82.1	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.5	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.5	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.5	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	80.4	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.9	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.2	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	88.0	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.7	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.3	67.0	123

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3197802) - continued								
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.6	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	101	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	95.9	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	98.5	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	101	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3199058)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	93.8	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.6	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.9	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	88.4	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	93.2	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	91.8	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3197802)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	98.1	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	107	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	76.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	82.2	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	98.8	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	103	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	69.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3197802) - continued								
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	93.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	89.8	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	101	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3199058)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.1	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	78.4	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	80.8	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.9	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	91.0	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	86.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	88.4	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.1	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.4	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	88.8	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.7	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.4	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	70.6	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3197801)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	104	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	106	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	103	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	103	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	111	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	111	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	111	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	114	74.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3197801) - continued								
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	103	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	107	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	97.3	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	107	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	102	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	101	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	98.6	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	94.2	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3199057)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	97.9	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	94.9	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	94.0	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	94.8	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	95.5	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	90.7	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	96.8	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	94.8	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	91.5	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	90.2	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	90.6	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	93.2	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	99.1	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	99.1	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	97.4	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	98.6	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3197800)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	106	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	106	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	101	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3198924)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	88.9	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3198925)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	76.9	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3199056)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	104	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	106	77.0	131

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3199056) - continued								
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	106	71.0	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3197800)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	104	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	107	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	75.7	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3198924)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	89.0	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3198925)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	75.4	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3199056)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	102	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	108	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	88.9	63.0	131
EP080: BTEXN (QCLot: 3198924)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	100	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	99.4	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	94.3	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	94.8	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	99.3	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	87.2	63.0	119
EP080: BTEXN (QCLot: 3198925)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	75.4	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	81.1	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	72.6	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	76.7	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	81.6	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	80.6	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3198214)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	94.4	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	95.2	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	90.5	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	90.2	81.0	111

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3198214) - continued								
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	90.7	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	88.5	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	85.9	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3198215)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	104	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3198246)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	91.1	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	90.3	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	98.3	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	96.0	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	106	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	96.6	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	104	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	97.6	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	98.4	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	97.1	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	100	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	97.9	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	96.4	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	98.0	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	102	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	102	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	96.2	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	102	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	103	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	96.6	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	103	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3198246)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	99.6	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	104	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	23.6	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	85.8	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	99.9	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	102	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	106	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	104	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	100	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	101	75.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3198246) - continued								
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	100	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	99.6	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	108	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	97.5	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	104	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	98.8	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	102	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	101	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	98.2	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3198247)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	62.0	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	83.6	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	89.1	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3200038)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	97.6	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3198247)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	68.2	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	88.5	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	96.7	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3200038)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	103	75.0	127
EP080: BTEXN (QCLot: 3200038)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	83.6	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	105	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	104	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	102	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	104	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	104	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3200111)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3200111) - continued							
ES2028010-021	V176	EG005T: Arsenic	7440-38-2	50 mg/kg	88.7	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	100	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	73.0	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	104	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	100	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	101	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	98.1	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3200113)							
ES2028010-061	QC15	EG005T: Arsenic	7440-38-2	50 mg/kg	71.3	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	84.1	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	84.8	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	97.7	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	83.8	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	83.6	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	78.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3200110)							
ES2028010-021	V176	EG035T: Mercury	7439-97-6	5 mg/kg	78.4	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3200112)							
ES2028010-061	QC15	EG035T: Mercury	7439-97-6	5 mg/kg	75.8	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3197802)							
ES2028010-021	V176	EP068: gamma-BHC	58-89-9	0.5 mg/kg	112	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	100.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	117	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	114	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	85.0	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	89.6	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3199058)							
ES2028010-061	QC15	EP068: gamma-BHC	58-89-9	0.5 mg/kg	78.7	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	71.7	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	76.9	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	85.2	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	82.7	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	87.5	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3197802)							
ES2028010-021	V176	EP068: Diazinon	333-41-5	0.5 mg/kg	116	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	94.5	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	94.7	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3197802) - continued							
ES2028010-021	V176	EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	89.4	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	73.7	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3199058)							
ES2028010-061	QC15	EP068: Diazinon	333-41-5	0.5 mg/kg	79.3	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	79.6	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	75.1	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	84.5	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	74.4	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3197801)							
ES2028010-021	V176	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	91.8	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	99.1	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3199057)							
ES2028010-061	QC15	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	99.7	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	98.1	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3197800)							
ES2028010-021	V176	EP071: C10 - C14 Fraction	----	523 mg/kg	86.5	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	98.0	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	105	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3198924)							
ES2028010-021	V176	EP080: C6 - C9 Fraction	----	32.5 mg/kg	110	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3198925)							
ES2028010-061	QC15	EP080: C6 - C9 Fraction	----	32.5 mg/kg	90.2	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3199056)							
ES2028010-061	QC15	EP071: C10 - C14 Fraction	----	523 mg/kg	99.0	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	116	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	117	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3197800)							
ES2028010-021	V176	EP071: >C10 - C16 Fraction	----	860 mg/kg	92.0	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	106	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	84.3	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3198924)							
ES2028010-021	V176	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	107	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3198925)							
ES2028010-061	QC15	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	87.5	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3199056)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3199056) - continued							
ES2028010-061	QC15	EP071: >C10 - C16 Fraction	----	860 mg/kg	109	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	118	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	108	52.0	132
EP080: BTEXN (QCLot: 3198924)							
ES2028010-021	V176	EP080: Benzene	71-43-2	2.5 mg/kg	116	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	111	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	110	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	110	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	110	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	95.2	70.0	130
EP080: BTEXN (QCLot: 3198925)							
ES2028010-061	QC15	EP080: Benzene	71-43-2	2.5 mg/kg	82.2	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	86.9	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	83.8	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	87.2	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	89.0	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	97.4	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3198214)							
ES2028254-001	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	94.9	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	97.8	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	92.3	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	94.2	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	103	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	91.9	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	95.8	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 3198215)							
ES2028010-063	RINSATE	EG035F: Mercury	7439-97-6	0.01 mg/L	99.2	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3200038)							
ME2001284-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	127	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3200038)							
ME2001284-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	128	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080: BTEXN (QCLot: 3200038)							
ME2001284-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	114	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	122	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	127	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	125	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	126	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	116	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2028010**	Page	: 1 of 10
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 12-Aug-2020
Site	: ----	Issue Date	: 17-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch	No. of samples received	: 62
Order number	: ----	No. of samples analysed	: 39

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count QC	Count Regular	Rate (%) Actual	Rate (%) Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
Dissolved Mercury by FIMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	4	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Pesticides by GCMS	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	4	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Evaluation	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Evaluation
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
V176,	V178,	**12-Aug-2020**	**----**	----	----	**14-Aug-2020**	26-Aug-2020	✓
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214,							
QC15,	QC16							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
V161A,	V173A,	**11-Aug-2020**	**----**	----	----	**13-Aug-2020**	07-Feb-2021	✓
V174A,	V175A							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
VS01,	VS02,	**12-Aug-2020**	**----**	----	----	**13-Aug-2020**	08-Feb-2021	✓
VS03,	VS04,							
VS05,	VS06,							
VS07,	VS08,							
V176,	V178,							
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
VP01,	VP03,	**12-Aug-2020**	**----**	----	----	**13-Aug-2020**	08-Feb-2021	✓
VP05,	VP07							
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
V176,	V178,	**12-Aug-2020**	**14-Aug-2020**	08-Feb-2021	✓	**14-Aug-2020**	08-Feb-2021	✓
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214,							
QC15,	QC16							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
V176,	V178,	**12-Aug-2020**	**14-Aug-2020**	09-Sep-2020	✓	**17-Aug-2020**	09-Sep-2020	✓
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214,							
QC15,	QC16							
EP068A: Organochlorine Pesticides (OC)								
Soil Glass Jar - Unpreserved (EP068)								
V176,	V178,	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	23-Sep-2020	✓
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214,							
QC15,	QC16							
EP068B: Organophosphorus Pesticides (OP)								
Soil Glass Jar - Unpreserved (EP068)								
V176,	V178,	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	23-Sep-2020	✓
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214,							
QC15,	QC16							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM))								
V176,	V178,	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	23-Sep-2020	✓
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214,							
QC15,	QC16							
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP080)								
V176,	V178,	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	26-Aug-2020	✓
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214,							
QC15,	QC16							
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Soil Glass Jar - Unpreserved (EP080)								
V176,	V178,	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	26-Aug-2020	✓
V180,	V182,							
V184,	V186,							
V188,	V190,							
V192,	V194,							
V196,	V198,							
V200,	V202,							
V204,	V206,							
V208,	V210,							
V212,	V214,							
QC15,	QC16							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
V176, V178, V180, V182, V184, V186, V188, V190, V192, V194, V196, V198, V200, V202, V204, V206, V208, V210, V212, V214, QC15, QC16	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	26-Aug-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG020A-F)							
RINSATE	**12-Aug-2020**	**----**	----	----	**13-Aug-2020**	08-Feb-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG035F)							
RINSATE	**12-Aug-2020**	**----**	----	----	**14-Aug-2020**	26-Aug-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**12-Aug-2020**	**13-Aug-2020**	19-Aug-2020	✓	**14-Aug-2020**	22-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
RINSATE	**12-Aug-2020**	**13-Aug-2020**	19-Aug-2020	✓	**14-Aug-2020**	22-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**12-Aug-2020**	**13-Aug-2020**	19-Aug-2020	✓	**14-Aug-2020**	22-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	26-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RINSATE	**12-Aug-2020**	**13-Aug-2020**	19-Aug-2020	✓	**14-Aug-2020**	22-Sep-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	26-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RINSATE	**12-Aug-2020**	**14-Aug-2020**	26-Aug-2020	✓	**14-Aug-2020**	26-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	3	26	11.54	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	22	13.64	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	22	13.64	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	26	11.54	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	26	15.38	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	22	13.64	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	24	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	26	7.69	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	26	7.69	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	24	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	26	7.69	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	26	7.69	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	24	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	26	7.69	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	26	7.69	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	24	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	6	16.67	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
TRH - Semivolatile Fraction	EP071	0	4	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	5	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	4	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

17.8.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one): ☐ BRISBANE ☐ CANBERRA ☐ DARWIN ☐ GOLD COAST ☐ MACKAY ☐ MELBOURNE ☐ NEWCASTLE ☐ PERTH ☐ SUNSHINE COAST ☒ SYDNEY ☐ TOWNSVILLE ☐ WOLLONGONG

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Sarah Doherty

PM CONTACT No: 0417 647 498

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Sarah Doherty/Gemma Sherridan/James Murdoch

SAMPLER CONTACT No:

Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; gsheridan@slrconsulting.com; jmcdowell@slrconsulting.com

Turnaround Time (TAT)

☐ Standard TAT

☒ Non Standard or Urgent TAT

Required TAT: 1-day

COC Number 1 of 1

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Rinsates (W-05, W-12)	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	STP19 1	13/08/2020	S	1xbag 1xjar	x								
2	STP19-2	13/08/2020	S	1xbag 1xjar	x								
3	STP19-3	13/08/2020	S	1xbag 1xjar	x								
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By / Date:
Relinquished By / Date: Asbestos
Connote / Courier:
WO No: ES2028218
Attach By PO - Internal Sheet:

Environmental Division
Sydney
Work Order Reference
ES2028218

Telephone : +61-2-8784 8555

LAB OF ORIGIN: DARWIN

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign:	Date / Time: 13/8/20	**Received by**	Sign: ALS-Darwin	Date / Time: 13/08/20 3:00pm	**Temperature Received:**	32.7C
Relinquished By	Sign:	Date / Time:	**Received by**	Sign: Kim-ALS	Date / Time: 14.08.20		
Relinquished By	Sign:	Date / Time:	**Received by**	Sign: Sydney	Date / Time: 8.00am		925

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2028218**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		

Dates

Date Samples Received	: 14-Aug-2020 08:00	Issue Date	: 14-Aug-2020
Client Requested Due Date	: 17-Aug-2020	Scheduled Reporting Date	: **17-Aug-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 1	Temperature	: 32.7' C
Receipt Detail	:	No. of samples received / analysed	: 3 / 3

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2028218-001	13-Aug-2020 00:00	STP19-1	✓	✓	✓	✓
ES2028218-002	13-Aug-2020 00:00	STP19-2	✓	✓	✓	✓
ES2028218-003	13-Aug-2020 00:00	STP19-3	✓	✓	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

J Mcdowell

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2028218**	Page	: 1 of 8
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 14-Aug-2020 08:00
Order number	: ----	Date Analysis Commenced	: 14-Aug-2020
C-O-C number	: ----	Issue Date	: 17-Aug-2020 15:41
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alexander Ristoski	Laboratory Technican	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP19-1	STP19-2	STP19-3	----	----
			Client sampling date / time	13-Aug-2020 00:00	13-Aug-2020 00:00	13-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2028218-001	ES2028218-002	ES2028218-003	--------	--------
				Result	Result	Result	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.8	7.7	7.9	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No*	No	----	----
Asbestos Type	1332-21-4	-	--	-	Ch	-	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	----	----
Sample weight (dry)	----	0.01	g	576	612	592	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	----	----
Organic Fibre	----	0.1	g/kg	No	No	No	----	----
APPROVED IDENTIFIER:	----	-	--	A. RISTOSKI	A. RISTOSKI	A. RISTOSKI	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	0.0004	<0.0004	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	----	----
ø Weight Used for % Calculation	----	0.0001	kg	0.576	0.612	0.592	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	6	7	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	100	133	97	----	----
Copper	7440-50-8	5	mg/kg	8	6	9	----	----
Lead	7439-92-1	5	mg/kg	10	8	12	----	----
Nickel	7440-02-0	2	mg/kg	6	4	6	----	----
Zinc	7440-66-6	5	mg/kg	28	21	28	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP19-1	STP19-2	STP19-3	----	----
			Client sampling date / time	13-Aug-2020 00:00	13-Aug-2020 00:00	13-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2028218-001	ES2028218-002	ES2028218-003	--------	--------
				Result	Result	Result	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	**0.10**	**0.11**	**0.15**	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	**0.10**	**0.11**	**0.15**	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	**0.14**	**0.14**	**0.20**	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.14**	**0.14**	**0.20**	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP19-1	STP19-2	STP19-3	----	----
				Client sampling date / time	13-Aug-2020 00:00	13-Aug-2020 00:00	13-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2028218-001	ES2028218-002	ES2028218-003	--------	--------
					Result	Result	Result	----	----
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP19-1	STP19-2	STP19-3	----	----
				Client sampling date / time	13-Aug-2020 00:00	13-Aug-2020 00:00	13-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2028218-001	ES2028218-002	ES2028218-003	--------	--------
					Result	Result	Result	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**63.0**	**66.3**	**70.9**	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**60.4**	**66.6**	**92.9**	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**91.6**	**92.4**	**84.6**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**91.0**	**92.1**	**85.1**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**79.4**	**77.3**	**70.9**	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**94.1**	**97.5**	**96.1**	----	----
Anthracene-d10	1719-06-8	0.5	%		**97.6**	**103**	**88.7**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**89.3**	**94.2**	**84.7**	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**83.1**	**87.7**	**82.8**	----	----
Toluene-D8	2037-26-5	0.2	%		**88.0**	**91.3**	**86.9**	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**92.4**	**94.3**	**91.7**	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP19-1 - 13-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP19-2 - 13-Aug-2020 00:00	Mid brown soil containing one bundle of asbestos fibre.
EA200: Description	STP19-3 - 13-Aug-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2028218**	Page	: 1 of 8
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 14-Aug-2020
Order number	: ----	Date Analysis Commenced	: 14-Aug-2020
C-O-C number	: ----	Issue Date	: 17-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alexander Ristoski	Laboratory Technican	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3200113)									
ES2028010-061	Anonymous	EG005T: Chromium	7440-47-3	2	mg/kg	111	108	3.03	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
ES2028010-061	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	6	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	8	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	9	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	8	6	23.9	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3200115)									
ES2028218-001	STP19-1	EA055: Moisture Content	----	0.1	%	8.8	8.6	2.79	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3200112)									
ES2028010-061	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3199898)									
ES2027211-013	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3199898) - continued									
ES2027211-013	Anonymous	EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3199898)									
ES2027211-013	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3199897)									
ES2027211-013	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	0.6	0.6	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	2.2	1.9	17.8	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	0.8	0.7	18.4	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	5.8	5.0	13.8	0% - 50%
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	6.0	5.2	14.5	0% - 50%
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	3.1	2.6	19.1	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	2.9	2.5	15.8	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3199897) - continued									
ES2027211-013	Anonymous	EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	4.7	3.8	21.2	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	1.6	1.4	12.6	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	3.8	3.1	19.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	2.0	1.6	22.2	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	2.6	2.1	22.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	36.6	30.5	18.2	0% - 20%
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	5.5	4.1	29.4	0% - 50%
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3199896)									
ES2027211-013	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	180	160	14.5	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	210	190	9.44	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3200109)									
ES2028218-001	STP19-1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3199896)									
ES2027211-013	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	340	290	18.2	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	150	160	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3200109)									
ES2028218-001	STP19-1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3200109)									
ES2028218-001	STP19-1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3200113)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	113	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	111	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	129	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	116	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	108	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	109	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	92.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3200112)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	77.3	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3199898)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	74.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.1	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.4	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.2	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	77.1	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	75.2	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	78.5	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.5	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.9	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	93.8	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.5	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	86.5	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3199898)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	89.5	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	62.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3199898) - continued								
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	94.5	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	99.0	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	100	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	106	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.0	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	100	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	98.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.9	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	81.0	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	72.7	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3199897)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	90.7	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	86.6	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	90.2	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	88.9	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	97.0	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	95.7	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	97.4	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	95.8	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	83.7	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	91.6	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	85.6	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	90.3	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	85.1	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	77.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	76.4	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	75.6	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3199896)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	94.8	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	94.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	99.9	71.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3200109)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	111	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3199896)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	92.5	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	96.1	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	116	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3200109)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	110	68.4	128
EP080: BTEXN (QCLot: 3200109)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	98.0	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	101	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	101	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	102	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	94.1	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3200113)							
ES2028010-061	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	71.3	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	84.1	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	84.8	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	97.7	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	83.8	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	83.6	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	78.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3200112)							
ES2028010-061	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	75.8	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3199898)							
ES2027211-013	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	97.9	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	97.1	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	92.0	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	88.8	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3199898) - continued							
ES2027211-013	Anonymous	EP068: Endrin	72-20-8	2 mg/kg	99.9	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	84.0	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3199898)							
ES2027211-013	Anonymous	EP068: Diazinon	333-41-5	0.5 mg/kg	114	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	92.8	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	83.8	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	78.0	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	75.9	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3199897)							
ES2027211-013	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	90.1	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	128	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3199896)							
ES2027211-013	Anonymous	EP071: C10 - C14 Fraction	----	523 mg/kg	95.7	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	103	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	102	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3200109)							
ES2028218-001	STP19-1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	105	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3199896)							
ES2027211-013	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	98.0	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	103	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	95.6	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3200109)							
ES2028218-001	STP19-1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	104	70.0	130
EP080: BTEXN (QCLot: 3200109)							
ES2028218-001	STP19-1	EP080: Benzene	71-43-2	2.5 mg/kg	89.7	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	96.1	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	98.5	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	98.3	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	100	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	94.5	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2028218**	Page	: 1 of 6
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 14-Aug-2020
Site	: ----	Issue Date	: 17-Aug-2020
Sampler	: Sarah Doherty/Gemma Sherridan/James Murdoch	No. of samples received	: 3
Order number	: ----	No. of samples analysed	: 3

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**----**	----	----	**14-Aug-2020**	27-Aug-2020	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**----**	----	----	**15-Aug-2020**	09-Feb-2021	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**----**	----	----	**15-Aug-2020**	09-Feb-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**14-Aug-2020**	09-Feb-2021	✓	**14-Aug-2020**	09-Feb-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**14-Aug-2020**	10-Sep-2020	✓	**17-Aug-2020**	10-Sep-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**14-Aug-2020**	27-Aug-2020	✓	**14-Aug-2020**	23-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**14-Aug-2020**	27-Aug-2020	✓	**14-Aug-2020**	23-Sep-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**14-Aug-2020**	27-Aug-2020	✓	**14-Aug-2020**	23-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**14-Aug-2020**	27-Aug-2020	✓	**14-Aug-2020**	27-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**14-Aug-2020**	27-Aug-2020	✓	**14-Aug-2020**	27-Aug-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP19-1, STP19-2, STP19-3	**13-Aug-2020**	**14-Aug-2020**	27-Aug-2020	✓	**14-Aug-2020**	27-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	1	7	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	6	**33.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.

Preparation Methods	Method	Matrix	Method Descriptions
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By Date: Asbestos
Relinquished By Date:
Connote Courier:
WO No: ES2028221
Attach By PO Internal Sheet:

SLR

9	STP15-6a	17/08/2020	S	1jar 1bag	x				x				
10	STP20-1	17/08/2020	S	1jar 1bag	x				x				
11	STP20-2	17/08/2020	S	1jar 1bag	x				x				
12	STP20-3	17/08/2020	S	1jar 1bag	x				x				
13	STP20-4	17/08/2020	S	1jar 1bag	x				x				
14	STP20-5	17/08/2020	S	1jar 1bag	x				x				
15	STP20-6	17/08/2020	S	1jar 1bag	x				x				
16	STP20-7	17/08/2020	S	1jar 1bag	x				x				
17	STP20-8	17/08/2020	S	1jar 1bag	x				x				
18	STP21-1	17/08/2020	S	1jar 1bag	x					x			suspected fragment in sample
19	STP21-2	17/08/2020	S	1jar 1bag	x				x				
20	STP21-3	17/08/2020	S	1jar 1bag	x				x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign	Date / Time 17/08/20 1:24pm.
Relinquished By	Sign		**Received by**	Sign 18.08.20 8.00am	Date / Time 2,25
Relinquished By	Sign		**Received by**	Sign	Date / Time

Temperature Received: 34.5°C

Environmental Division Sydney
Work Order Reference
ES2028221

Telephone : 61-2-8784 8555

LAB OF ORIGIN: DARWIN

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2028221**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: 2	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		

Dates

Date Samples Received	: 18-Aug-2020 08:00	Issue Date	: 18-Aug-2020
Client Requested Due Date	: 19-Aug-2020	Scheduled Reporting Date	: **20-Aug-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 34.5
Receipt Detail	:	No. of samples received / analysed	: 20 / 20

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Water samles RIN14 (#2) and RIN17 (#3) to be analysed for TPH C6-C9/BTEX and total metals as per containers supplied.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200N Asbestos in Soils - (<1kg samples ONLY)	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2028221-001	17-Aug-2020 00:00	QC17	✓	✓		✓	✓
ES2028221-004	17-Aug-2020 00:00	STP15-1a	✓	✓		✓	✓
ES2028221-005	17-Aug-2020 00:00	STP15-2a	✓	✓		✓	✓
ES2028221-006	17-Aug-2020 00:00	STP15-3a	✓	✓		✓	✓
ES2028221-007	17-Aug-2020 00:00	STP15-4a	✓	✓		✓	✓
ES2028221-008	17-Aug-2020 00:00	STP15-5a	✓	✓		✓	✓
ES2028221-009	17-Aug-2020 00:00	STP15-6a	✓	✓		✓	✓
ES2028221-010	17-Aug-2020 00:00	STP20-1	✓	✓		✓	✓
ES2028221-011	17-Aug-2020 00:00	STP20-2	✓	✓		✓	✓
ES2028221-012	17-Aug-2020 00:00	STP20-3	✓	✓		✓	✓
ES2028221-013	17-Aug-2020 00:00	STP20-4	✓	✓		✓	✓
ES2028221-014	17-Aug-2020 00:00	STP20-5	✓	✓		✓	✓
ES2028221-015	17-Aug-2020 00:00	STP20-6	✓	✓		✓	✓
ES2028221-016	17-Aug-2020 00:00	STP20-7	✓	✓		✓	✓
ES2028221-017	17-Aug-2020 00:00	STP20-8	✓	✓		✓	✓
ES2028221-018	17-Aug-2020 00:00	STP21-1	✓		✓	✓	✓
ES2028221-019	17-Aug-2020 00:00	STP21-2	✓	✓		✓	✓
ES2028221-020	17-Aug-2020 00:00	STP21-3	✓	✓		✓	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-02T 8 metals (Total)	WATER - W-18 TRH(C6 - C9)/BTEXN
ES2028221-002	14-Aug-2020 00:00	RIN14	✓	✓
ES2028221-003	17-Aug-2020 00:00	RIN17	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

J Mcdowell

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2028221**	Page	: 1 of 21
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 18-Aug-2020 08:00
Order number	: ----	Date Analysis Commenced	: 18-Aug-2020
C-O-C number	: 2	Issue Date	: 20-Aug-2020 18:09
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 20		
No. of samples analysed	: 20		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	QC17	STP15-1a	STP15-2a	STP15-3a	STP15-4a
			Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2028221-001	ES2028221-004	ES2028221-005	ES2028221-006	ES2028221-007
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.7	7.0	10.1	8.5	6.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	767	832	957	952	885
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.767	0.832	0.957	0.952	0.885
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	6	6	7	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	101	115	121	107	84
Copper	7440-50-8	5	mg/kg	7	7	9	21	8
Lead	7439-92-1	5	mg/kg	12	11	12	11	9
Nickel	7440-02-0	2	mg/kg	4	4	5	4	4
Zinc	7440-66-6	5	mg/kg	18	17	22	38	34
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.08
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.06

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC17	STP15-1a	STP15-2a	STP15-3a	STP15-4a
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-001	ES2028221-004	ES2028221-005	ES2028221-006	ES2028221-007
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.10**	**0.06**	**0.20**	**0.06**	**0.85**
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.10**	**0.06**	**0.20**	**0.06**	**0.77**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.08**
Dieldrin	60-57-1	0.05	mg/kg		**0.34**	**0.21**	**0.43**	**0.19**	**0.83**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.34**	**0.21**	**0.43**	**0.19**	**0.91**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC17	STP15-1a	STP15-2a	STP15-3a	STP15-4a
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-001	ES2028221-004	ES2028221-005	ES2028221-006	ES2028221-007
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC17	STP15-1a	STP15-2a	STP15-3a	STP15-4a
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-001	ES2028221-004	ES2028221-005	ES2028221-006	ES2028221-007
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		103	104	113	97.3	117
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		111	109	124	100	128
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		96.9	93.2	95.2	93.8	96.3
2-Chlorophenol-D4	93951-73-6	0.5	%		95.6	93.5	97.3	97.1	97.3
2.4.6-Tribromophenol	118-79-6	0.5	%		76.6	80.5	82.7	84.5	70.4
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		106	103	115	116	110
Anthracene-d10	1719-06-8	0.5	%		105	101	108	109	107
4-Terphenyl-d14	1718-51-0	0.5	%		104	89.9	95.4	94.2	99.0
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		105	95.3	107	103	107
Toluene-D8	2037-26-5	0.2	%		102	98.2	108	106	110
4-Bromofluorobenzene	460-00-4	0.2	%		90.6	88.4	96.4	94.2	97.8

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP15-5a	STP15-6a	STP20-1	STP20-2	STP20-3
			Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2028221-008	ES2028221-009	ES2028221-010	ES2028221-011	ES2028221-012
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.0	6.1	9.0	8.3	8.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	950	758	786	931	913
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.950	0.758	0.786	0.931	0.913
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	<5	6	7	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	96	49	110	102	101
Copper	7440-50-8	5	mg/kg	7	8	7	10	8
Lead	7439-92-1	5	mg/kg	11	10	10	14	11
Nickel	7440-02-0	2	mg/kg	5	4	4	5	5
Zinc	7440-66-6	5	mg/kg	34	27	11	41	16
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-5a	STP15-6a	STP20-1	STP20-2	STP20-3
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-008	ES2028221-009	ES2028221-010	ES2028221-011	ES2028221-012
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.17**	**0.15**	**0.08**	**0.10**	**0.06**
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.17**	**0.15**	**0.08**	**0.10**	**0.06**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.13**	**0.31**	**0.22**	**0.38**	**0.17**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.13**	**0.31**	**0.22**	**0.38**	**0.17**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-5a	STP15-6a	STP20-1	STP20-2	STP20-3
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-008	ES2028221-009	ES2028221-010	ES2028221-011	ES2028221-012
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP15-5a	STP15-6a	STP20-1	STP20-2	STP20-3
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-008	ES2028221-009	ES2028221-010	ES2028221-011	ES2028221-012
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**99.3**	**86.8**	**99.7**	**100**	**100**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**105**	**91.2**	**105**	**60.8**	**94.7**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**95.1**	**92.4**	**91.3**	**90.3**	**88.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**98.0**	**92.7**	**93.4**	**94.0**	**94.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**77.3**	**74.8**	**70.8**	**71.5**	**71.8**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**111**	**107**	**106**	**102**	**109**
Anthracene-d10	1719-06-8	0.5	%		**105**	**103**	**102**	**105**	**106**
4-Terphenyl-d14	1718-51-0	0.5	%		**103**	**93.7**	**94.5**	**90.2**	**96.3**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**100**	**99.2**	**83.3**	**96.5**	**92.8**
Toluene-D8	2037-26-5	0.2	%		**100**	**91.8**	**73.5**	**88.2**	**86.0**
4-Bromofluorobenzene	460-00-4	0.2	%		**90.4**	**85.5**	**72.9**	**79.1**	**77.6**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP20-4	STP20-5	STP20-6	STP20-7	STP20-8
			Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit	ES2028221-013	ES2028221-014	ES2028221-015	ES2028221-016	ES2028221-017
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.7	9.0	6.5	8.1	8.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	904	831	879	762	760
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.904	0.831	0.879	0.762	0.760
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	6	6	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	100	104	59	75	116
Copper	7440-50-8	5	mg/kg	9	8	10	5	7
Lead	7439-92-1	5	mg/kg	12	10	11	8	10
Nickel	7440-02-0	2	mg/kg	5	4	5	4	5
Zinc	7440-66-6	5	mg/kg	18	17	17	7	10
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	0.09	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP20-4	STP20-5	STP20-6	STP20-7	STP20-8
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-013	ES2028221-014	ES2028221-015	ES2028221-016	ES2028221-017
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.07**	**0.20**	**0.17**	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.07**	**0.20**	**0.17**	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.11**	**0.18**	**0.15**	**0.13**	**0.20**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.11**	**0.18**	**0.15**	**0.22**	**0.20**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP20-4	STP20-5	STP20-6	STP20-7	STP20-8
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-013	ES2028221-014	ES2028221-015	ES2028221-016	ES2028221-017
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP20-4	STP20-5	STP20-6	STP20-7	STP20-8
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00
Compound	CAS Number	LOR	Unit		ES2028221-013	ES2028221-014	ES2028221-015	ES2028221-016	ES2028221-017
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**103**	**117**	**116**	**96.3**	**122**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**69.6**	**68.1**	**62.7**	**57.7**	**100**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**90.4**	**88.8**	**90.7**	**89.6**	**90.3**
2-Chlorophenol-D4	93951-73-6	0.5	%		**92.7**	**95.2**	**93.6**	**92.9**	**95.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**75.2**	**71.9**	**69.5**	**74.4**	**74.9**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**108**	**109**	**109**	**108**	**114**
Anthracene-d10	1719-06-8	0.5	%		**107**	**106**	**105**	**104**	**106**
4-Terphenyl-d14	1718-51-0	0.5	%		**92.7**	**97.3**	**98.6**	**100**	**97.5**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**94.2**	**94.9**	**92.0**	**93.2**	**100.0**
Toluene-D8	2037-26-5	0.2	%		**88.3**	**87.7**	**79.3**	**86.8**	**93.7**
4-Bromofluorobenzene	460-00-4	0.2	%		**81.7**	**79.5**	**73.5**	**77.8**	**85.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP21-1	STP21-2	STP21-3	----	----
			Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2028221-018	ES2028221-019	ES2028221-020	--------	--------
				Result	Result	Result	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**6.8**	**8.0**	**9.2**	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**Yes**	**No**	**No**	----	----
Asbestos Type	1332-21-4	-	--	**Ch + Am**	**-**	**-**	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	----	----
Sample weight (dry)	----	0.01	g	**587**	**541**	**516**	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	----	----
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	**0.0103**	<0.0004	<0.0004	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	**0.354**	<0.001	<0.001	----	----
ø Asbestos Containing Material	1332-21-4	0.1	g	<0.1	**----**	**----**	----	----
ø Weight Used for % Calculation	----	0.0001	kg	**0.587**	**0.541**	**0.516**	----	----
ø Asbestos Containing Material (as 15% Asbestos in ACM >7mm)	1332-21-4	0.01	% (w/w)	<0.01	**----**	**----**	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g	**2.07**	<0.0004	<0.0004	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**6**	**5**	**6**	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	**64**	**41**	**57**	----	----
Copper	7440-50-8	5	mg/kg	**7**	**8**	**7**	----	----
Lead	7439-92-1	5	mg/kg	**11**	**10**	**10**	----	----
Nickel	7440-02-0	2	mg/kg	**5**	**5**	**4**	----	----
Zinc	7440-66-6	5	mg/kg	**8**	**9**	**23**	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP21-1	STP21-2	STP21-3	----	----
			Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2028221-018	ES2028221-019	ES2028221-020	--------	--------
				Result	Result	Result	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ **Total Chlordane (sum)**	----	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	**0.08**	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	**0.08**	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP21-1	STP21-2	STP21-3	----	----
			Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2028221-018	ES2028221-019	ES2028221-020	--------	--------
				Result	Result	Result	----	----
EP068B: Organophosphorus Pesticides (OP) - Continued								
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP21-1	STP21-2	STP21-3	----	----
				Client sampling date / time	17-Aug-2020 00:00	17-Aug-2020 00:00	17-Aug-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2028221-018	ES2028221-019	ES2028221-020	--------	--------
					Result	Result	Result	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**104**	**120**	**114**	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**85.7**	**66.9**	**71.3**	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**89.0**	**90.8**	**86.8**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**91.7**	**92.2**	**89.7**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**67.6**	**65.0**	**66.1**	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**106**	**100**	**101**	----	----
Anthracene-d10	1719-06-8	0.5	%		**102**	**102**	**100**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**104**	**93.7**	**92.0**	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.3**	**92.8**	**91.4**	----	----
Toluene-D8	2037-26-5	0.2	%		**88.4**	**83.1**	**80.5**	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**82.0**	**77.3**	**74.7**	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	RIN14	RIN17	----	----	----
			Client sampling date / time	14-Aug-2020 00:00	17-Aug-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2028221-002	ES2028221-003	--------	--------	--------
				Result	Result	----	----	----
EG020T: Total Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L	<20	<20	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	----	----	----
Toluene	108-88-3	2	µg/L	<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	----	----	----
^ **Total Xylenes**	----	2	µg/L	<2	<2	----	----	----
^ **Sum of BTEX**	----	1	µg/L	<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	<5	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**88.4**	**87.1**	----	----	----
Toluene-D8	2037-26-5	2	%	**88.4**	**83.8**	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	**92.4**	**88.3**	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	QC17 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-1a - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-2a - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-3a - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-4a - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-5a - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP15-6a - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP20-1 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP20-2 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP20-3 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP20-4 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP20-5 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP20-6 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP20-7 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP20-8 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP21-1 - 17-Aug-2020 00:00	Mid brown soil containing three pieces of fibrous asbestos fibre board approximately 35x20x2mm and two smaller fragments approximately 5x2x1mm.
EA200: Description	STP21-2 - 17-Aug-2020 00:00	Mid brown soil.
EA200: Description	STP21-3 - 17-Aug-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2028221**	Page	: 1 of 13
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 18-Aug-2020
Order number	: ----	Date Analysis Commenced	: 18-Aug-2020
C-O-C number	: 2	Issue Date	: 20-Aug-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 20		
No. of samples analysed	: 20		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3205796)									
ES2028221-001	QC17	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	101	116	14.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	6	18.3	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	7	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	10	15.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	18	18	0.00	No Limit
ES2028221-013	STP20-4	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	100	100	0.00	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	5	4	23.1	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	9	7	25.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	18	14	26.3	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3205799)									
ES2028221-005	STP15-2a	EA055: Moisture Content	----	0.1	%	10.1	8.9	12.6	0% - 50%
ES2028221-016	STP20-7	EA055: Moisture Content	----	0.1	%	8.1	8.2	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3205795)									
ES2028221-001	QC17	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2028221-013	STP20-4	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3205345)									
ES2028221-001	QC17	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3205345) - continued									
ES2028221-001	QC17	EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.10	0.12	15.7	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.34	0.30	11.3	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2028221-013	STP20-4	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.07	0.06	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.11	0.12	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3205345)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3205345) - continued									
ES2028221-001	QC17	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2028221-013	STP20-4	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3205344)									
ES2028221-001	QC17	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3205344) - continued									
ES2028221-001	QC17	EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2028221-013	STP20-4	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3205276)									

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3205276) - continued									
ES2028221-001	QC17	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2028221-013	STP20-4	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3205343)									
ES2028221-001	QC17	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2028221-013	STP20-4	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3205276)									
ES2028221-001	QC17	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2028221-013	STP20-4	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3205343)									
ES2028221-001	QC17	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2028221-013	STP20-4	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080: BTEXN (QC Lot: 3205276)									
ES2028221-001	QC17	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2028221-013	STP20-4	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020T: Total Metals by ICP-MS (QC Lot: 3206981)									
ES2028221-002	RIN14	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 3206981) - continued									
ES2028221-002	RIN14	EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
ES2028516-002	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	0.0001	0.0001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.004	0.004	0.00	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.004	0.004	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.008	0.007	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	0.005	0.005	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.001	0.001	0.00	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.154	0.157	2.08	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3206988)									
ES2028221-002	RIN14	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
WN2007206-004	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3206424)									
ES2028812-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3206424)									
ES2028812-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3206424)									
ES2028812-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3205796)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	117	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	102	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	128	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	106	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	111	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	106	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	107	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3205795)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	78.7	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3205345)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.2	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	89.7	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	81.3	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.7	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	76.1	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.9	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	103	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.5	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	103	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	101	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	106	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	87.6	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3205345)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	80.3	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	62.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3205345) - continued								
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	92.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	78.2	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	91.8	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	86.7	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	103	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	103	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	102	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.5	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	96.5	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	79.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	101	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	103	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3205344)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	104	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	108	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	100	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	104	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	107	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	106	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	112	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	111	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	99.3	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	103	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	95.6	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	99.7	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	98.5	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	97.3	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	95.7	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	95.3	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3205276)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	89.5	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3205343)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3205343) - continued								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	89.0	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	94.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	87.7	71.0	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3205276)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	88.2	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3205343)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	91.4	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	92.4	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	74.9	63.0	131
EP080: BTEXN (QCLot: 3205276)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	97.7	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	95.6	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	89.1	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	91.5	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	93.4	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	91.7	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 3206981)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	98.8	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	98.1	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	94.9	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	94.7	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	88.1	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	96.0	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	99.5	79.0	117
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3206988)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	97.4	77.0	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3206424)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	89.0	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3206424)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	91.8	75.0	127
EP080: BTEXN (QCLot: 3206424)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	91.0	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	101	69.0	123

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 3206424) - continued								
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	106	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	106	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	108	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	111	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3205796)							
ES2028221-001	QC17	EG005T: Arsenic	7440-38-2	50 mg/kg	84.8	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.2	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	119	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	98.0	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	97.9	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	99.6	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	102	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3205795)							
ES2028221-001	QC17	EG035T: Mercury	7439-97-6	5 mg/kg	87.6	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3205345)							
ES2028221-001	QC17	EP068: gamma-BHC	58-89-9	0.5 mg/kg	107	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	99.8	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	111	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	93.4	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	100	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	113	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3205345)							
ES2028221-001	QC17	EP068: Diazinon	333-41-5	0.5 mg/kg	107	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	111	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	109	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	91.0	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	110	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3205344)							
ES2028221-001	QC17	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	94.4	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3205344) - continued							
ES2028221-001	QC17	EP075(SIM): Pyrene	129-00-0	10 mg/kg	99.2	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3205276)							
ES2028221-001	QC17	EP080: C6 - C9 Fraction	----	32.5 mg/kg	87.0	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3205343)							
ES2028221-001	QC17	EP071: C10 - C14 Fraction	----	523 mg/kg	78.2	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	102	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	127	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3205276)							
ES2028221-001	QC17	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	85.3	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3205343)							
ES2028221-001	QC17	EP071: >C10 - C16 Fraction	----	860 mg/kg	80.3	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	120	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	112	52.0	132
EP080: BTEXN (QCLot: 3205276)							
ES2028221-001	QC17	EP080: Benzene	71-43-2	2.5 mg/kg	91.4	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	90.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	87.9	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	87.0	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	90.4	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	87.2	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 3206981)							
ES2028221-003	RIN17	EG020A-T: Arsenic	7440-38-2	1 mg/L	97.2	70.0	130
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	100	70.0	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	100	70.0	130
		EG020A-T: Copper	7440-50-8	1 mg/L	96.2	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	97.6	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	95.7	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	95.9	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3206988)							
ES2028221-003	RIN17	EG035T: Mercury	7439-97-6	0.01 mg/L	77.3	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3206424)							
ES2028812-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	97.7	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3206424)							
ES2028812-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	98.3	70.0	130
EP080: BTEXN (QCLot: 3206424)							
ES2028812-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	89.3	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	97.9	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	103	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	103	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	106	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	105	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2028221**	Page	: 1 of 10
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 18-Aug-2020
Site	: ----	Issue Date	: 20-Aug-2020
Sampler	: GEMMA SHERIDAN, JAMES MURDOCH, Sarah Dorherty	No. of samples received	: 20
Order number	: ----	No. of samples analysed	: 20

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Regular Sample Surrogates

Sub-Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP080S: TPH(V)/BTEX Surrogates	ES2028221-010	STP20-1	**Toluene-D8**	2037-26-5	73.5 %	73.9-132 %	**Recovery less than lower data quality objective**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL** Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
QC17,	STP15-1a,	**17-Aug-2020**	**----**	----	----	**18-Aug-2020**	31-Aug-2020	✓
STP15-2a,	STP15-3a,							
STP15-4a,	STP15-5a,							
STP15-6a,	STP20-1,							
STP20-2,	STP20-3,							
STP20-4,	STP20-5,							
STP20-6,	STP20-7,							
STP20-8,	STP21-1,							
STP21-2,	STP21-3							
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
QC17,	STP15-1a,	**17-Aug-2020**	**----**	----	----	**18-Aug-2020**	13-Feb-2021	✓
STP15-2a,	STP15-3a,							
STP15-4a,	STP15-5a,							
STP15-6a,	STP20-1,							
STP20-2,	STP20-3,							
STP20-4,	STP20-5,							
STP20-6,	STP20-7,							
STP20-8,	STP21-1,							
STP21-2,	STP21-3							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200N: Asbestos Quantification (non-NATA)								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)								
QC17,	STP15-1a,	**17-Aug-2020**	**----**	----	----	**18-Aug-2020**	13-Feb-2021	✓
STP15-2a,	STP15-3a,							
STP15-4a,	STP15-5a,							
STP15-6a,	STP20-1,							
STP20-2,	STP20-3,							
STP20-4,	STP20-5,							
STP20-6,	STP20-7,							
STP20-8,	STP21-1,							
STP21-2,	STP21-3							
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
QC17,	STP15-1a,	**17-Aug-2020**	**18-Aug-2020**	13-Feb-2021	✓	**18-Aug-2020**	13-Feb-2021	✓
STP15-2a,	STP15-3a,							
STP15-4a,	STP15-5a,							
STP15-6a,	STP20-1,							
STP20-2,	STP20-3,							
STP20-4,	STP20-5,							
STP20-6,	STP20-7,							
STP20-8,	STP21-1,							
STP21-2,	STP21-3							
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
QC17,	STP15-1a,	**17-Aug-2020**	**18-Aug-2020**	14-Sep-2020	✓	**19-Aug-2020**	14-Sep-2020	✓
STP15-2a,	STP15-3a,							
STP15-4a,	STP15-5a,							
STP15-6a,	STP20-1,							
STP20-2,	STP20-3,							
STP20-4,	STP20-5,							
STP20-6,	STP20-7,							
STP20-8,	STP21-1,							
STP21-2,	STP21-3							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
QC17, STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a, STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8, STP21-1, STP21-2, STP21-3	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**19-Aug-2020**	27-Sep-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
QC17, STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a, STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8, STP21-1, STP21-2, STP21-3	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**19-Aug-2020**	27-Sep-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
QC17, STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a, STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8, STP21-1, STP21-2, STP21-3	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**19-Aug-2020**	27-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
QC17, STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a, STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8, STP21-1, STP21-2, STP21-3	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**18-Aug-2020**	31-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
QC17, STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a, STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8, STP21-1, STP21-2, STP21-3	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**19-Aug-2020**	27-Sep-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
QC17, STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a, STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8, STP21-1, STP21-2, STP21-3	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**18-Aug-2020**	31-Aug-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
QC17, STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a, STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8, STP21-1, STP21-2, STP21-3	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**19-Aug-2020**	27-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
QC17, STP15-1a, STP15-2a, STP15-3a, STP15-4a, STP15-5a, STP15-6a, STP20-1, STP20-2, STP20-3, STP20-4, STP20-5, STP20-6, STP20-7, STP20-8, STP21-1, STP21-2, STP21-3	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**18-Aug-2020**	31-Aug-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG020A-T)							
RIN14	**14-Aug-2020**	**19-Aug-2020**	10-Feb-2021	✓	**19-Aug-2020**	10-Feb-2021	✓
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG020A-T)							
RIN17	**17-Aug-2020**	**19-Aug-2020**	13-Feb-2021	✓	**19-Aug-2020**	13-Feb-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG035T)							
RIN14	**14-Aug-2020**	**----**	----	----	**19-Aug-2020**	11-Sep-2020	✓
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG035T)							
RIN17	**17-Aug-2020**	**----**	----	----	**19-Aug-2020**	14-Sep-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN14	**14-Aug-2020**	**18-Aug-2020**	28-Aug-2020	✓	**18-Aug-2020**	28-Aug-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN17	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**18-Aug-2020**	31-Aug-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN14	**14-Aug-2020**	**18-Aug-2020**	28-Aug-2020	✓	**18-Aug-2020**	28-Aug-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN17	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**18-Aug-2020**	31-Aug-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN14	**14-Aug-2020**	**18-Aug-2020**	28-Aug-2020	✓	**18-Aug-2020**	28-Aug-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN17	**17-Aug-2020**	**18-Aug-2020**	31-Aug-2020	✓	**18-Aug-2020**	31-Aug-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Total Mercury by FIMS	EG035T	2	11	18.18	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	7	28.57	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS)							
Total Mercury by FIMS	EG035T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Total Mercury by FIMS	EG035T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Total Mercury by FIMS	EG035T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

7.9.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT / OFFICE (Tick one)

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Sarah Doherty

PM CONTACT No: 0417 647 498

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Robin Birua

SAMPLER CONTACT No: 0482 680 242

Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au

Turnaround Time (TAT)

☐ Standard TAT

☒ Non Standard or Urgent TAT

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, Water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200K)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	STP24-1	03-09-2020	Soil	x1 Jar and x1 Bag	x									24 Hrs TAT Please
2	STP24-2	02-09-2020	Soil	x1 Jar and x1 Bag	x									
3	STP24-3	02-09-2020	Soil	x1 Jar and x1 Bag	x									
4	STP24-4	02-09-2020	Soil	x1 Jar and x1 Bag	x									
5	STP24-5	02-09-2020	Soil	x1 Jar and x1 Bag	x									
6	STP24-6	02-09-2020	Soil	x1 Jar and x1 Bag	x									
7	QC18	03-09-2020	Soil	x1 Jar and x1 Bag	x									24 Hrs TAT Please
8	Rinsate	03-09-2020	Water	1 Bottle								x		

Subcon / Forward Lab / Split WO

Lab / Analysis: New Castle

Organised By / Date: 7.9.20

Relinquished By / Date: 7.9.20

Courier: ES2030598

WO No: ES2030598

Attach by PO / Internal sheet.

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 03-09-2020	Received by	Sign	Date / Time 4-9-20 8.30 am	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

Environmental Division Sydney

Work Order Reference

ES2030598

Telephone : +61-2-8784 8555

Received as;

STP24-1a

STP24-2a

STP24-3a

STP24-4a

STP24-5a

STP24-6a

STP24-QA01

STP24-RB01

TAT

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2030598**
Amendment : **1**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 04-Sep-2020 08:30	Issue Date	: 08-Sep-2020
Client Requested Due Date	: 07-Sep-2020	Scheduled Reporting Date	: **07-Sep-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 34.3
Receipt Detail	:	No. of samples received / analysed	: 11 / 8

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **This is an updated SRN which indicates Asbestos for samples 1-7.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2030598-001	03-Sep-2020 00:00	STP24-1	✓	✓	✓	✓
ES2030598-002	02-Sep-2020 00:00	STP24-2	✓	✓	✓	✓
ES2030598-003	02-Sep-2020 00:00	STP24-3	✓	✓	✓	✓
ES2030598-004	02-Sep-2020 00:00	STP24-4	✓	✓	✓	✓
ES2030598-005	02-Sep-2020 00:00	STP24-5	✓	✓	✓	✓
ES2030598-006	02-Sep-2020 00:00	STP24-6	✓	✓	✓	✓
ES2030598-007	03-Sep-2020 00:00	QC18	✓	✓	✓	✓
ES2030598-009	03-Sep-2020 00:00	STPTHE-01	✓		✓	✓
ES2030598-010	03-Sep-2020 00:00	STPTHE-02	✓		✓	✓
ES2030598-011	03-Sep-2020 00:00	STPTHE-03	✓		✓	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-02T 8 metals (Total)
ES2030598-008	03-Sep-2020 00:00	Rinsate	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU		
- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com
GEMMA SHERIDAN		
- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com
J Mcdowell		
- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com
PAUL TURYN		
- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com
ROBIN BIRUA		
- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com.au
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com.au
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- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com.au
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com.au
Sarah Dorherty		
- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2030598**	Page	: 1 of 13
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 04-Sep-2020 08:30
Order number	: ----	Date Analysis Commenced	: 04-Sep-2020
C-O-C number	: ----	Issue Date	: 08-Sep-2020 08:39
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 11		
No. of samples analysed	: 11		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Christopher Owler	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP24-1 Received as STP24-1a	STP24-2 Received as STP24-2a	STP24-3 Received as STP24-3a	STP24-4 Received as STP24-4a	STP24-5 Received as STP24-5a
			Client sampling date / time	03-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2030598-001	ES2030598-002	ES2030598-003	ES2030598-004	ES2030598-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.8	7.1	9.2	2.4	8.3
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	777	834	900	900	811
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	C.OWLER	C.OWLER	C.OWLER	C.OWLER	C.OWLER
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.777	0.834	0.900	0.900	0.811
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	6	9	8	10
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	109	84	97	78	147
Copper	7440-50-8	5	mg/kg	7	8	10	8	8
Lead	7439-92-1	5	mg/kg	11	10	13	11	11
Nickel	7440-02-0	2	mg/kg	6	7	7	6	6
Zinc	7440-66-6	5	mg/kg	12	18	42	30	22
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP24-1 Received as STP24-1a	STP24-2 Received as STP24-2a	STP24-3 Received as STP24-3a	STP24-4 Received as STP24-4a	STP24-5 Received as STP24-5a
				Client sampling date / time	03-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2030598-001	ES2030598-002	ES2030598-003	ES2030598-004	ES2030598-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.08**	**0.11**	**0.11**	**0.07**	**0.16**
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.08**	**0.11**	**0.11**	**0.07**	**0.16**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.38**	**0.47**	**0.17**	**0.10**	**0.22**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.38**	**0.47**	**0.17**	**0.10**	**0.22**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	STP24-1 Received as STP24-1a	STP24-2 Received as STP24-2a	STP24-3 Received as STP24-3a	STP24-4 Received as STP24-4a	STP24-5 Received as STP24-5a
				Client sampling date / time	03-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00
					ES2030598-001	ES2030598-002	ES2030598-003	ES2030598-004	ES2030598-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP24-1 Received as STP24-1a	STP24-2 Received as STP24-2a	STP24-3 Received as STP24-3a	STP24-4 Received as STP24-4a	STP24-5 Received as STP24-5a
				Client sampling date / time	03-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00	02-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2030598-001	ES2030598-002	ES2030598-003	ES2030598-004	ES2030598-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**79.6**	**90.0**	**101**	**99.8**	**102**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**85.3**	**98.4**	**108**	**102**	**107**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**91.6**	**91.9**	**94.4**	**88.8**	**89.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		**90.4**	**93.3**	**93.3**	**88.3**	**90.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**81.7**	**74.6**	**77.0**	**56.0**	**72.9**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**99.6**	**102**	**103**	**98.8**	**98.8**
Anthracene-d10	1719-06-8	0.5	%		**99.8**	**102**	**103**	**99.6**	**99.3**
4-Terphenyl-d14	1718-51-0	0.5	%		**90.7**	**93.7**	**94.3**	**90.0**	**90.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**86.9**	**92.4**	**86.7**	**93.7**	**107**
Toluene-D8	2037-26-5	0.2	%		**98.4**	**101**	**96.5**	**103**	**112**
4-Bromofluorobenzene	460-00-4	0.2	%		**112**	**117**	**109**	**111**	**108**

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	Received as STP24-1b Received as STP24-6a	QC18 Received as STP24-QA01	STPTHE-01	STPTHE-02	STPTHE-03
				Client sampling date / time	02-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00
					ES2030598-006	ES2030598-007	ES2030598-009	ES2030598-010	ES2030598-011
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		**6.2**	**10.3**	**2.4**	**1.2**	**1.6**
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**No**	**----**	**----**	**----**
Asbestos Type	1332-21-4	-	--		**-**	**-**	**----**	**----**	**----**
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	**No**	**----**	**----**	**----**
Sample weight (dry)	----	0.01	g		**872**	**744**	**----**	**----**	**----**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**----**	**----**	**----**
Organic Fibre	----	0.1	g/kg		**No**	**No**	**----**	**----**	**----**
APPROVED IDENTIFIER:	----	-	--		**C.OWLER**	**C.OWLER**	**----**	**----**	**----**
EA200N: Asbestos Quantification (non-NATA)									
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g		<0.0004	<0.0004	**----**	**----**	**----**
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)		<0.001	<0.001	**----**	**----**	**----**
ø **Weight Used for % Calculation**	----	0.0001	kg		**0.872**	**0.744**	**----**	**----**	**----**
ø **Fibrous Asbestos >7mm**	----	0.0004	g		<0.0004	<0.0004	**----**	**----**	**----**
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		**9**	**8**	**6**	**7**	**7**
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		**155**	**143**	**42**	**78**	**47**
Copper	7440-50-8	5	mg/kg		**8**	**7**	**27**	**6**	**7**
Lead	7439-92-1	5	mg/kg		**12**	**12**	**9**	**10**	**9**
Nickel	7440-02-0	2	mg/kg		**7**	**6**	**4**	**6**	**5**
Zinc	7440-66-6	5	mg/kg		**16**	**14**	**14**	**7**	**23**
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	Received as STP24-1b Received as STP24-6a	QC18 Received as STP24-QA01	STPTHE-01	STPTHE-02	STPTHE-03
				Client sampling date / time	02-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00
					ES2030598-006	ES2030598-007	ES2030598-009	ES2030598-010	ES2030598-011
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.12**	**0.08**	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.12**	**0.08**	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.55**	**0.35**	<0.05	<0.05	**0.10**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.55**	**0.35**	<0.05	<0.05	**0.10**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	Received as STP24-1b Received as STP24-6a	QC18 Received as STP24-QA01	STPTHE-01	STPTHE-02	STPTHE-03
				Client sampling date / time	02-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00
					ES2030598-006	ES2030598-007	ES2030598-009	ES2030598-010	ES2030598-011
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	Received as STP24-1b Received as STP24-6a	QC18 Received as STP24-QA01	STPTHE-01	STPTHE-02	STPTHE-03
				Client sampling date / time	02-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00
					ES2030598-006	ES2030598-007	ES2030598-009	ES2030598-010	ES2030598-011
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**131**	**90.4**	**85.5**	**111**	**104**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**132**	**82.0**	**93.3**	**121**	**96.4**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**87.1**	**91.8**	**87.1**	**88.0**	**85.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**87.7**	**91.6**	**88.0**	**87.8**	**85.1**
2.4.6-Tribromophenol	118-79-6	0.5	%		**69.7**	**76.5**	**61.7**	**49.5**	**50.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**97.6**	**100**	**98.4**	**99.8**	**94.5**
Anthracene-d10	1719-06-8	0.5	%		**97.8**	**101**	**98.5**	**100**	**95.9**
4-Terphenyl-d14	1718-51-0	0.5	%		**88.3**	**91.9**	**88.8**	**89.7**	**86.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**88.2**	**92.2**	**87.2**	**86.6**	**91.5**
Toluene-D8	2037-26-5	0.2	%		**100**	**102**	**98.1**	**97.0**	**101**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Received as STP24-1b Received as STP24-6a	QC18 Received as STP24-QA01	STPTHE-01	STPTHE-02	STPTHE-03
				Client sampling date / time	02-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00	03-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2030598-006	ES2030598-007	ES2030598-009	ES2030598-010	ES2030598-011
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	0.2	%		**108**	**113**	**110**	**108**	**108**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	Rinsate Received as STP24-RB01	----	----	----	----
				Client sampling date / time	03-Sep-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2030598-008	--------	--------	--------	--------
					Result	----	----	----	----
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP24-1Received as STP24-1a - 03-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP24-2Received as STP24-2a - 02-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP24-3Received as STP24-3a - 02-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP24-4Received as STP24-4a - 02-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP24-5Received as STP24-5a - 02-Sep-2020 00:00	Mid brown soil.
EA200: Description	Received as STP24-1bReceived as STP24-6a - 02-Sep-2020 00:00	Mid brown soil.
EA200: Description	QC18Received as STP24-QA01 - 03-Sep-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2030598**	Page	: 1 of 12
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 04-Sep-2020
Order number	: ----	Date Analysis Commenced	: 04-Sep-2020
C-O-C number	: ----	Issue Date	: 08-Sep-2020
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 11		
No. of samples analysed	: 11		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Christopher Owler	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3239749)									
ES2030598-001	STP24-1 Received as STP24-1a	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	109	132	18.9	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	5	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	7	17.5	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	7	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	12	14	11.3	No Limit
ES2031033-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	21	19	11.6	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	32	35	7.58	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	15	18	14.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	46	48	3.90	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	83	94	13.4	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3239755)									
ES2030598-003	STP24-3 Received as STP24-3a	EA055: Moisture Content	----	0.1	%	9.2	8.5	8.74	No Limit
ES2031054-002	Anonymous	EA055: Moisture Content	----	0.1	%	12.0	13.6	12.0	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3239748)									
ES2030598-001	STP24-1 Received as STP24-1a	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2031033-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3239319)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3239319) - continued									
ES2031100-002	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2030598-001	STP24-1 Received as STP24-1a	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.08	0.14	51.9	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.38	0.39	4.28	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3239319) - continued									
ES2030598-001	STP24-1 Received as STP24-1a	EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3239319)									
ES2031100-002	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2030598-001	STP24-1 Received as STP24-1a	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3239319) - continued									
ES2030598-001	STP24-1 Received as STP24-1a	EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3239318)									
ES2030598-001	STP24-1 Received as STP24-1a	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3239317)									
ES2030598-001	STP24-1 Received as STP24-1a	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3240122)									
ES2030598-001	STP24-1 Received as STP24-1a	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2031213-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3239317)									
ES2030598-001	STP24-1 Received as STP24-1a	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3239317) - continued									
ES2030598-001	STP24-1 Received as STP24-1a	EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3240122)									
ES2030598-001	STP24-1 Received as STP24-1a	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2031213-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3240122)									
ES2030598-001	STP24-1 Received as STP24-1a	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2031213-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 3241173)									
ES2030598-008	Rinsate Received as STP24-RB01	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
WN2007859-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	0.0008	0.0009	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.056	0.057	0.00	0% - 20%
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.298	0.298	0.00	0% - 20%
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.073	0.079	7.51	0% - 20%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	0.010	0.010	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.139	0.140	1.14	0% - 20%
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.168	0.176	4.81	0% - 20%

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3241185)									
ES2030598-008	Rinsate Received as STP24-RB01	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3239749)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	119	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	82.7	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	123	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	112	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	115	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	112	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	106	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3239748)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	88.5	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3239319)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	95.6	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	96.7	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	97.7	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.4	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.5	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.5	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.5	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.4	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	76.1	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	83.8	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	83.5	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	86.4	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3239319)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.7	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	62.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3239319) - continued								
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	81.9	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	81.4	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.7	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	90.1	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	82.8	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.0	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	81.6	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.3	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	88.1	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.5	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	62.7	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3239318)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	101	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	97.6	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	98.1	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	103	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	103	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	103	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	104	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	91.5	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	95.2	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	87.2	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	96.6	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	89.3	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	87.8	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	87.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	87.2	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3239317)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	106	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	91.6	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	88.0	71.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3240122)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	96.8	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3239317)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	90.8	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	89.4	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	80.4	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3240122)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	102	68.4	128
EP080: BTEXN (QCLot: 3240122)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	78.3	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	85.3	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	88.5	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	90.2	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	91.6	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	98.4	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 3241173)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	82.8	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	88.3	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	91.9	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	87.2	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	90.0	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	87.5	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	83.7	79.0	117
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3241185)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	91.4	77.0	111

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3239749)							
ES2030598-001	STP24-1 Received as STP24-1a						

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3239749) - continued							
ES2030598-001	STP24-1 Received as STP24-1a	EG005T: Arsenic	7440-38-2	50 mg/kg	80.1	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	87.4	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	103	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	91.8	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	87.6	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	91.4	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	89.3	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3239748)							
ES2030598-001	STP24-1 Received as STP24-1a	EG035T: Mercury	7439-97-6	5 mg/kg	89.3	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3239319)							
ES2030598-001	STP24-1 Received as STP24-1a	EP068: gamma-BHC	58-89-9	0.5 mg/kg	109	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	89.4	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	96.7	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	93.2	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	96.5	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	104	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3239319)							
ES2030598-001	STP24-1 Received as STP24-1a	EP068: Diazinon	333-41-5	0.5 mg/kg	76.7	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	88.0	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	84.1	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	91.8	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	96.0	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3239318)							
ES2030598-001	STP24-1 Received as STP24-1a	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	99.8	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	104	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3239317)							
ES2030598-001	STP24-1 Received as STP24-1a	EP071: C10 - C14 Fraction	----	523 mg/kg	85.6	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	87.5	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	115	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3240122)							
ES2030598-001	STP24-1 Received as STP24-1a	EP080: C6 - C9 Fraction	----	32.5 mg/kg	98.0	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3239317)							
ES2030598-001	STP24-1 Received as STP24-1a	EP071: >C10 - C16 Fraction	----	860 mg/kg	86.2	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	93.6	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	114	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3240122)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3240122) - continued							
ES2030598-001	STP24-1 Received as STP24-1a	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	103	70.0	130
EP080: BTEXN (QCLot: 3240122)							
ES2030598-001	STP24-1 Received as STP24-1a	EP080: Benzene	71-43-2	2.5 mg/kg	75.6	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	79.9	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	87.9	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	88.1	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	88.3	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	92.0	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 3241173)							
ES2031174-001	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	78.9	70.0	130
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	87.1	70.0	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	90.9	70.0	130
		EG020A-T: Copper	7440-50-8	1 mg/L	85.1	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	93.3	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	88.0	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	78.2	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3241185)							
ES2030598-008	Rinsate Received as STP24-RB01	EG035T: Mercury	7439-97-6	0.01 mg/L	76.0	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2030598**	Page	: 1 of 8
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 04-Sep-2020
Site	: ----	Issue Date	: 08-Sep-2020
Sampler	: ROBIN BIRUA	No. of samples received	: 11
Order number	: ----	No. of samples analysed	: 11

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
STP24-2 - Received as STP24-2a, STP24-4 - Received as STP24-4a, Received as STP24-1b - Received as STP24-6a	STP24-3 - Received as STP24-3a, STP24-5 - Received as STP24-5a,	**02-Sep-2020**	**----**	----	----	**04-Sep-2020**	16-Sep-2020	✓
Soil Glass Jar - Unpreserved (EA055)								
STP24-1 - Received as STP24-1a, STPTHE-01, STPTHE-03	QC18 - Received as STP24-QA01, STPTHE-02,	**03-Sep-2020**	**----**	----	----	**04-Sep-2020**	17-Sep-2020	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
STP24-2 - Received as STP24-2a, STP24-4 - Received as STP24-4a, Received as STP24-1b - Received as STP24-6a	STP24-3 - Received as STP24-3a, STP24-5 - Received as STP24-5a,	**02-Sep-2020**	**----**	----	----	**07-Sep-2020**	01-Mar-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)								
STP24-1 - Received as STP24-1a,	QC18 - Received as STP24-QA01	**03-Sep-2020**	**----**	----	----	**07-Sep-2020**	02-Mar-2021	✓
EA200N: Asbestos Quantification (non-NATA)								
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)								
STP24-2 - Received as STP24-2a, STP24-4 - Received as STP24-4a, Received as STP24-1b - Received as STP24-6a	STP24-3 - Received as STP24-3a, STP24-5 - Received as STP24-5a,	**02-Sep-2020**	**----**	----	----	**07-Sep-2020**	01-Mar-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)								
STP24-1 - Received as STP24-1a,	QC18 - Received as STP24-QA01	**03-Sep-2020**	**----**	----	----	**07-Sep-2020**	02-Mar-2021	✓
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
STP24-2 - Received as STP24-2a, STP24-4 - Received as STP24-4a, Received as STP24-1b - Received as STP24-6a	STP24-3 - Received as STP24-3a, STP24-5 - Received as STP24-5a,	**02-Sep-2020**	**04-Sep-2020**	01-Mar-2021	✓	**04-Sep-2020**	01-Mar-2021	✓
Soil Glass Jar - Unpreserved (EG005T)								
STP24-1 - Received as STP24-1a, STPTHE-01, STPTHE-03	QC18 - Received as STP24-QA01, STPTHE-02,	**03-Sep-2020**	**04-Sep-2020**	02-Mar-2021	✓	**04-Sep-2020**	02-Mar-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
STP24-2 - Received as STP24-2a, STP24-4 - Received as STP24-4a, Received as STP24-1b - Received as STP24-6a	STP24-3 - Received as STP24-3a, STP24-5 - Received as STP24-5a,	**02-Sep-2020**	**04-Sep-2020**	30-Sep-2020	✓	**07-Sep-2020**	30-Sep-2020	✓
Soil Glass Jar - Unpreserved (EG035T)								
STP24-1 - Received as STP24-1a, STPTHE-01, STPTHE-03	QC18 - Received as STP24-QA01, STPTHE-02,	**03-Sep-2020**	**04-Sep-2020**	01-Oct-2020	✓	**07-Sep-2020**	01-Oct-2020	✓
EP068A: Organochlorine Pesticides (OC)								
Soil Glass Jar - Unpreserved (EP068)								
STP24-2 - Received as STP24-2a, STP24-4 - Received as STP24-4a, Received as STP24-1b - Received as STP24-6a	STP24-3 - Received as STP24-3a, STP24-5 - Received as STP24-5a,	**02-Sep-2020**	**04-Sep-2020**	16-Sep-2020	✓	**04-Sep-2020**	14-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)								
STP24-1 - Received as STP24-1a, STPTHE-01, STPTHE-03	QC18 - Received as STP24-QA01, STPTHE-02,	**03-Sep-2020**	**04-Sep-2020**	17-Sep-2020	✓	**04-Sep-2020**	14-Oct-2020	✓
EP068B: Organophosphorus Pesticides (OP)								
Soil Glass Jar - Unpreserved (EP068)								
STP24-2 - Received as STP24-2a, STP24-4 - Received as STP24-4a, Received as STP24-1b - Received as STP24-6a	STP24-3 - Received as STP24-3a, STP24-5 - Received as STP24-5a,	**02-Sep-2020**	**04-Sep-2020**	16-Sep-2020	✓	**04-Sep-2020**	14-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)								
STP24-1 - Received as STP24-1a, STPTHE-01, STPTHE-03	QC18 - Received as STP24-QA01, STPTHE-02,	**03-Sep-2020**	**04-Sep-2020**	17-Sep-2020	✓	**04-Sep-2020**	14-Oct-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM))								
STP24-2 - Received as STP24-2a, STP24-4 - Received as STP24-4a, Received as STP24-1b - Received as STP24-6a	STP24-3 - Received as STP24-3a, STP24-5 - Received as STP24-5a,	**02-Sep-2020**	**04-Sep-2020**	16-Sep-2020	✓	**04-Sep-2020**	14-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))								
STP24-1 - Received as STP24-1a, STPTHE-01, STPTHE-03	QC18 - Received as STP24-QA01, STPTHE-02,	**03-Sep-2020**	**04-Sep-2020**	17-Sep-2020	✓	**04-Sep-2020**	14-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080) STP24-2 - Received as STP24-2a, STP24-3 - Received as STP24-3a, STP24-4 - Received as STP24-4a, STP24-5 - Received as STP24-5a, Received as STP24-1b - Received as STP24-6a	**02-Sep-2020**	**04-Sep-2020**	16-Sep-2020	✓	**04-Sep-2020**	16-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080) STP24-1 - Received as STP24-1a, QC18 - Received as STP24-QA01, STPTHE-01, STPTHE-02, STPTHE-03	**03-Sep-2020**	**04-Sep-2020**	17-Sep-2020	✓	**04-Sep-2020**	17-Sep-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080) STP24-2 - Received as STP24-2a, STP24-3 - Received as STP24-3a, STP24-4 - Received as STP24-4a, STP24-5 - Received as STP24-5a, Received as STP24-1b - Received as STP24-6a	**02-Sep-2020**	**04-Sep-2020**	16-Sep-2020	✓	**04-Sep-2020**	16-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080) STP24-1 - Received as STP24-1a, QC18 - Received as STP24-QA01, STPTHE-01, STPTHE-02, STPTHE-03	**03-Sep-2020**	**04-Sep-2020**	17-Sep-2020	✓	**04-Sep-2020**	17-Sep-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080) STP24-2 - Received as STP24-2a, STP24-3 - Received as STP24-3a, STP24-4 - Received as STP24-4a, STP24-5 - Received as STP24-5a, Received as STP24-1b - Received as STP24-6a	**02-Sep-2020**	**04-Sep-2020**	16-Sep-2020	✓	**04-Sep-2020**	16-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080) STP24-1 - Received as STP24-1a, QC18 - Received as STP24-QA01, STPTHE-01, STPTHE-02, STPTHE-03	**03-Sep-2020**	**04-Sep-2020**	17-Sep-2020	✓	**04-Sep-2020**	17-Sep-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-T) Rinsate - Received as STP24-RB01	**03-Sep-2020**	**07-Sep-2020**	02-Mar-2021	✓	**07-Sep-2020**	02-Mar-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035T) Rinsate - Received as STP24-RB01	**03-Sep-2020**	**----**	----	----	**07-Sep-2020**	01-Oct-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	1	10	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	11	18.18	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	10	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	11	18.18	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Total Mercury by FIMS	EG035T	1	3	33.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	11	18.18	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS) - Continued							
Total Mercury by FIMS	EG035T	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Total Mercury by FIMS	EG035T	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Total Mercury by FIMS	EG035T	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)

17.09.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

CLIENT: SLR Consulting	LABORATORY: ALS
PROJECT: John Stokes Square	LABORATORY ADDRESS:
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au

Turnaround Time (TAT): ☐ Standard TAT ☑ Non Standard or Urgent TAT

COC Number: 1 of 13

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, Water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any grossly contaminated or specific requirements)
1	Val-56	10/09/2020	Soil	x1 Jar and x1 Bag		x								24 Hrs TAT Please
2	Val-57	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
3	Val-58	10/09/2020	Soil	x1 Jar and x1 Bag		x								
4	Val-59	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
5	Val-60	10/09/2020	Soil	x1 Jar and x1 Bag		x								
6	Val-61	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
7	Val-62	10/09/2020	Soil	x1 Jar and x1 Bag		x								
8	Val-63	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
9	Val-64	10/09/2020	Soil	x1 Jar and x1 Bag		x								
10	Val-65	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
11	Val-66	10/09/2020	Soil	x1 Jar and x1 Bag		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign	Date / Time 15.09.20 10.20am	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

TAT

Environmental Division Sydney

Work Order Reference

ES2032260

Telephone : + 61-2-8784 8555

ES2032454

Subcon / Forward Lab / Split WO

Lab / Analysis: Newcastle Asbestos

Organised By / Date:

Relinquished By / Date:

Connote / Courier:

WO No: ES2032260

Attach By PO / Internal Sheet:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 2 of 13
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc.)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
12	Val-67	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	24 Hrs TAT Please
13	Val-68	10/09/2020	Soil	x1 Jar and x1 Bag		x								
14	Val-69	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
15	Val-70	10/09/2020	Soil	x1 Jar and x1 Bag		x								
16	Val-71	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
17	Val-72	10/09/2020	Soil	x1 Jar and x1 Bag		x								
18	Val-73	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
19	Val-74	10/09/2020	Soil	x1 Jar and x1 Bag		x								
20	Val-75	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
21	Val-76	10/09/2020	Soil	x1 Jar and x1 Bag		x								
22	Val-77	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign Kim	Date / Time 15.09.20 10.20am	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number: 3 of 33
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birrus	☒ Non-Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0402 680 165		
PM CONTACT No: 0417 567 588	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirrus@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix	Containers and Preservatives	REQUESTED ANALYSIS: SVP (S-86.5-12, EA200SF)	VOC (S-06.5-12, EA200)	Asbestos ID in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk ID (EA200H)	Asbestos Bulk ID (EA200B)	Presence of bonded ACM fragment (EA200E)	Silica/clay (W-05, W-14)	Hold	Additional Information
23	Val-78	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	24 Hrs TAT Please
24	Val-79	10/09/2020	Soil	x1 Jar and x1 Bag		x								
25	Val-80	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
26	Val-81	10/09/2020	Soil	x1 Jar and x1 Bag		x								
27	Val-82	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
28	Val-83	10/09/2020	Soil	x1 Jar and x1 Bag		x								
29	Val-84	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
30	Val-85	10/09/2020	Soil	x1 Jar and x1 Bag		x								
31	Val-86	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
32	Val-87	10/09/2020	Soil	x1 Jar and x1 Bag		x								
33	Val-88	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birrus	14/09/2020	Received by		15.09.20 Temperature Received:
Relinquished By			Received by		
Relinquished By			Received by		

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROFILE OFFICE (Tick one)

☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 4 of 13
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, AGW, etc.)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200BM)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
34	Val-89	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	24 Hrs TAT Please
35	Val-90	10/09/2020	Soil	x1 Jar and x1 Bag		x								
36	Val-91	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
37	Val-92	10/09/2020	Soil	x1 Jar and x1 Bag		x								
38	Val-93	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
39	Val-94	10/09/2020	Soil	x1 Jar and x1 Bag		x								
40	Val-95	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
41	Val-96	10/09/2020	Soil	x1 Jar and x1 Bag		x								
42	Val 97	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
43	Val-98	10/09/2020	Soil	x1 Jar and x1 Bag		x								
44	Val-99	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign	Date / Time 15-09-20 10.10am	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number: 5 of 13
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 640.10679	SAMPLER: Robin Birrus	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirrus@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix	Containers and Preservatives	NEPM(ASS) HM (ALS)	SPP (S-36, S-12, EA200)	VAC (S-36, S-12, EA200)	Asbestos FA/AF in soil (FA201)	NEPM asbestos in soil only (EA200)	NEPM asbestos fines + bulk (EA200)	Asbestos Bulk ID (EA200)	Potential bonded ACM fragment (EA200)	Minerals (W-20, W-37)	(bvl)	Additional Information
45	Val-100	10/09/2020	Soil	x1 Jar and x1 Bag only			x								24 Hrs TAT Please
46	Val-101	10/09/2020	Soil	x2 Jar and x1 Bag			x							x	
47	Val-102	10/09/2020	Soil	x1 Jar and x1 Bag			x								
48	Val-103	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
49	Val-104	10/09/2020	Soil	x1 Jar and x1 Bag			x								
50	Val-105	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
51	Val-106	10/09/2020	Soil	x1 Jar and x1 Bag			x								
52	Val-107	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
53	Val-108	10/09/2020	Soil	x1 Jar and x1 Bag			x								
54	Val-109	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
55	Val-110	10/09/2020	Soil	x1 Jar and x1 Bag			x								

I attest that the proper field sampling procedures were implemented during the collection of these samples.

Relinquished By Sampler	Robin Birrus	14/09/2020	Received by	Kim	15.09.20 10.20am
Relinquished By			Received by		
Relinquished By			Received by		

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number: 6 of 13
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☒ Standard TAT	
PROJECT NUMBER: 680.10579	SAMPLER: Robin Blrua	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0447 680 165		
PM CONTACT No: 0417 647 488	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rblrua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix	Containers and Preservatives	REQUESTED ANALYSES	STP (S-46, 5-32, EA200)	HAL (S-46, 5-32, EA025)	Asbestos ID/Airborne (EA200)	NEPM asbestos in soil only (EA200)	NEPM asbestos in soil + bulk (EA200)	Asbestos Bulk ID (EA200)	Potential Bonded ACM Fragment (EA200)	Russian (W-05, W-32)	Metal	Additional Information
56	Val-111	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	24 Hrs TAT Please
57	Val-112	10/09/2020	Soil	x1 Jar and x1 Bag			x								
58	Val-113	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
59	Val-114	10/09/2020	Soil	x1 Jar and x1 Bag			x								
60	Val-115	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
61	Val-116	10/09/2020	Soil	x1 Jar and x1 Bag			x								
62	Val-117	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
63	Val-118	10/09/2020	Soil	x1 Jar and x1 Bag			x								
64	Val-119	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
65	Val-120	10/09/2020	Soil	x1 Jar and x1 Bag			x								

I declare that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler:	Robin Blrua	14/09/2020	Received by:	Kim	15.09.20 10.25am
Relinquished By:			Received by:		
Relinquished By:			Received by:		

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 7 of 13
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birus	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Coherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: scoherty@slrconsulting.com; gturpin@slrconsulting.com; rbirus@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix	Containers and Preservative	REQUESTED ANALYSES	SVP (E.M, S-12, E402B)	VOC (E-M, S-11, E602B)	Asbestos W/A in soil (E.A200)	Asbestos W/A in soil only (E.A200)	NEPM asbestos in soil > 2mm (E.A200(b))	Asbestos Bulk ID (E.A200)	Potential bonded ACM fragment (E.A200B)	Barcodes (WI no. WI-XX)	Hold	Additional Information
66	Val-121	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	24 Hrs TAT Please
67	Val-122	10/09/2020	Soil	x1 Jar and x1 Bag			x								
68	Val-123	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
69	Val-124	10/09/2020	Soil	x1 Jar and x1 Bag			x								
70	Val-125	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
71	Val-126	10/09/2020	Soil	x1 Jar and x1 Bag			x								
72	Val-127	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
73	Val-128	10/09/2020	Soil	x1 Jar and x1 Bag			x								
74	Val-129	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
75	Val-130	10/09/2020	Soil	x1 Jar and x1 Bag			x								
76	Val-131	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birus	14/09/2020	Received by	15.09.20 10.20am
Relinquished By			Received by	
Relinquished By			Received by	

Temperature Received:

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2032260**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 4
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Robin Birua		

Dates

Date Samples Received	: 15-Sep-2020 10:20	Issue Date	: 16-Sep-2020
Client Requested Due Date	: 17-Sep-2020	Scheduled Reporting Date	: **17-Sep-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 7	Temperature	: 26.5' C
Receipt Detail	:	No. of samples received / analysed	: 76 / 37

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Workorder has been split into ES2032454 due to samples numbers.**
- **16/09/2020: This is an updated SRN which indicates Asbestos analysis for sample Val-100 (ALS #77), as per bag supplied.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2032260-001	10-Sep-2020 00:00	Val-56		✓	✓	✓	✓
ES2032260-002	10-Sep-2020 00:00	Val-57	✓				
ES2032260-003	10-Sep-2020 00:00	Val-58		✓	✓	✓	✓
ES2032260-004	10-Sep-2020 00:00	Val-59	✓				
ES2032260-005	10-Sep-2020 00:00	Val-60		✓	✓	✓	✓
ES2032260-006	10-Sep-2020 00:00	Val-61	✓				
ES2032260-007	10-Sep-2020 00:00	Val-62		✓	✓	✓	✓
ES2032260-008	10-Sep-2020 00:00	Val-63	✓				
ES2032260-009	10-Sep-2020 00:00	Val-64		✓	✓	✓	✓
ES2032260-010	10-Sep-2020 00:00	Val-65	✓				
ES2032260-011	10-Sep-2020 00:00	Val-66		✓	✓	✓	✓
ES2032260-012	10-Sep-2020 00:00	Val-67	✓				
ES2032260-013	10-Sep-2020 00:00	Val-68		✓	✓	✓	✓
ES2032260-014	10-Sep-2020 00:00	Val-69	✓				
ES2032260-015	10-Sep-2020 00:00	Val-70		✓	✓	✓	✓
ES2032260-016	10-Sep-2020 00:00	Val-71	✓				
ES2032260-017	10-Sep-2020 00:00	Val-72		✓	✓	✓	✓
ES2032260-018	10-Sep-2020 00:00	Val-73	✓				
ES2032260-019	10-Sep-2020 00:00	Val-74		✓	✓	✓	✓
ES2032260-020	10-Sep-2020 00:00	Val-75	✓				
ES2032260-021	10-Sep-2020 00:00	Val-76		✓	✓	✓	✓
ES2032260-022	10-Sep-2020 00:00	Val-77	✓				
ES2032260-023	10-Sep-2020 00:00	Val-78	✓				
ES2032260-024	10-Sep-2020 00:00	Val-79		✓	✓	✓	✓
ES2032260-025	10-Sep-2020 00:00	Val-80	✓				
ES2032260-026	10-Sep-2020 00:00	Val-81		✓	✓	✓	✓
ES2032260-027	10-Sep-2020 00:00	Val-82	✓				
ES2032260-028	10-Sep-2020 00:00	Val-83		✓	✓	✓	✓
ES2032260-029	10-Sep-2020 00:00	Val-84	✓				
ES2032260-030	10-Sep-2020 00:00	Val-85		✓	✓	✓	✓
ES2032260-031	10-Sep-2020 00:00	Val-86	✓				
ES2032260-032	10-Sep-2020 00:00	Val-87		✓	✓	✓	✓
ES2032260-033	10-Sep-2020 00:00	Val-88	✓				
ES2032260-034	10-Sep-2020 00:00	Val-89	✓				
ES2032260-035	10-Sep-2020 00:00	Val-90		✓	✓	✓	✓

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2032260-036	10-Sep-2020 00:00	Val-91	✓				
ES2032260-037	10-Sep-2020 00:00	Val-92		✓	✓	✓	✓
ES2032260-038	10-Sep-2020 00:00	Val-93	✓				
ES2032260-039	10-Sep-2020 00:00	Val-94		✓	✓	✓	✓
ES2032260-040	10-Sep-2020 00:00	Val-95	✓				
ES2032260-041	10-Sep-2020 00:00	Val-96		✓	✓	✓	✓
ES2032260-042	10-Sep-2020 00:00	Val-97	✓				
ES2032260-043	10-Sep-2020 00:00	Val-98		✓	✓	✓	✓
ES2032260-044	10-Sep-2020 00:00	Val-99	✓				
ES2032260-046	10-Sep-2020 00:00	Val-101	✓				
ES2032260-047	10-Sep-2020 00:00	Val-102		✓	✓	✓	✓
ES2032260-048	10-Sep-2020 00:00	Val-103	✓				
ES2032260-049	10-Sep-2020 00:00	Val-104		✓	✓	✓	✓
ES2032260-050	10-Sep-2020 00:00	Val-105	✓				
ES2032260-051	10-Sep-2020 00:00	Val-106		✓	✓	✓	✓
ES2032260-052	10-Sep-2020 00:00	Val-107	✓				
ES2032260-053	10-Sep-2020 00:00	Val-108		✓	✓	✓	✓
ES2032260-054	10-Sep-2020 00:00	Val-109	✓				
ES2032260-055	10-Sep-2020 00:00	Val-110		✓	✓	✓	✓
ES2032260-056	10-Sep-2020 00:00	Val-111	✓				
ES2032260-057	10-Sep-2020 00:00	Val-112		✓	✓	✓	✓
ES2032260-058	10-Sep-2020 00:00	Val-113	✓				
ES2032260-059	10-Sep-2020 00:00	Val-114		✓	✓	✓	✓
ES2032260-060	10-Sep-2020 00:00	Val-115	✓				
ES2032260-061	10-Sep-2020 00:00	Val-116		✓	✓	✓	✓
ES2032260-062	10-Sep-2020 00:00	Val-117	✓				
ES2032260-063	10-Sep-2020 00:00	Val-118		✓	✓	✓	✓
ES2032260-064	10-Sep-2020 00:00	Val-119	✓				
ES2032260-065	10-Sep-2020 00:00	Val-120		✓	✓	✓	✓
ES2032260-066	10-Sep-2020 00:00	Val-121	✓				
ES2032260-067	10-Sep-2020 00:00	Val-122		✓	✓	✓	✓
ES2032260-068	10-Sep-2020 00:00	Val-123	✓				
ES2032260-069	10-Sep-2020 00:00	Val-124		✓	✓	✓	✓
ES2032260-070	10-Sep-2020 00:00	Val-125	✓				
ES2032260-071	10-Sep-2020 00:00	Val-126		✓	✓	✓	✓
ES2032260-072	10-Sep-2020 00:00	Val-127	✓				
ES2032260-073	10-Sep-2020 00:00	Val-128		✓	✓	✓	✓
ES2032260-074	10-Sep-2020 00:00	Val-129	✓				
ES2032260-075	10-Sep-2020 00:00	Val-130		✓	✓	✓	✓
ES2032260-076	10-Sep-2020 00:00	Val-131	✓				
ES2032260-077	10-Sep-2020 00:00	Val-100			✓		

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU		
- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com
GEMMA SHERIDAN		
- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com
J Mcdowell		
- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com
PAUL TURYN		
- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com
ROBIN BIRUA		
- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com.au
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com.au
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com.au
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com.au
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com.au
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com.au
Sarah Dorherty		
- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
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- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2032260**	Page	: 1 of 37
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020 10:20
Order number	: ----	Date Analysis Commenced	: 15-Sep-2020
C-O-C number	: ----	Issue Date	: 21-Sep-2020 15:26
Sampler	: Robin Birua		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 76		
No. of samples analysed	: 39		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005: Poor precision was obtained for Chromium on sample ES2032260-1. Results have been confirmed by re-extraction and reanalysis
- Amendment (18/09/2020): This report has been amended and re-released to allow the reporting of additional analytical data.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-56	Val-58	Val-60	Val-62	Val-64
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-001	ES2032260-003	ES2032260-005	ES2032260-007	ES2032260-009
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		6.5	8.6	8.6	7.3	4.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		84.2	96.6	81.7	81.8	98.6
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		5	5	6	5	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		67	126	64	44	51
Copper	7440-50-8	5	mg/kg		6	6	7	9	8
Lead	7439-92-1	5	mg/kg		8	8	7	9	7
Nickel	7440-02-0	2	mg/kg		5	4	5	7	6
Zinc	7440-66-6	5	mg/kg		13	<5	<5	6	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-56	Val-58	Val-60	Val-62	Val-64
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-001	ES2032260-003	ES2032260-005	ES2032260-007	ES2032260-009
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-56	Val-58	Val-60	Val-62	Val-64
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-001	ES2032260-003	ES2032260-005	ES2032260-007	ES2032260-009
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-56	Val-58	Val-60	Val-62	Val-64
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032260-001	ES2032260-003	ES2032260-005	ES2032260-007	ES2032260-009
				Result	Result	Result	Result	Result
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**112**	**100**	**98.4**	**111**	**101**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**94.9**	**80.2**	**84.6**	**89.7**	**86.3**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**89.7**	**88.6**	**93.0**	**90.6**	**89.6**
2-Chlorophenol-D4	93951-73-6	0.5	%	**91.1**	**90.3**	**93.5**	**91.1**	**90.3**
2.4.6-Tribromophenol	118-79-6	0.5	%	**68.9**	**66.6**	**67.2**	**65.0**	**63.9**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**95.6**	**95.4**	**98.4**	**96.2**	**94.9**
Anthracene-d10	1719-06-8	0.5	%	**99.4**	**100**	**104**	**102**	**101**
4-Terphenyl-d14	1718-51-0	0.5	%	**89.6**	**89.8**	**93.7**	**91.9**	**91.0**
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**112**	**111**	**100**	**102**	**103**
Toluene-D8	2037-26-5	0.2	%	**115**	**113**	**107**	**105**	**102**
4-Bromofluorobenzene	460-00-4	0.2	%	**114**	**114**	**106**	**102**	**100**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-66	Val-68	Val-70	Val-72	Val-74
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-011	ES2032260-013	ES2032260-015	ES2032260-017	ES2032260-019
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		4.9	12.3	11.2	6.6	7.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		91.9	76.1	71.2	75.8	89.6
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		6	6	6	<5	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		92	170	62	97	86
Copper	7440-50-8	5	mg/kg		10	5	10	7	6
Lead	7439-92-1	5	mg/kg		10	10	10	9	8
Nickel	7440-02-0	2	mg/kg		7	4	7	5	6
Zinc	7440-66-6	5	mg/kg		7	<5	10	<5	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	0.18	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-66	Val-68	Val-70	Val-72	Val-74
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032260-011	ES2032260-013	ES2032260-015	ES2032260-017	ES2032260-019
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	**0.18**	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-66	Val-68	Val-70	Val-72	Val-74
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-011	ES2032260-013	ES2032260-015	ES2032260-017	ES2032260-019
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-66	Val-68	Val-70	Val-72	Val-74
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-011	ES2032260-013	ES2032260-015	ES2032260-017	ES2032260-019
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**115**	**113**	**106**	**108**	**120**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**94.4**	**103**	**96.6**	**93.9**	**116**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**83.6**	**88.0**	**89.3**	**88.4**	**86.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**82.9**	**88.7**	**90.0**	**89.3**	**87.5**
2.4.6-Tribromophenol	118-79-6	0.5	%		**56.2**	**61.2**	**62.3**	**60.8**	**60.9**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**86.1**	**94.3**	**95.8**	**94.7**	**93.0**
Anthracene-d10	1719-06-8	0.5	%		**91.7**	**99.0**	**102**	**100**	**98.6**
4-Terphenyl-d14	1718-51-0	0.5	%		**82.4**	**90.4**	**91.8**	**90.6**	**88.9**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**106**	**96.6**	**95.3**	**93.7**	**91.3**
Toluene-D8	2037-26-5	0.2	%		**106**	**99.3**	**98.0**	**95.9**	**90.4**
4-Bromofluorobenzene	460-00-4	0.2	%		**103**	**98.3**	**94.6**	**97.0**	**90.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-76	Val-79	Val-81	Val-83	Val-85
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-021	ES2032260-024	ES2032260-026	ES2032260-028	ES2032260-030
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		9.4	13.8	12.4	6.5	8.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		80.0	84.5	72.2	81.5	77.2
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		8	8	6	6	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		147	128	108	63	64
Copper	7440-50-8	5	mg/kg		7	6	8	8	8
Lead	7439-92-1	5	mg/kg		11	9	9	8	8
Nickel	7440-02-0	2	mg/kg		6	6	6	7	5
Zinc	7440-66-6	5	mg/kg		9	<5	9	<5	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-76	Val-79	Val-81	Val-83	Val-85
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032260-021	ES2032260-024	ES2032260-026	ES2032260-028	ES2032260-030
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-76	Val-79	Val-81	Val-83	Val-85
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-021	ES2032260-024	ES2032260-026	ES2032260-028	ES2032260-030
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-76	Val-79	Val-81	Val-83	Val-85
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032260-021	ES2032260-024	ES2032260-026	ES2032260-028	ES2032260-030
				Result	Result	Result	Result	Result
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**110**	**97.9**	**110**	**97.3**	**107**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**116**	**82.7**	**91.0**	**88.1**	**98.2**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**87.7**	**85.0**	**87.6**	**88.1**	**87.0**
2-Chlorophenol-D4	93951-73-6	0.5	%	**88.7**	**84.7**	**88.0**	**89.0**	**87.7**
2.4.6-Tribromophenol	118-79-6	0.5	%	**60.5**	**58.5**	**59.4**	**59.4**	**60.7**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**94.1**	**90.3**	**92.6**	**94.8**	**94.4**
Anthracene-d10	1719-06-8	0.5	%	**100**	**97.7**	**99.7**	**101**	**98.8**
4-Terphenyl-d14	1718-51-0	0.5	%	**90.0**	**87.9**	**90.3**	**91.2**	**89.3**
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**105**	**95.1**	**103**	**107**	**105**
Toluene-D8	2037-26-5	0.2	%	**105**	**96.5**	**101**	**109**	**107**
4-Bromofluorobenzene	460-00-4	0.2	%	**104**	**100**	**100**	**107**	**104**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-87	Val-90	Val-92	Val-93	Val-94
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032260-032	ES2032260-035	ES2032260-037	ES2032260-038	ES2032260-039
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	10.4	9.1	8.8	----	7.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No*
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	Ch
Sample weight (dry)	----	0.01	g	84.7	81.4	67.3	80.4	81.2
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	7	6	----	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	<1
Chromium	7440-47-3	2	mg/kg	157	77	53	----	87
Copper	7440-50-8	5	mg/kg	6	10	10	----	8
Lead	7439-92-1	5	mg/kg	10	10	8	----	8
Nickel	7440-02-0	2	mg/kg	5	8	9	----	6
Zinc	7440-66-6	5	mg/kg	7	<5	8	----	12
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-87	Val-90	Val-92	Val-93	Val-94
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032260-032	ES2032260-035	ES2032260-037	ES2032260-038	ES2032260-039
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-87	Val-90	Val-92	Val-93	Val-94
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-032	ES2032260-035	ES2032260-037	ES2032260-038	ES2032260-039
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	----	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	----	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	----	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-87	Val-90	Val-92	Val-93	Val-94
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-032	ES2032260-035	ES2032260-037	ES2032260-038	ES2032260-039
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**94.9**	**112**	**106**	----	**86.8**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**83.8**	**97.0**	**104**	----	**78.0**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**85.3**	**87.3**	**86.6**	----	**87.1**
2-Chlorophenol-D4	93951-73-6	0.5	%		**84.4**	**88.5**	**87.7**	----	**87.6**
2.4.6-Tribromophenol	118-79-6	0.5	%		**58.1**	**59.8**	**59.1**	----	**58.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**90.4**	**94.7**	**93.4**	----	**93.0**
Anthracene-d10	1719-06-8	0.5	%		**94.6**	**99.4**	**98.8**	----	**97.9**
4-Terphenyl-d14	1718-51-0	0.5	%		**85.2**	**90.1**	**88.7**	----	**88.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**99.5**	**106**	**102**	----	**95.3**
Toluene-D8	2037-26-5	0.2	%		**93.6**	**104**	**102**	----	**95.7**
4-Bromofluorobenzene	460-00-4	0.2	%		**92.7**	**102**	**101**	----	**95.3**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-95	Val-96	Val-98	Val-102	Val-104
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-040	ES2032260-041	ES2032260-043	ES2032260-047	ES2032260-049
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		----	9.1	9.1	10.2	6.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		75.6	90.6	66.1	72.7	72.7
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		----	5	7	6	5
Cadmium	7440-43-9	1	mg/kg		----	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		----	46	117	132	58
Copper	7440-50-8	5	mg/kg		----	8	10	8	10
Lead	7439-92-1	5	mg/kg		----	7	11	11	8
Nickel	7440-02-0	2	mg/kg		----	8	8	8	11
Zinc	7440-66-6	5	mg/kg		----	<5	58	6	6
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		----	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-95	Val-96	Val-98	Val-102	Val-104
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-040	ES2032260-041	ES2032260-043	ES2032260-047	ES2032260-049
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-95	Val-96	Val-98	Val-102	Val-104
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-040	ES2032260-041	ES2032260-043	ES2032260-047	ES2032260-049
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		----	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		----	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		----	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		----	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		----	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-95	Val-96	Val-98	Val-102	Val-104
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-040	ES2032260-041	ES2032260-043	ES2032260-047	ES2032260-049
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		----	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		----	**90.9**	**114**	**115**	**124**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		----	**84.3**	**101**	**110**	**121**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	**85.1**	**88.6**	**93.0**	**94.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		----	**85.9**	**92.0**	**92.8**	**96.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		----	**56.5**	**68.8**	**70.2**	**72.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	**90.5**	**101**	**106**	**106**
Anthracene-d10	1719-06-8	0.5	%		----	**96.6**	**99.6**	**105**	**106**
4-Terphenyl-d14	1718-51-0	0.5	%		----	**87.1**	**100**	**102**	**102**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	**95.0**	**93.8**	**93.5**	**90.0**
Toluene-D8	2037-26-5	0.2	%		----	**91.1**	**110**	**107**	**107**
4-Bromofluorobenzene	460-00-4	0.2	%		----	**89.2**	**112**	**106**	**106**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-106	Val-108	Val-110	Val-112	Val-114
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-051	ES2032260-053	ES2032260-055	ES2032260-057	ES2032260-059
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		9.1	6.9	5.5	9.2	9.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		81.6	72.8	87.2	84.0	67.6
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	15	6	7	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		38	84	71	177	109
Copper	7440-50-8	5	mg/kg		6	17	9	6	7
Lead	7439-92-1	5	mg/kg		6	10	11	11	9
Nickel	7440-02-0	2	mg/kg		5	8	7	6	8
Zinc	7440-66-6	5	mg/kg		7	9	24	<5	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		0.28	<0.05	0.13	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		0.28	<0.05	0.13	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	0.39	0.06	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-106	Val-108	Val-110	Val-112	Val-114
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032260-051	ES2032260-053	ES2032260-055	ES2032260-057	ES2032260-059
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	**0.39**	**0.06**	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-106	Val-108	Val-110	Val-112	Val-114
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-051	ES2032260-053	ES2032260-055	ES2032260-057	ES2032260-059
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-106	Val-108	Val-110	Val-112	Val-114
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-051	ES2032260-053	ES2032260-055	ES2032260-057	ES2032260-059
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**119**	**120**	**104**	**118**	**123**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**115**	**123**	**101**	**117**	**104**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**91.5**	**90.9**	**88.0**	**83.5**	**87.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**94.6**	**93.6**	**90.3**	**85.1**	**91.7**
2.4.6-Tribromophenol	118-79-6	0.5	%		**67.5**	**67.5**	**64.0**	**65.0**	**62.8**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**105**	**102**	**99.0**	**102**	**102**
Anthracene-d10	1719-06-8	0.5	%		**102**	**102**	**95.6**	**96.2**	**99.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**102**	**98.4**	**93.9**	**92.9**	**97.1**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**86.8**	**89.4**	**91.9**	**89.9**	**85.1**
Toluene-D8	2037-26-5	0.2	%		**100**	**104**	**108**	**99.4**	**102**
4-Bromofluorobenzene	460-00-4	0.2	%		**102**	**107**	**111**	**99.4**	**101**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-116	Val-118	Val-120	Val-122	Val-124
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-061	ES2032260-063	ES2032260-065	ES2032260-067	ES2032260-069
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		5.0	7.0	7.8	5.3	5.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		103	68.4	93.1	98.8	70.9
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		5	6	8	6	7
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		96	106	122	64	152
Copper	7440-50-8	5	mg/kg		8	7	10	12	8
Lead	7439-92-1	5	mg/kg		9	9	12	9	13
Nickel	7440-02-0	2	mg/kg		8	7	6	10	8
Zinc	7440-66-6	5	mg/kg		19	28	25	7	6
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		0.59	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		0.59	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-116	Val-118	Val-120	Val-122	Val-124
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-061	ES2032260-063	ES2032260-065	ES2032260-067	ES2032260-069
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-116	Val-118	Val-120	Val-122	Val-124
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-061	ES2032260-063	ES2032260-065	ES2032260-067	ES2032260-069
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-116	Val-118	Val-120	Val-122	Val-124
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032260-061	ES2032260-063	ES2032260-065	ES2032260-067	ES2032260-069
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**115**	**97.2**	**118**	**124**	**126**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**111**	**84.4**	**93.7**	**122**	**104**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**105**	**95.9**	**89.7**	**92.5**	**96.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**107**	**97.1**	**90.6**	**95.5**	**102**
2.4.6-Tribromophenol	118-79-6	0.5	%		**71.6**	**67.8**	**65.1**	**69.2**	**67.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**116**	**107**	**107**	**106**	**114**
Anthracene-d10	1719-06-8	0.5	%		**112**	**107**	**102**	**106**	**108**
4-Terphenyl-d14	1718-51-0	0.5	%		**107**	**109**	**99.0**	**100**	**109**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**92.0**	**92.4**	**97.6**	**93.9**	**95.7**
Toluene-D8	2037-26-5	0.2	%		**106**	**103**	**106**	**110**	**110**
4-Bromofluorobenzene	460-00-4	0.2	%		**104**	**104**	**106**	**108**	**108**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-126	Val-128	Val-130	Val-100	----
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	----
Compound	CAS Number	LOR	Unit	ES2032260-071	ES2032260-073	ES2032260-075	ES2032260-077	--------
				Result	Result	Result	Result	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.9	7.4	5.6	5.6	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	----
Asbestos Type	1332-21-4	-	--	-	-	-	-	----
Sample weight (dry)	----	0.01	g	71.9	78.6	72.8	78.8	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	----
Organic Fibre	----	0.1	g/kg	No	No	No	No	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	6	5	15	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg	55	53	55	252	----
Copper	7440-50-8	5	mg/kg	9	7	10	6	----
Lead	7439-92-1	5	mg/kg	8	8	9	15	----
Nickel	7440-02-0	2	mg/kg	8	7	10	6	----
Zinc	7440-66-6	5	mg/kg	13	6	51	<5	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	0.11	<0.05	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.11	<0.05	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-126	Val-128	Val-130	Val-100	----
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	----
Compound	CAS Number	LOR	Unit	ES2032260-071	ES2032260-073	ES2032260-075	ES2032260-077	--------
				Result	Result	Result	Result	----
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-126	Val-128	Val-130	Val-100	----
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	----
Compound	CAS Number	LOR	Unit		ES2032260-071	ES2032260-073	ES2032260-075	ES2032260-077	--------
					Result	Result	Result	Result	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-126	Val-128	Val-130	Val-100	----
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	----
Compound	CAS Number	LOR	Unit	ES2032260-071	ES2032260-073	ES2032260-075	ES2032260-077	--------
				Result	Result	Result	Result	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**130**	**117**	**115**	**78.2**	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**89.6**	**79.1**	**97.4**	**68.3**	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**95.8**	**94.5**	**89.6**	**95.9**	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**97.8**	**99.1**	**93.0**	**95.0**	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**63.2**	**66.4**	**59.9**	**54.2**	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**108**	**110**	**103**	**104**	----
Anthracene-d10	1719-06-8	0.5	%	**104**	**107**	**102**	**99.2**	----
4-Terphenyl-d14	1718-51-0	0.5	%	**106**	**104**	**101**	**96.2**	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**91.3**	**89.8**	**91.4**	**89.0**	----
Toluene-D8	2037-26-5	0.2	%	**104**	**107**	**102**	**105**	----
4-Bromofluorobenzene	460-00-4	0.2	%	**105**	**106**	**102**	**113**	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	Val-56 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-58 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-60 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-62 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-64 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-66 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-68 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-70 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-72 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-74 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-76 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-79 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-81 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-83 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-85 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-87 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-90 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-92 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-93 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-94 - 10-Sep-2020 00:00	Mid brown soil containing one asbestos fibre bundle approximately 5x1x0.5mm.
EA200: Description	Val-95 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-96 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-98 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-102 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-104 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-106 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-108 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-110 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-112 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-114 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-116 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-118 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-120 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-122 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-124 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-126 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-128 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-130 - 10-Sep-2020 00:00	Mid brown soil.

Sub-Matrix: **SOIL**

Method: Compound	*Client sample ID - Client sampling date / time*	*Analytical Results*
EA200: Description	Val-100 - 10-Sep-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2032260**	Page	: 1 of 25
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020
Order number	: ----	Date Analysis Commenced	: 15-Sep-2020
C-O-C number	: ----	Issue Date	: 21-Sep-2020
Sampler	: Robin Birua		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 76		
No. of samples analysed	: 39		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3257806)									
ES2032260-001	Val-56	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	67	# 91	30.7	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	5	6	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	6	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	8	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	13	14	10.00	No Limit
ES2032260-013	Val-68	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	170	182	6.68	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3257809)									
ES2032260-035	Val-90	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	77	68	13.2	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	8	9	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	10	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
ES2032260-057	Val-112	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	177	191	7.89	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	8	20.8	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3257809) - continued									
ES2032260-057	Val-112	EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	7	16.3	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	11	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3263863)									
ES2032260-077	Val-100	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	252	273	8.05	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	7	19.1	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	15	14	12.6	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	6	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	15	15	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	7	39.0	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3257810)									
ES2032260-003	Val-58	EA055: Moisture Content	----	0.1	%	8.6	8.5	0.00	No Limit
ES2032260-019	Val-74	EA055: Moisture Content	----	0.1	%	7.9	7.7	3.15	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3257811)									
ES2032260-039	Val-94	EA055: Moisture Content	----	0.1	%	7.6	9.6	23.9	No Limit
ES2032260-063	Val-118	EA055: Moisture Content	----	0.1	%	7.0	7.1	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3263867)									
ES2032486-062	Anonymous	EA055: Moisture Content	----	0.1	%	13.1	13.8	4.72	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3257807)									
ES2032260-001	Val-56	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032260-013	Val-68	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3257808)									
ES2032260-035	Val-90	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032260-057	Val-112	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3263862)									
ES2032260-077	Val-100	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3257472)									
ES2032260-001	Val-56	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3257472) - continued									
ES2032260-001	Val-56	EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032260-021	Val-76	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3257477)									
ES2032260-043	Val-98	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3257477) - continued									
ES2032260-043	Val-98	EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032260-065	Val-120	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3264307)									
ES2032454-066	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3264307) - continued									
ES2032454-066	Anonymous	EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3257472)									
ES2032260-001	Val-56	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032260-021	Val-76	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3257472) - continued									
ES2032260-021	Val-76	EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3257477)									
ES2032260-043	Val-98	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032260-065	Val-120	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3257477) - continued									
ES2032260-065	Val-120	EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3264307)									
ES2032454-066	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3257471)									
ES2032260-001	Val-56	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3257471) - continued									
ES2032260-001	Val-56	EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2032260-021	Val-76	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3257476)									
ES2032260-043	Val-98	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3257476) - continued									
ES2032260-043	Val-98	EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2032260-065	Val-120	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3264306)									
ES2032454-066	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3264306) - continued									
ES2032454-066	Anonymous	EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3257467)									
ES2032260-001	Val-56	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032260-021	Val-76	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3257470)									
ES2032260-001	Val-56	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032260-021	Val-76	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3257474)									
ES2032260-043	Val-98	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032260-065	Val-120	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3257475)									
ES2032260-043	Val-98	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032260-065	Val-120	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3264305)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3264305) - continued									
ES2032454-066	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3264423)									
ES2031442-012	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032820-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3257467)									
ES2032260-001	Val-56	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032260-021	Val-76	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3257470)									
ES2032260-001	Val-56	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032260-021	Val-76	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3257474)									
ES2032260-043	Val-98	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032260-065	Val-120	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3257475)									
ES2032260-043	Val-98	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032260-065	Val-120	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3264305)									
ES2032454-066	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3264423)									
ES2031442-012	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032820-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3257467)									
ES2032260-001	Val-56	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3257467) - continued									
ES2032260-001	Val-56	EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032260-021	Val-76	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3257474)									
ES2032260-043	Val-98	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032260-065	Val-120	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3264423)									
ES2031442-012	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032820-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3257806)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	106	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	83.8	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	124	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	99.1	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	102	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	115	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	97.5	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3257809)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	115	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	97.0	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	127	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	111	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	113	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	119	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	108	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3263863)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	120	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	116	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	130	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	129	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	117	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	118	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	126	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3257807)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	103	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3257808)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	70.2	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3263862)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	91.1	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3257472)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	96.4	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	67.0	119

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3257472) - continued								
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.7	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.1	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.9	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.6	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	100	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	82.8	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.7	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	96.1	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.8	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	102	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	81.5	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.5	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	93.4	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	80.1	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	90.9	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3257477)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.2	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	106	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.5	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	109	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	96.7	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.4	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	100	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	99.6	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	107	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.7	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	107	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	104	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.4	64.0	122

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3257477) - continued								
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	99.9	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264307)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.6	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.2	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	77.4	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	83.1	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	82.7	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3257472)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	89.8	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	84.8	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	104	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	88.2	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	99.5	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	86.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.0	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	78.1	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	72.3	68.0	124

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3257472) - continued								
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	109	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	73.1	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3257477)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.7	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	83.4	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.5	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	111	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	102	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.9	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	103	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	99.9	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	100	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.9	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	110	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	102	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	103	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	77.1	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.5	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	89.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	89.3	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	75.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.1	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	74.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.7	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.9	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	66.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307) - continued								
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	80.9	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3257471)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	94.3	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	89.2	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	92.6	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	93.6	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	97.3	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	96.4	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	97.7	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	98.4	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	85.5	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	91.6	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	87.3	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	96.5	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	86.3	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	87.2	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	87.6	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	85.8	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3257476)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	103	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	99.9	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	93.2	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	102	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	99.2	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	96.4	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	103	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	99.0	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	93.6	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	90.3	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	86.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	87.9	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	90.8	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	87.8	61.0	121

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3257476) - continued								
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	83.7	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	92.6	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264306)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	99.5	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	97.2	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	92.6	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	101	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	98.4	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	98.1	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	94.4	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	85.8	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	88.3	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	83.7	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	95.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	85.5	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	84.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	80.6	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	88.6	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257467)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	110	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257470)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	94.8	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	91.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	91.6	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257474)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	98.6	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257475)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	92.2	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	88.8	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	84.8	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264305)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	91.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	88.3	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	98.9	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264423)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	116	68.4	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257467)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	110	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257470)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	91.6	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	91.3	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	86.5	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257474)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	98.8	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257475)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	90.6	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	86.5	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	91.7	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264305)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	89.0	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	88.4	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	79.4	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264423)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	121	68.4	128
EP080: BTEXN (QCLot: 3257467)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	110	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	98.8	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	102	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	103	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	103	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	90.7	63.0	119
EP080: BTEXN (QCLot: 3257474)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	101	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	99.5	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	101	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	104	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	92.6	63.0	119
EP080: BTEXN (QCLot: 3264423)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	102	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	110	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	110	65.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 3264423) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	106	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	107	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	93.2	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3257806)							
ES2032260-001	Val-56	EG005T: Arsenic	7440-38-2	50 mg/kg	76.0	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	86.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	92.3	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	89.0	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	85.1	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	87.1	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	87.9	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3257809)							
ES2032260-035	Val-90	EG005T: Arsenic	7440-38-2	50 mg/kg	78.7	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	89.1	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	72.3	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	91.6	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	88.3	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	88.4	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	90.8	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3263863)							
ES2032260-077	Val-100	EG005T: Arsenic	7440-38-2	50 mg/kg	78.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	# Not Determined	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	99.7	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	94.9	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	99.2	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	95.5	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3257807)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3257807) - continued							
ES2032260-001	Val-56	EG035T: Mercury	7439-97-6	5 mg/kg	79.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3257808)							
ES2032260-035	Val-90	EG035T: Mercury	7439-97-6	5 mg/kg	86.2	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3263862)							
ES2032260-077	Val-100	EG035T: Mercury	7439-97-6	5 mg/kg	79.8	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3257472)							
ES2032260-001	Val-56	EP068: gamma-BHC	58-89-9	0.5 mg/kg	99.8	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	91.4	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	88.2	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	90.7	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	99.8	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	96.5	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3257477)							
ES2032260-043	Val-98	EP068: gamma-BHC	58-89-9	0.5 mg/kg	101	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	89.7	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	104	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	98.1	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	92.9	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	90.6	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264307)							
ES2032454-066	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	93.4	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	71.2	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	83.8	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	77.8	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	93.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	88.6	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3257472)							
ES2032260-001	Val-56	EP068: Diazinon	333-41-5	0.5 mg/kg	110	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	91.0	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	86.4	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	103	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	87.9	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3257477)							
ES2032260-043	Val-98	EP068: Diazinon	333-41-5	0.5 mg/kg	106	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	88.6	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	93.0	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	106	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3257477) - continued							
ES2032260-043	Val-98	EP068: Prothiofos	34643-46-4	0.5 mg/kg	97.6	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307)							
ES2032454-066	Anonymous	EP068: Diazinon	333-41-5	0.5 mg/kg	79.4	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	93.4	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	102	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	91.6	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	90.4	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3257471)							
ES2032260-001	Val-56	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	89.4	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	91.5	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3257476)							
ES2032260-043	Val-98	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	87.4	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	94.4	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264306)							
ES2032454-066	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	91.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	97.8	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257467)							
ES2032260-001	Val-56	EP080: C6 - C9 Fraction	----	32.5 mg/kg	120	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257470)							
ES2032260-001	Val-56	EP071: C10 - C14 Fraction	----	523 mg/kg	78.8	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	92.4	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	110	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257474)							
ES2032260-043	Val-98	EP080: C6 - C9 Fraction	----	32.5 mg/kg	97.3	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257475)							
ES2032260-043	Val-98	EP071: C10 - C14 Fraction	----	523 mg/kg	81.6	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	91.1	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	109	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264305)							
ES2032454-066	Anonymous	EP071: C10 - C14 Fraction	----	523 mg/kg	110	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	119	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	130	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	111	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257467)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257467) - continued							
ES2032260-001	Val-56	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	116	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257470)							
ES2032260-001	Val-56	EP071: >C10 - C16 Fraction	----	860 mg/kg	88.5	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	96.9	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	117	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257474)							
ES2032260-043	Val-98	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	96.7	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257475)							
ES2032260-043	Val-98	EP071: >C10 - C16 Fraction	----	860 mg/kg	87.5	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	95.9	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	116	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264305)							
ES2032454-066	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	124	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	121	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	124	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	113	70.0	130
EP080: BTEXN (QCLot: 3257467)							
ES2032260-001	Val-56	EP080: Benzene	71-43-2	2.5 mg/kg	111	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	98.3	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	105	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	107	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	106	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	105	70.0	130
EP080: BTEXN (QCLot: 3257474)							
ES2032260-043	Val-98	EP080: Benzene	71-43-2	2.5 mg/kg	89.8	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	93.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	95.0	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	93.0	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	98.0	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	106	70.0	130
EP080: BTEXN (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	93.4	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	114	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080: BTEXN (QCLot: 3264423) - continued							
ES2031442-012	Anonymous	EP080: Ethylbenzene	100-41-4	2.5 mg/kg	116	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	116	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	116	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	82.0	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2032260**	Page	: 1 of 13
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020
Site	: ----	Issue Date	: 21-Sep-2020
Sampler	: Robin Birua	No. of samples received	: 76
Order number	: ----	No. of samples analysed	: 39

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	ES2032260--001	Val-56	**Chromium**	7440-47-3	30.7 %	0% - 20%	**RPD exceeds LOR based limits**
Matrix Spike (MS) Recoveries							
EG005(ED093)T: Total Metals by ICP-AES	ES2032260--077	Val-100	**Chromium**	7440-47-3	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**----**	----	----	**15-Sep-2020**	24-Sep-2020	✓
Soil Glass Jar - Unpreserved (EA055)							
Val-100	**10-Sep-2020**	**----**	----	----	**18-Sep-2020**	24-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
Val-56,	Val-58,	**10-Sep-2020**	**----**	----	----	**17-Sep-2020**	09-Mar-2021	✓
Val-60,	Val-62,							
Val-64,	Val-66,							
Val-68,	Val-70,							
Val-72,	Val-74,							
Val-76,	Val-79,							
Val-81,	Val-83,							
Val-85,	Val-87,							
Val-90,	Val-92,							
Val-94,	Val-96,							
Val-98,	Val-102,							
Val-104,	Val-106,							
Val-108,	Val-110,							
Val-112,	Val-114,							
Val-116,	Val-118,							
Val-120,	Val-122,							
Val-124,	Val-126,							
Val-128,	Val-130,							
Val-100								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
Val-93,	Val-95	**10-Sep-2020**	**----**	----	----	**21-Sep-2020**	09-Mar-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**15-Sep-2020**	09-Mar-2021	✓	**16-Sep-2020**	09-Mar-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
Val-100	**10-Sep-2020**	**18-Sep-2020**	09-Mar-2021	✓	**18-Sep-2020**	09-Mar-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**15-Sep-2020**	08-Oct-2020	✓	**17-Sep-2020**	08-Oct-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
Val-100	**10-Sep-2020**	**18-Sep-2020**	08-Oct-2020	✓	**19-Sep-2020**	08-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	25-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
Val-100	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	25-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
Val-100	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	25-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
Val-100	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	24-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-100	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	24-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	24-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-100	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	24-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
Val-56, Val-58, Val-60, Val-62, Val-64, Val-66, Val-68, Val-70, Val-72, Val-74, Val-76, Val-79, Val-81, Val-83, Val-85, Val-87, Val-90, Val-92, Val-94, Val-96, Val-98, Val-102, Val-104, Val-106, Val-108, Val-110, Val-112, Val-114, Val-116, Val-118, Val-120, Val-122, Val-124, Val-126, Val-128, Val-130	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	24-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-100	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	24-Sep-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	5	47	**10.64**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	5	45	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	5	45	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	5	48	**10.42**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	47	**10.64**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	5	45	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	6	52	**11.54**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	52	**5.77**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	52	**5.77**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	45	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	52	**5.77**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

TAT

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT ☐ BRISBANE: Level 7, 175 Eagle Street, Brisbane, QLD 4000 ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227 ☐ SUNSHINE COAST: 6/6 Kenny Street, Maroochydore, QLD 4558 ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305 ☐ WOLLONGONG: Level 1, 62 Burelli Street, Wollongong, NSW 2500

UE TICL ☐ CANBERRA: 15 Bentham Street, Level 2, Canberra, ACT 2600 ☐ MACKAY: 1/1 Bowen Street, Mackay, QLD 4740 ☐ MELBOURNE: Level 16, 700 Collins Street, Docklands, VIC 3008 ☐ PERTH: Ground Floor, 503 Murray Street, Perth, WA 6000 ☐ ADELAIDE: 60 Halifax Street, Adelaide, SA 5000

(Tick one) ☐ DARWIN: Unit 2, 2 Woodyard Road, Darwin, NT 0820 ☐ HOBART: 89 Bay Street, Hobart, TAS 7000 ☐ AUCKLAND: Level 4, 12 Madden Street, Auckland, 1010 ☐ CHRISTCHURCH: 3 Buchanan St, Riccarton, Christchurch, 8011 ☐ WAIPUKURAU: 21 Ruataniwha Street, Waipukurau, Hawke's Bay, New Zealand, 4200

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 1 of 4
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP [S-26, S-12, EA200F]	VAT [S-26, S-12, EA200]	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	STP 25-01	14-09-2020	Soil	x1 Jar and x1 Bag	x									
2	STP 25-02	14-09-2020	Soil	x1 Jar and x1 Bag	x									
3	STP 25-03	14-09-2020	Soil	x1 Jar and x1 Bag	x									
4	STP 25-04	14-09-2020	Soil	x1 Jar and x1 Bag	x									
5	STP26-01	14-09-2020	Soil	x1 Jar and x1 Bag	x									
6	STP26-02	14 09 2020	Soil	x1 Jar and x1 Bag	x									24 Hrs TAT Please
7	STP26-03	14-09-2020	Soil	x1 Jar and x1 Bag	x									
8	STP26-04	14-09-2020	Soil	x1 Jar and x1 Bag	x									
9	STP26-05	14-09-2020	Soil	x1 Jar and x1 Bag	x									
10	STP26-06	14-09-2020	Soil	x1 Jar and x1 Bag	x									
11	STP26-07	14-09-2020	Soil	x1 Jar and x1 Bag	x									

Subcon / Forward Lab / Split WO:

Lab / Analysis: [illegible] / Alberts

Organised By / Date:

Relinquished By / Date:

Connote / Courier:

WO No:

Attached By PO / Internal Sheet:

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time	14-09-2020	Received by	Sign ALS	Date / Time 15/09/20 11:30am	Temperature Received:
Relinquished By	Sign	Date / Time		Received by	Sign ALS Sydney	Date / Time 16.9.2020 8am	25,6C
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time 3,0	

Environmental Division Sydney

Work Order Reference

ES2032265

Telephone : 61-2-8784 8555

LAB OF ORIGIN DARWIN

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one): ☐ Brisbane ☐ Gold Coast ☐ Sunshine Coast ☐ Newcastle ☐ Sydney ☐ Canberra ☐ Wagga Wagga ☐ Albury ☐ Melbourne ☐ Ballarat ☐ Perth ☐ Adelaide ☐ Auckland ☐ Christchurch ☐ Wellington

CLIENT: SLR Consulting	**LABORATORY:** ALS	**Turnaround Time (TAT)**	**COC Number** 2 of 4
PROJECT: John Stokes Square	**LABORATORY ADDRESS:**	☐ Standard TAT	
PROJECT NUMBER: 680.10679	**SAMPLER:** Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	**SAMPLER CONTACT No:** 0482 680 165		
PM CONTACT No: 0417 647 498	**Email Reports and Invoices to:** sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200) Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B) Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12) Hold	Additional Information (Comment on any gross contamination or specific requirements)
12	STP27-01	14-09-2020	Soil	x1 Jar and x1 Bag	x						
13	STP27-02	14-09-2020	Soil	x1 Jar and x1 Bag	x						
14	STP27-03	14-09-2020	Soil	x1 Jar and x1 Bag	x						
15	STP27-04	14-09-2020	Soil	x1 Jar and x1 Bag	x						
16	STP27-05	14 09 2020	Soil	x1 Jar and x1 Bag	x						
17	STP28-01	14-09-2020	Soil	x1 Jar and x1 Bag	x						24 Hrs TAT Please
18	STP28-02	14 09 2020	Soil	x1 Jar and x1 Bag	x						
19	STP28-03	14 09 2020	Soil	x1 Jar and x1 Bag	x						
20	STP28-04	14-09-2020	Soil	x1 Jar and x1 Bag	x						
21	STP28-05	14-09-2020	Soil	x1 Jar and x1 Bag	x						
22	STP28-06	14-09 2020	Soil	x1 Jar and x1 Bag	x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	**Robin Birua**	Date / Time	14-09-2020	**Received by**	Sign Sydney ALS	Date / Time 16.9.2020 8:00	**Temperature Received:**
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Sarah Doherty

PM CONTACT No: 0417 647 498

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Robin Birua

SAMPLER CONTACT No: 0482 680 165

Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au

Turnaround Time (TAT)

☐ Standard TAT

☒ Non Standard or Urgent TAT

COC Number: 3 of 4

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
23	STP29-01	14-09-2020	Soil	x1 Jar and x1 Bag	x									
24	STP29-02	14-09-2020	Soil	x1 Jar and x1 Bag	x									
25	STP29-03	14-09-2020	Soil	x1 Jar and x1 Bag	x									
26	STP30-01 extra bag	14-09-2020	Soil	x1 Jar and x1 Bag	x									
27	STP30-02 Duplicate jar + bag	14-09-2020	Soil	x1 Jar and x1 Bag	x									
28	STP30-03 Duplicate jar + bag	14-09-2020	Soil	x1 Jar and x1 Bag	x									24 Hrs TAT Please
29	STP30-04	14-09-2020	Soil	x1 Jar and x1 Bag	x									
30	STP30-05	14-09-2020	Soil	x1 Jar and x1 Bag	x									
31	STP31-01 Missing bag	14-09-2020	Soil	x1 Jar and x1 Bag	x									
32	STP31-02 SNA	14-09-2020	Soil	x1 Jar and x1 Bag	x									
33	STP31-03 SNA	14-09-2020	Soil	x1 Jar and x1 Bag	x									

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time	14-09-2020	Received by	Sydney ALS	16.9.2020 8:00	Temperature Received:
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one): ☐ BRISBANE ☐ GOLD COAST ☐ SUNSHINE COAST ☐ TOWNSVILLE ☐ NEWCASTLE ☐ SYDNEY ☐ CANBERRA ☐ ADELAIDE ☐ MELBOURNE ☐ PERTH ☐ DARWIN

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 4 of 4
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.19679	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
34	QC-27 SNL	14-09-2020	Soil	x1 Jar and x1 Bag	x									
35	QC-28 SNL	14-09-2020	Soil	x1 Jar and x1 Bag	x									
36	RB05	14-9	Water	1 Bottle								X		
37	TB05	14-9	Soil	1 Jar										
38	* RBC1	9-9	W											24 Hrs TAT Please
39	* RB02	10-9	W											
40	* RB03	11-9	W			Extra Samples Received								
41	* RB04	14-9	W											
42	* STP GAC1	14-9	S											
43	* STP GAC2	14-9	S											
44	* Val-15S	14-9	S											
45	Val-15G	14-9	S											

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time	14-09-2020	Received by	Sydney ALS	Date / Time	16-9-2020 8:00
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received:

Angus Harding

From: Angus Harding
Sent: Wednesday, 16 September 2020 3:46 PM
To: Megan Gould
Cc: Helen Simpson
Subject: FW: [EXTERNAL] - RE: ES2032265 - John Stokes Square
Attachments: FW: ES2032265 - John Stokes Square

Hi Megan,

See below for clients responses for the photos.

Cheers.

Kind Regards,

Environmental Division
Sydney
Work Order Reference
ES2032265

Telephone : +61-2-8784 8555

Angus Harding
Client Services Officer, Environmental Sydney

T +61 2 8784 8555
F +61 2 8784 8500
D +61 2 8784 8503
angus.harding@alsglobal.com
277-289 Woodpark Road
Smithfield NSW 2164 AUSTRALIA

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From: Robin Birua [mailto:RBirua@slrconsulting.com]
Sent: Wednesday, 16 September 2020 3:31 PM
To: Sarah Doherty <sdoherty@slrconsulting.com>; Helen Simpson <helen.simpson@alsglobal.com>
Cc: Angus Harding <angus.harding@ALSGlobal.com>
Subject: [EXTERNAL] - RE: ES2032265 - John Stokes Square

CAUTION: This email originated from outside of ALS. Do not click links or open attachments unless you recognize the sender and are sure content is relevant to you.

Hi Angus/Helen,

Thanks for sending me through the photos of soil jars and bags.

The darker reddish brown coloured soil bags and jars belong to stockpile STP30 1 to 5. If you are looking at the photos Helen sent us this arvo that will give you a clear idea of colour difference.

Photos 2 – the bag in the middle and the soil jar on the left hand side belongs to STP31-01.
Photos 3 – the soil jar and the bag on the top belong to STP31-02
Photos 5 – the soil jar and the bag on the top belong to STP31-03.
Please give me a call if you have any questions.
Kind regards,

SLR

Robin Birua
Project Consultant - Land Quality & Remediation

Please note in response to the COVID 19 Pandemic and physical distancing recommendations from the Australian Government,
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

+61 8 8998 0100
RBirua@slrconsulting.com

SLR Consulting Australia Pty Ltd
21 Parap Rd, Parap, NT, Australia, 0820

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Winners' RoSPA President's Award 2020

From: Sarah Doherty <sdoherty@slrconsulting.com>
Sent: Wednesday, 16 September 2020 1:06 PM
To: Robin Birua <RBirua@slrconsulting.com>
Subject: FW: ES2032265 - John Stokes Square

Sarah Doherty
Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government,

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2032265**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 4
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 14-Sep-2020 09:30	Issue Date	: 17-Sep-2020
Client Requested Due Date	: 21-Sep-2020	Scheduled Reporting Date	: **21-Sep-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 3	Temperature	: 25.6
Receipt Detail	:	No. of samples received / analysed	: 43 / 34

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- This is an updated SRN which indicates the addition of tests to samples 026-028 and 031-033 for this work order.
- **Samples QC-27 and QC-28 not received. Samples 38-45 received extra. Extra soil bag received for sample 26; no soil bag received for sample 31. Duplicate jar and bag received for samples 27-28; samples 32-33 not received.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2032265-001	14-Sep-2020 00:00	STP25-01		✓	✓	✓	✓
ES2032265-002	14-Sep-2020 00:00	STP25-02		✓	✓	✓	✓
ES2032265-003	14-Sep-2020 00:00	STP25-03		✓	✓	✓	✓
ES2032265-004	14-Sep-2020 00:00	STP25-04		✓	✓	✓	✓
ES2032265-005	14-Sep-2020 00:00	STP26-01		✓	✓	✓	✓
ES2032265-006	14-Sep-2020 00:00	STP26-02		✓	✓	✓	✓
ES2032265-007	14-Sep-2020 00:00	STP26-03		✓	✓	✓	✓
ES2032265-008	14-Sep-2020 00:00	STP26-04		✓	✓	✓	✓
ES2032265-009	14-Sep-2020 00:00	STP26-05		✓	✓	✓	✓
ES2032265-010	14-Sep-2020 00:00	STP26-06		✓	✓	✓	✓
ES2032265-011	14-Sep-2020 00:00	STP26-07		✓	✓	✓	✓
ES2032265-012	14-Sep-2020 00:00	STP27-01		✓	✓	✓	✓
ES2032265-013	14-Sep-2020 00:00	STP27-02		✓	✓	✓	✓
ES2032265-014	14-Sep-2020 00:00	STP27-03		✓	✓	✓	✓
ES2032265-015	14-Sep-2020 00:00	STP27-04		✓	✓	✓	✓
ES2032265-016	14-Sep-2020 00:00	STP27-05		✓	✓	✓	✓
ES2032265-017	14-Sep-2020 00:00	STP28-01		✓	✓	✓	✓
ES2032265-018	14-Sep-2020 00:00	STP28-02		✓	✓	✓	✓
ES2032265-019	14-Sep-2020 00:00	STP28-03		✓	✓	✓	✓
ES2032265-020	14-Sep-2020 00:00	STP28-04		✓	✓	✓	✓
ES2032265-021	14-Sep-2020 00:00	STP28-05		✓	✓	✓	✓
ES2032265-022	14-Sep-2020 00:00	STP28-06		✓	✓	✓	✓
ES2032265-023	14-Sep-2020 00:00	STP29-01		✓	✓	✓	✓
ES2032265-024	14-Sep-2020 00:00	STP29-02		✓	✓	✓	✓
ES2032265-025	14-Sep-2020 00:00	STP29-03		✓	✓	✓	✓
ES2032265-026	14-Sep-2020 00:00	STP31-01		✓	✓	✓	✓
ES2032265-027	14-Sep-2020 00:00	STP30-02		✓	✓	✓	✓
ES2032265-028	14-Sep-2020 00:00	STP30-03		✓	✓	✓	✓
ES2032265-029	14-Sep-2020 00:00	STP30-04		✓	✓	✓	✓
ES2032265-030	14-Sep-2020 00:00	STP30-05		✓	✓	✓	✓
ES2032265-031	14-Sep-2020 00:00	STP30-01		✓	✓	✓	✓
ES2032265-032	14-Sep-2020 00:00	STP31-02		✓	✓	✓	✓
ES2032265-033	14-Sep-2020 00:00	STP31-03		✓	✓	✓	✓
ES2032265-037	14-Sep-2020 00:00	TB05	✓				
ES2032265-042	14-Sep-2020 00:00	STP QA01	✓				

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2032265-043	14-Sep-2020 00:00	STP QA02	✓				
ES2032265-044	10-Sep-2020 00:00	Val-155	✓				
ES2032265-045	10-Sep-2020 00:00	Val-156	✓				

Matrix: **WATER**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	WATER - W-05 TRH/BTEXN/8 Metals	WATER - W-12 OC/OP Pesticides
ES2032265-036	14-Sep-2020 00:00	RB05	✓	✓

Matrix: **WATER**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	(On Hold) WATER No analysis requested
ES2032265-038	08-Sep-2020 00:00	RB01	✓
ES2032265-039	10-Sep-2020 00:00	RB02	✓
ES2032265-040	11-Sep-2020 00:00	RB03	✓
ES2032265-041	14-Sep-2020 00:00	RB04	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

GEMMA SHERIDAN

- *AU Certificate of Analysis - NATA (COA)	Email	gsheridan@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	gsheridan@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	gsheridan@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	gsheridan@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	gsheridan@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	gsheridan@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	gsheridan@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	gsheridan@slrconsulting.com

J Mcdowell

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com.au
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com.au
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com.au
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com.au
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com.au

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2032265**	Page	: 1 of 35
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 14-Sep-2020 09:30
Order number	: ----	Date Analysis Commenced	: 16-Sep-2020
C-O-C number	: ----	Issue Date	: 21-Sep-2020 15:30
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 43		
No. of samples analysed	: 34		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP25-01	STP25-02	STP25-03	STP25-04	STP26-01
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-001	ES2032265-002	ES2032265-003	ES2032265-004	ES2032265-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.9	6.1	8.7	4.2	7.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	735	797	646	815	798
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.735	0.797	0.646	0.815	0.798
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	6	5	6	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	51	40	44	32	41
Copper	7440-50-8	5	mg/kg	8	9	9	9	14
Lead	7439-92-1	5	mg/kg	12	10	9	13	12
Nickel	7440-02-0	2	mg/kg	7	8	9	8	8
Zinc	7440-66-6	5	mg/kg	18	18	14	22	40
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP25-01	STP25-02	STP25-03	STP25-04	STP26-01
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-001	ES2032265-002	ES2032265-003	ES2032265-004	ES2032265-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	**0.05**	<0.05	<0.05	**0.06**	**0.13**
trans-Chlordane	5103-74-2	0.05	mg/kg	**0.05**	<0.05	<0.05	**0.06**	**0.13**
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	**0.09**	**0.10**	<0.05	**0.08**	**0.10**
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.09**	**0.10**	<0.05	**0.08**	**0.15**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP25-01	STP25-02	STP25-03	STP25-04	STP26-01
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-001	ES2032265-002	ES2032265-003	ES2032265-004	ES2032265-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP25-01	STP25-02	STP25-03	STP25-04	STP26-01
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-001	ES2032265-002	ES2032265-003	ES2032265-004	ES2032265-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**82.3**	**60.2**	**70.6**	**76.9**	**74.8**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**83.6**	**61.4**	**64.6**	**75.0**	**73.1**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**94.5**	**98.4**	**98.1**	**103**	**102**
2-Chlorophenol-D4	93951-73-6	0.5	%		**103**	**97.2**	**103**	**102**	**104**
2.4.6-Tribromophenol	118-79-6	0.5	%		**97.5**	**97.8**	**96.5**	**95.3**	**93.0**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**100**	**98.9**	**102**	**99.2**	**102**
Anthracene-d10	1719-06-8	0.5	%		**102**	**107**	**105**	**104**	**104**
4-Terphenyl-d14	1718-51-0	0.5	%		**92.9**	**97.1**	**94.5**	**96.2**	**95.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**86.7**	**84.7**	**92.8**	**90.4**	**85.8**
Toluene-D8	2037-26-5	0.2	%		**101**	**107**	**104**	**105**	**100**
4-Bromofluorobenzene	460-00-4	0.2	%		**105**	**107**	**109**	**108**	**104**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP26-02	STP26-03	STP26-04	STP26-05	STP26-06
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-006	ES2032265-007	ES2032265-008	ES2032265-009	ES2032265-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.8	6.4	4.3	6.4	4.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	764	745	847	808	808
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.764	0.745	0.847	0.808	0.808
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	7	7	7	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	73	42	42	35	42
Copper	7440-50-8	5	mg/kg	10	12	12	16	11
Lead	7439-92-1	5	mg/kg	11	10	10	10	11
Nickel	7440-02-0	2	mg/kg	7	9	8	8	8
Zinc	7440-66-6	5	mg/kg	34	41	38	30	57
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	0.10	0.08	<0.05	<0.05	0.07
Heptachlor epoxide	1024-57-3	0.05	mg/kg	0.07	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP26-02	STP26-03	STP26-04	STP26-05	STP26-06
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-006	ES2032265-007	ES2032265-008	ES2032265-009	ES2032265-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	----	0.05	mg/kg		**0.45**	**0.27**	**0.24**	**0.13**	**0.32**
trans-Chlordane	5103-74-2	0.05	mg/kg		**0.39**	**0.27**	**0.24**	**0.13**	**0.32**
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		**0.06**	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		**0.08**	**0.05**	<0.05	**0.12**	**0.15**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.18**	**0.13**	<0.05	**0.12**	**0.22**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP26-02	STP26-03	STP26-04	STP26-05	STP26-06
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-006	ES2032265-007	ES2032265-008	ES2032265-009	ES2032265-010
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP26-02	STP26-03	STP26-04	STP26-05	STP26-06
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-006	ES2032265-007	ES2032265-008	ES2032265-009	ES2032265-010
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**92.8**	**73.6**	**78.5**	**86.3**	**91.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**71.9**	**96.0**	**64.0**	**92.3**	**88.2**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**103**	**100**	**102**	**100**	**99.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**101**	**99.0**	**103**	**100**	**98.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**102**	**95.8**	**88.6**	**94.2**	**91.0**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**100**	**103**	**101**	**102**	**102**
Anthracene-d10	1719-06-8	0.5	%		**106**	**104**	**102**	**102**	**104**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.9**	**94.0**	**93.3**	**94.3**	**94.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**92.6**	**90.3**	**89.6**	**88.2**	**86.7**
Toluene-D8	2037-26-5	0.2	%		**108**	**107**	**107**	**104**	**111**
4-Bromofluorobenzene	460-00-4	0.2	%		**109**	**108**	**106**	**105**	**112**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP26-07	STP27-01	STP27-02	STP27-03	STP27-04
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-011	ES2032265-012	ES2032265-013	ES2032265-014	ES2032265-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.5	5.9	8.9	8.7	6.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	771	748	664	696	604
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.771	0.748	0.664	0.696	0.604
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	5	<5	5	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	32	31	22	38	65
Copper	7440-50-8	5	mg/kg	13	8	7	8	10
Lead	7439-92-1	5	mg/kg	10	8	7	8	10
Nickel	7440-02-0	2	mg/kg	7	8	6	8	9
Zinc	7440-66-6	5	mg/kg	41	22	24	17	32
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP26-07	STP27-01	STP27-02	STP27-03	STP27-04
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-011	ES2032265-012	ES2032265-013	ES2032265-014	ES2032265-015
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	**0.29**	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	**0.29**	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP26-07	STP27-01	STP27-02	STP27-03	STP27-04
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-011	ES2032265-012	ES2032265-013	ES2032265-014	ES2032265-015
				Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP26-07	STP27-01	STP27-02	STP27-03	STP27-04
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-011	ES2032265-012	ES2032265-013	ES2032265-014	ES2032265-015
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**83.7**	**76.2**	**74.1**	**86.2**	**92.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**61.9**	**66.4**	**62.2**	**102**	**102**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**102**	**101**	**101**	**98.0**	**104**
2-Chlorophenol-D4	93951-73-6	0.5	%		**95.6**	**104**	**99.5**	**99.7**	**102**
2.4.6-Tribromophenol	118-79-6	0.5	%		**96.7**	**87.1**	**96.5**	**98.0**	**86.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**105**	**104**	**103**	**99.3**	**102**
Anthracene-d10	1719-06-8	0.5	%		**103**	**106**	**105**	**108**	**105**
4-Terphenyl-d14	1718-51-0	0.5	%		**95.5**	**95.8**	**95.2**	**97.2**	**94.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**93.2**	**88.4**	**86.4**	**88.8**	**91.6**
Toluene-D8	2037-26-5	0.2	%		**106**	**105**	**108**	**101**	**106**
4-Bromofluorobenzene	460-00-4	0.2	%		**110**	**107**	**107**	**102**	**107**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP27-05	STP28-01	STP28-02	STP28-03	STP28-04
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-016	ES2032265-017	ES2032265-018	ES2032265-019	ES2032265-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.1	4.9	4.6	4.8	6.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	731	798	720	793	709
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.731	0.798	0.720	0.793	0.709
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	6	7	7	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	31	30	32	60	73
Copper	7440-50-8	5	mg/kg	9	10	12	10	10
Lead	7439-92-1	5	mg/kg	8	10	10	11	10
Nickel	7440-02-0	2	mg/kg	8	8	8	8	7
Zinc	7440-66-6	5	mg/kg	22	27	39	33	36
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP27-05	STP28-01	STP28-02	STP28-03	STP28-04
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-016	ES2032265-017	ES2032265-018	ES2032265-019	ES2032265-020
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	**0.05**	**0.16**	**0.07**	**0.14**
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	**0.05**	**0.16**	**0.07**	**0.14**
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	**0.22**	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	**0.22**	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP27-05	STP28-01	STP28-02	STP28-03	STP28-04
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-016	ES2032265-017	ES2032265-018	ES2032265-019	ES2032265-020
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP27-05	STP28-01	STP28-02	STP28-03	STP28-04
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-016	ES2032265-017	ES2032265-018	ES2032265-019	ES2032265-020
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**94.3**	**72.9**	**73.1**	**73.3**	**55.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**76.5**	**61.9**	**64.4**	**62.7**	**82.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**103**	**97.4**	**98.6**	**97.0**	**94.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.2**	**104**	**98.8**	**94.8**	**99.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**96.7**	**98.6**	**93.2**	**91.9**	**99.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**104**	**95.1**	**104**	**96.8**	**94.4**
Anthracene-d10	1719-06-8	0.5	%		**106**	**109**	**107**	**107**	**109**
4-Terphenyl-d14	1718-51-0	0.5	%		**95.8**	**98.3**	**96.0**	**96.9**	**98.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**85.3**	**91.0**	**90.5**	**90.8**	**84.6**
Toluene-D8	2037-26-5	0.2	%		**101**	**103**	**108**	**109**	**98.7**
4-Bromofluorobenzene	460-00-4	0.2	%		**100**	**104**	**107**	**107**	**99.6**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP28-05	STP28-06	STP29-01	STP29-02	STP29-03
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-021	ES2032265-022	ES2032265-023	ES2032265-024	ES2032265-025
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	5.7	4.1	8.4	6.7	10.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	670	793	584	787	574
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.670	0.793	0.584	0.787	0.574
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	7	6	5	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	45	63	79	24	72
Copper	7440-50-8	5	mg/kg	11	10	8	7	8
Lead	7439-92-1	5	mg/kg	9	11	10	9	10
Nickel	7440-02-0	2	mg/kg	8	7	9	6	9
Zinc	7440-66-6	5	mg/kg	41	24	127	31	8
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP28-05	STP28-06	STP29-01	STP29-02	STP29-03
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-021	ES2032265-022	ES2032265-023	ES2032265-024	ES2032265-025
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	**0.22**	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	**0.22**	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	**0.08**	**0.24**	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.08**	**0.24**	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP28-05	STP28-06	STP29-01	STP29-02	STP29-03
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-021	ES2032265-022	ES2032265-023	ES2032265-024	ES2032265-025
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP28-05	STP28-06	STP29-01	STP29-02	STP29-03
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-021	ES2032265-022	ES2032265-023	ES2032265-024	ES2032265-025
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		82.1	88.8	71.1	70.4	81.1
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		73.9	87.4	69.7	65.3	80.0
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		85.2	81.0	85.8	83.4	84.0
2-Chlorophenol-D4	93951-73-6	0.5	%		91.9	88.4	90.7	90.8	91.9
2.4.6-Tribromophenol	118-79-6	0.5	%		49.1	42.8	53.0	47.9	51.1
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		101	97.9	96.7	98.1	98.5
Anthracene-d10	1719-06-8	0.5	%		103	100	100	101	101
4-Terphenyl-d14	1718-51-0	0.5	%		97.2	97.1	95.8	98.0	99.2
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		94.0	101	93.9	97.4	97.3
Toluene-D8	2037-26-5	0.2	%		98.9	99.8	98.8	104	105
4-Bromofluorobenzene	460-00-4	0.2	%		101	105	106	109	108

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP31-01	STP30-02	STP30-03	STP30-04	STP30-05
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-026	ES2032265-027	ES2032265-028	ES2032265-029	ES2032265-030
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.1	6.7	6.4	6.6	6.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No*	No	No
Asbestos Type	1332-21-4	-	--	-	-	Ch	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	603	629	686	643	672
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	0.0007	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.603	0.629	0.686	0.643	0.672
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	6	6	7	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	67	69	39	37	58
Copper	7440-50-8	5	mg/kg	14	11	11	11	9
Lead	7439-92-1	5	mg/kg	10	10	10	10	9
Nickel	7440-02-0	2	mg/kg	10	8	9	8	8
Zinc	7440-66-6	5	mg/kg	59	101	62	68	20
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP31-01	STP30-02	STP30-03	STP30-04	STP30-05
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-026	ES2032265-027	ES2032265-028	ES2032265-029	ES2032265-030
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	**0.09**	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	**0.09**	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	**0.06**	**0.07**	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	**0.06**	**0.07**	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP31-01	STP30-02	STP30-03	STP30-04	STP30-05
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032265-026	ES2032265-027	ES2032265-028	ES2032265-029	ES2032265-030
				Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP31-01	STP30-02	STP30-03	STP30-04	STP30-05
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032265-026	ES2032265-027	ES2032265-028	ES2032265-029	ES2032265-030
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**94.2**	**87.9**	**122**	**78.2**	**80.3**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**77.8**	**88.2**	**125**	**75.9**	**73.7**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**79.8**	**95.8**	**100**	**84.0**	**87.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**88.4**	**91.5**	**101**	**90.0**	**92.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**42.1**	**100**	**98.2**	**48.3**	**49.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**98.1**	**99.1**	**103**	**97.4**	**99.1**
Anthracene-d10	1719-06-8	0.5	%		**98.3**	**102**	**105**	**98.5**	**101**
4-Terphenyl-d14	1718-51-0	0.5	%		**98.3**	**92.3**	**94.9**	**97.8**	**99.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**90.4**	**105**	**103**	**108**	**95.0**
Toluene-D8	2037-26-5	0.2	%		**97.2**	**112**	**110**	**115**	**100**
4-Bromofluorobenzene	460-00-4	0.2	%		**101**	**106**	**101**	**119**	**103**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP30-01	STP31-02	STP31-03	----	----
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2032265-031	ES2032265-032	ES2032265-033	--------	--------
				Result	Result	Result	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**9.3**	**8.9**	**9.1**	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	----	----
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	----	----
Sample weight (dry)	----	0.01	g	**459**	**686**	**604**	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	----	----
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	----	----
ø Weight Used for % Calculation	----	0.0001	kg	**0.459**	**0.686**	**0.604**	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**6**	**6**	**5**	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	**58**	**66**	**114**	----	----
Copper	7440-50-8	5	mg/kg	**8**	**10**	**7**	----	----
Lead	7439-92-1	5	mg/kg	**8**	**10**	**10**	----	----
Nickel	7440-02-0	2	mg/kg	**7**	**8**	**7**	----	----
Zinc	7440-66-6	5	mg/kg	**18**	**11**	**25**	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP30-01	STP31-02	STP31-03	----	----
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2032265-031	ES2032265-032	ES2032265-033	--------	--------
				Result	Result	Result	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP30-01	STP31-02	STP31-03	----	----
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2032265-031	ES2032265-032	ES2032265-033	--------	--------
				Result	Result	Result	----	----
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg	<10	<10	<10	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP30-01	STP31-02	STP31-03	----	----
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2032265-031	ES2032265-032	ES2032265-033	--------	--------
					Result	Result	Result	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**83.7**	**86.3**	**75.6**	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**78.7**	**68.0**	**65.5**	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**87.9**	**100**	**102**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**92.0**	**100**	**104**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**52.7**	**94.5**	**95.0**	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**98.3**	**98.9**	**102**	----	----
Anthracene-d10	1719-06-8	0.5	%		**97.8**	**101**	**102**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**99.3**	**91.4**	**94.0**	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**100.0**	**92.0**	**83.7**	----	----
Toluene-D8	2037-26-5	0.2	%		**110**	**91.8**	**87.5**	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**111**	**88.7**	**83.0**	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB05	----	----	----	----
				Client sampling date / time	14-Sep-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2032265-036	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB05	----	----	----	----
				Client sampling date / time	14-Sep-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2032265-036	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB05	----	----	----	----
				Client sampling date / time	14-Sep-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2032265-036	--------	--------	--------	--------	
				Result	----	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L	<100	----	----	----	----	
EP080: BTEXN									
Benzene	71-43-2	1	µg/L	<1	----	----	----	----	
Toluene	108-88-3	2	µg/L	<2	----	----	----	----	
Ethylbenzene	100-41-4	2	µg/L	<2	----	----	----	----	
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	----	----	----	----	
ortho-Xylene	95-47-6	2	µg/L	<2	----	----	----	----	
^ **Total Xylenes**	----	2	µg/L	<2	----	----	----	----	
^ **Sum of BTEX**	----	1	µg/L	<1	----	----	----	----	
Naphthalene	91-20-3	5	µg/L	<5	----	----	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%	**84.6**	----	----	----	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%	**82.5**	----	----	----	----	
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%	**99.8**	----	----	----	----	
Toluene-D8	2037-26-5	2	%	**97.5**	----	----	----	----	
4-Bromofluorobenzene	460-00-4	2	%	**97.3**	----	----	----	----	

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP25-01 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP25-02 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP25-03 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP25-04 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP26-01 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP26-02 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP26-03 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP26-04 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP26-05 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP26-06 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP26-07 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP27-01 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP27-02 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP27-03 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP27-04 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP27-05 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP28-01 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP28-02 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP28-03 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP28-04 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP28-05 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP28-06 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP29-01 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP29-02 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP29-03 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP31-01 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP30-02 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP30-03 - 14-Sep-2020 00:00	Mid brown soil containing one asbestos fibre bundle approximately 10x2x1mm.
EA200: Description	STP30-04 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP30-05 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP30-01 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP31-02 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP31-03 - 14-Sep-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2032265**	Page	: 1 of 27
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 14-Sep-2020
Order number	: ----	Date Analysis Commenced	: 16-Sep-2020
C-O-C number	: ----	Issue Date	: 21-Sep-2020
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 43		
No. of samples analysed	: 34		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3259598)									
ES2032265-001	STP25-01	EG005T: Chromium	7440-47-3	2	mg/kg	51	51	0.00	0% - 20%
ES2032265-001	STP25-01	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	7	8	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	7	22.3	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	8	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	10	12.2	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	18	16	9.72	No Limit
ES2032265-011	STP26-07	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	32	34	6.88	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	7	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	13	10	28.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	41	43	5.48	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3262321)									
ES2032178-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	19	18	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	20	17	13.1	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	10	9	12.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	93	79	15.4	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	42	37	12.8	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	103	90	12.9	0% - 20%
ES2032265-021	STP28-05	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	45	49	8.82	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	8	7	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3262321) - continued									
ES2032265-021	STP28-05	EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	11	16	40.6	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	9	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	41	41	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3262323)									
ES2032265-031	STP30-01	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	58	65	12.1	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	7	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	8	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	8	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	18	17	8.76	No Limit
ES2032334-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	7	6	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	3	3	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	10	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	18	16	8.48	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	68	66	2.56	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3259599)									
ES2032265-003	STP25-03	EA055: Moisture Content	----	0.1	%	8.7	7.9	9.19	No Limit
ES2032265-014	STP27-03	EA055: Moisture Content	----	0.1	%	8.7	8.7	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3262325)									
ES2032178-008	Anonymous	EA055: Moisture Content	----	0.1	%	22.2	22.5	1.48	0% - 20%
ES2032265-024	STP29-02	EA055: Moisture Content	----	0.1	%	6.7	6.4	4.07	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3262326)									
ES2032265-033	STP31-03	EA055: Moisture Content	----	0.1	%	9.1	9.1	0.00	No Limit
ES2032540-001	Anonymous	EA055: Moisture Content	----	0.1	%	8.2	7.8	4.32	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3259597)									
ES2032265-001	STP25-01	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032265-011	STP26-07	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3262322)									
ES2032178-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032265-021	STP28-05	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3262324)									
ES2032265-031	STP30-01	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032334-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3259250)									
ES2032265-001	STP25-01	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3259250) - continued									
ES2032265-001	STP25-01	EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.09	0.08	13.7	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032265-011	STP26-07	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.29	0.34	15.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3259250) - continued									
ES2032265-011	STP26-07	EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3259297)									
ES2032265-021	STP28-05	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.22	0.25	16.2	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.08	0.08	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3261187)									
ES2032265-027	STP30-02	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3261187) - continued									
ES2032265-027	STP30-02	EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3259250)									
ES2032265-001	STP25-01	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032265-011	STP26-07	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3259250) - continued									
ES2032265-011	STP26-07	EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3259297)									
ES2032265-021	STP28-05	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3261187)									
ES2032265-027	STP30-02	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3261187) - continued									
ES2032265-027	STP30-02	EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3259249)									
ES2032265-001	STP25-01	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2032265-011	STP26-07	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3259249) - continued									
ES2032265-011	STP26-07	EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3259299)									
ES2032265-021	STP28-05	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3261186)									
ES2032265-027	STP30-02	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3261186) - continued									
ES2032265-027	STP30-02	EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3259248)									
ES2032265-001	STP25-01	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032265-011	STP26-07	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3259298)									
ES2032265-021	STP28-05	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3259513)									
ES2032265-001	STP25-01	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032265-011	STP26-07	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3259965)									
ES2032265-021	STP28-05	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032486-002	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3261185)									
ES2032265-027	STP30-02	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3261332)									
ES2032353-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3259248)									
ES2032265-001	STP25-01	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032265-011	STP26-07	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3259298)									
ES2032265-021	STP28-05	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3259298) - continued									
ES2032265-021	STP28-05	EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3259513)									
ES2032265-001	STP25-01	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032265-011	STP26-07	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3259965)									
ES2032265-021	STP28-05	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032486-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3261185)									
ES2032265-027	STP30-02	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3261332)									
ES2032353-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3259513)									
ES2032265-001	STP25-01	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032265-011	STP26-07	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3259965)									
ES2032265-021	STP28-05	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032486-002	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 3259965) - continued									
ES2032486-002	Anonymous	EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3261332)									
ES2032353-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3260435)									
ES2032732-001	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
ES2032451-002	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	0.002	0.002	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	0.014	0.014	0.00	0% - 50%
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 3260436)									
ES2032451-002	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3259885)									
ES2032438-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3259885)									
ES2032438-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 3259885)									
ES2032438-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3259885) - continued									
ES2032438-001	Anonymous	EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3259598)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	117	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	91.6	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	117	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	112	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	115	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	127	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	113	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262321)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	118	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	95.6	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	109	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	107	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	111	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	114	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	107	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262323)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	123	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	120	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	127	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	125	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	128	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	126	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	127	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3259597)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	89.2	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262322)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	88.6	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262324)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	89.2	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3259250)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.6	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.9	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	67.0	119

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3259250) - continued								
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.1	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	96.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	91.8	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.7	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.1	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.1	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	88.0	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	89.9	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	89.1	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	86.8	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3259297)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.4	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	105	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.7	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	106	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	103	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	102	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	103	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	105	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.3	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	98.4	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	64.0	122

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3259297) - continued								
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	98.5	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3261187)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.5	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	104	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	106	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	106	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	102	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	98.6	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.6	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.7	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	92.2	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.3	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.1	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	96.0	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	101	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	95.2	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	87.8	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3259250)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.7	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	59.9	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	80.6	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	77.1	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.5	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.9	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	76.4	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.2	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	70.8	68.0	124

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3259250) - continued								
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.1	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	71.0	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3259297)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.0	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	81.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	111	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	99.8	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	106	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	100	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	107	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	105	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	105	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	97.3	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	105	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	105	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.5	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	105	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	107	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.1	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	93.8	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3261187)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	79.1	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	78.5	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.7	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	89.8	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	107	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	83.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.7	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.3	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	83.3	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	76.2	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.3	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	66.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3261187) - continued								
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.3	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	94.1	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	60.5	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3259249)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	95.7	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	93.0	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	91.7	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	97.5	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	89.7	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	97.4	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	96.8	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	98.6	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	92.0	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	89.7	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	92.9	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	93.5	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	91.5	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	88.8	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	95.6	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	89.2	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3259299)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	96.1	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	90.3	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	95.2	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	95.2	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	101	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	99.8	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	99.9	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	99.9	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	85.6	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	92.9	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	81.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	92.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	88.9	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	85.4	61.0	121

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3259299) - continued								
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	84.8	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	83.9	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3261186)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	92.2	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	95.1	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	93.1	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	96.1	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	93.7	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	96.6	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	99.8	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	93.1	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	99.5	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	92.4	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	89.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	97.5	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	94.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	88.8	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	93.0	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259248)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	85.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	91.9	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	91.4	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259298)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	94.0	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	92.9	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	95.1	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259513)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	84.8	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259965)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	117	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3261185)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	99.4	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	95.3	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	91.8	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3261332)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	82.1	68.4	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259248)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	89.0	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	92.0	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	75.7	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259298)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	95.8	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	94.9	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	78.0	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259513)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	84.0	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259965)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	117	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3261185)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	95.1	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	94.6	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	91.7	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3261332)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	82.9	68.4	128
EP080: BTEXN (QCLot: 3259513)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	89.3	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	89.4	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	89.0	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	89.7	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	93.8	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	82.0	63.0	119
EP080: BTEXN (QCLot: 3259965)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	113	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	111	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	109	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	105	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	113	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	107	63.0	119
EP080: BTEXN (QCLot: 3261332)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	95.8	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	90.7	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	87.9	65.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 3261332) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	86.5	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	88.2	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	86.7	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3260435)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	91.6	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	94.3	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	88.1	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	87.7	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	87.7	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	87.7	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	90.6	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3260436)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	96.1	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3259242)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	102	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	96.4	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	106	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	102	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	99.3	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	96.2	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	101	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	88.0	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	94.2	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	94.4	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	90.2	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	98.3	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	92.1	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	90.6	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	94.6	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	94.6	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	98.3	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	93.9	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	103	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	88.3	63.8	110

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3259242) - continued								
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	107	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3259242)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	84.8	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	94.4	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	23.4	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	92.7	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	80.4	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	99.9	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	102	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	94.5	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	93.1	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	94.9	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	98.2	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	87.2	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	94.3	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	94.7	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	85.6	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	94.1	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	102	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	88.4	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	82.9	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259243)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	63.4	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	85.5	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	90.3	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259885)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	98.9	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259243)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	65.6	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	92.3	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	77.9	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259885)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	104	75.0	127
EP080: BTEXN (QCLot: 3259885)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	103	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	107	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	107	70.0	120

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 3259885) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	104	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	108	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	110	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3259598)							
ES2032265-001	STP25-01	EG005T: Arsenic	7440-38-2	50 mg/kg	81.3	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	96.3	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	90.5	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	95.8	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	93.0	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	96.5	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	94.8	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262321)							
ES2032178-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	97.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.9	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	76.5	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	94.3	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	92.8	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	106	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	90.0	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262323)							
ES2032265-031	STP30-01	EG005T: Arsenic	7440-38-2	50 mg/kg	87.1	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.3	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	74.5	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	97.8	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	96.6	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	96.1	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	96.9	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3259597)							
ES2032265-001	STP25-01	EG035T: Mercury	7439-97-6	5 mg/kg	89.3	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262322)							
ES2032178-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	79.5	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262324)							
ES2032265-031	STP30-01	EG035T: Mercury	7439-97-6	5 mg/kg	85.7	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3259250)							
ES2032265-001	STP25-01	EP068: gamma-BHC	58-89-9	0.5 mg/kg	105	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	79.7	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	95.1	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	85.4	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	77.9	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	82.0	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3259297)							
ES2032265-021	STP28-05	EP068: gamma-BHC	58-89-9	0.5 mg/kg	110	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	79.1	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	105	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	74.4	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	90.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	88.8	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3261187)							
ES2032265-027	STP30-02	EP068: gamma-BHC	58-89-9	0.5 mg/kg	104	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	76.2	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	81.8	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	84.7	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	75.9	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	77.3	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3259250)							
ES2032265-001	STP25-01	EP068: Diazinon	333-41-5	0.5 mg/kg	80.4	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	106	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	110	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	104	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	88.5	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3259297)							
ES2032265-021	STP28-05	EP068: Diazinon	333-41-5	0.5 mg/kg	87.7	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	119	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	117	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	116	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	90.4	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3261187)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3261187) - continued							
ES2032265-027	STP30-02	EP068: Diazinon	333-41-5	0.5 mg/kg	102	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	90.9	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	105	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	80.3	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	78.8	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3259249)							
ES2032265-001	STP25-01	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	96.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	100	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3259299)							
ES2032265-021	STP28-05	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	95.1	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	99.0	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3261186)							
ES2032265-027	STP30-02	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	100	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	104	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259248)							
ES2032265-001	STP25-01	EP071: C10 - C14 Fraction	----	523 mg/kg	104	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	76.5	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	101	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259298)							
ES2032265-021	STP28-05	EP071: C10 - C14 Fraction	----	523 mg/kg	106	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	114	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	126	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259513)							
ES2032265-001	STP25-01	EP080: C6 - C9 Fraction	----	32.5 mg/kg	85.0	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259965)							
ES2032265-021	STP28-05	EP080: C6 - C9 Fraction	----	32.5 mg/kg	120	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3261185)							
ES2032265-027	STP30-02	EP071: C10 - C14 Fraction	----	523 mg/kg	108	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	115	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	131	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3261332)							
ES2032353-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	101	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259248)							
ES2032265-001	STP25-01	EP071: >C10 - C16 Fraction	----	860 mg/kg	101	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	85.7	53.0	131

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259248) - continued							
ES2032265-001	STP25-01	EP071: >C34 - C40 Fraction	----	1058 mg/kg	85.1	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259298)							
ES2032265-021	STP28-05	EP071: >C10 - C16 Fraction	----	860 mg/kg	117	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	116	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	123	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259513)							
ES2032265-001	STP25-01	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	83.3	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259965)							
ES2032265-021	STP28-05	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	120	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3261185)							
ES2032265-027	STP30-02	EP071: >C10 - C16 Fraction	----	860 mg/kg	109	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	125	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	112	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3261332)							
ES2032353-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	118	70.0	130
EP080: BTEXN (QCLot: 3259513)							
ES2032265-001	STP25-01	EP080: Benzene	71-43-2	2.5 mg/kg	81.6	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	84.7	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	86.6	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	85.4	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	90.0	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	98.4	70.0	130
EP080: BTEXN (QCLot: 3259965)							
ES2032265-021	STP28-05	EP080: Benzene	71-43-2	2.5 mg/kg	108	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	106	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	108	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	104	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	109	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	102	70.0	130
EP080: BTEXN (QCLot: 3261332)							
ES2032353-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	84.5	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	89.2	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	89.7	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080: BTEXN (QCLot: 3261332) - continued							
ES2032353-001	Anonymous	EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	85.5	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	87.1	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	86.0	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3260435)							
ES2032451-001	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	97.5	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	107	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	96.9	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	100	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	97.4	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	100	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	103	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 3260436)							
ES2032265-036	RB05	EG035F: Mercury	7439-97-6	0.01 mg/L	89.0	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259885)							
ES2032438-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	103	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259885)							
ES2032438-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	106	70.0	130
EP080: BTEXN (QCLot: 3259885)							
ES2032438-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	114	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	109	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	111	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	109	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	113	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	105	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2032265**	Page	: 1 of 14
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 14-Sep-2020
Site	: ----	Issue Date	: 21-Sep-2020
Sampler	: ROBIN BIRUA	No. of samples received	: 43
Order number	: ----	No. of samples analysed	: 34

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count QC	Count Regular	Rate (%) Actual	Rate (%) Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
Pesticides by GCMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	7	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Pesticides by GCMS	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	7	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Evaluation	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04	**14-Sep-2020**	**----**	----	----	**16-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EA055)							
STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-02, STP30-03, STP30-04, STP30-05, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**----**	----	----	**17-Sep-2020**	28-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP30-04, STP30-05	**14-Sep-2020**	**----**	----	----	**17-Sep-2020**	13-Mar-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP31-01, STP30-02, STP30-03, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**----**	----	----	**18-Sep-2020**	13-Mar-2021	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP30-04, STP30-05	**14-Sep-2020**	**----**	----	----	**17-Sep-2020**	13-Mar-2021	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP31-01, STP30-02, STP30-03, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**----**	----	----	**18-Sep-2020**	13-Mar-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04	**14-Sep-2020**	**16-Sep-2020**	13-Mar-2021	✓	**17-Sep-2020**	13-Mar-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-02, STP30-03, STP30-04, STP30-05, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**17-Sep-2020**	13-Mar-2021	✓	**18-Sep-2020**	13-Mar-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04	**14-Sep-2020**	**16-Sep-2020**	12-Oct-2020	✓	**18-Sep-2020**	12-Oct-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-02, STP30-03, STP30-04, STP30-05, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**17-Sep-2020**	12-Oct-2020	✓	**18-Sep-2020**	12-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-02, STP30-03, STP30-04, STP30-05, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-02, STP30-03, STP30-04, STP30-05, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-02, STP30-03, STP30-04, STP30-05, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-04, STP30-05, STP30-01	**14-Sep-2020**	**16-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP30-02, STP30-03, STP31-02, STP31-03	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-02, STP30-03, STP30-04, STP30-05, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-04, STP30-05, STP30-01	**14-Sep-2020**	**16-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP30-02, STP30-03, STP31-02, STP31-03	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-02, STP30-03, STP30-04, STP30-05, STP30-01, STP31-02, STP31-03	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP25-01, STP25-02, STP25-03, STP25-04, STP26-01, STP26-02, STP26-03, STP26-04, STP26-05, STP26-06, STP26-07, STP27-01, STP27-02, STP27-03, STP27-04, STP27-05, STP28-01, STP28-02, STP28-03, STP28-04, STP28-05, STP28-06, STP29-01, STP29-02, STP29-03, STP31-01, STP30-04, STP30-05, STP30-01	**14-Sep-2020**	**16-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP30-02, STP30-03, STP31-02, STP31-03	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Filtered; Lab-acidified (EG020A-F)							
RB05	**14-Sep-2020**	**----**	----	----	**17-Sep-2020**	13-Mar-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Filtered; Lab-acidified (EG035F)							
RB05	**14-Sep-2020**	**----**	----	----	**17-Sep-2020**	12-Oct-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
RB05	**14-Sep-2020**	**18-Sep-2020**	21-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
RB05	**14-Sep-2020**	**18-Sep-2020**	21-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RB05	**14-Sep-2020**	**18-Sep-2020**	21-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RB05	**14-Sep-2020**	**16-Sep-2020**	28-Sep-2020	✓	**16-Sep-2020**	28-Sep-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RB05	**14-Sep-2020**	**18-Sep-2020**	21-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RB05	**14-Sep-2020**	**16-Sep-2020**	28-Sep-2020	✓	**16-Sep-2020**	28-Sep-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RB05	**14-Sep-2020**	**16-Sep-2020**	28-Sep-2020	✓	**16-Sep-2020**	28-Sep-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	6	60	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	4	33	12.12	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	4	33	12.12	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	6	60	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	7	60	11.67	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	33	12.12	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	5	47	10.64	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	60	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	60	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	47	6.38	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	60	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	60	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	47	6.38	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	60	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	60	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	33	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	47	6.38	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	1	4	25.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	9	22.22	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
TRH - Semivolatile Fraction	EP071	0	7	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	10	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	7	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

18.09.20

Environmental Division
Sydney
Work Order Reference
ES2032454

Telephone : + 61-2-8784 8555

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number
PROJECT: John Stokes Square	LABORATORY ADDRESS:		6 of 13
PROJECT NUMBER: 580.10679	SAMPLER: Robin Birtles	☐ Standard TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 620 365	☒ Non Standard or Urgent TAT	
PM CONTACT No: 0417 647 458	Email Reports and Invoices to: sdoherty@slrconsulting.com; pfurym@slrconsulting.com; rbirtles@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-393-20 SLR

No.	Sample ID	Date & Time	Matrix	Containers and Preservation	RQH(SHS) ANALYSIS	STP (E.Ab, S-12, EA200)	VAI (E.Ab, S-12, EA200)	Asbestos ID/Fines in soil (EA200)	HSP/FAF (Asbestos in soil only) (EA210)	HSP/FAF (Asbestos in soil + bulk) (EA200/EA210)	Asbestos Bulk ID (EA200/EA210)	Potential bonded ACM fragment (EA200)	Rinsates (E.Ab, W-12)	Hold	Additional Information
1	Val-132	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	24 Hrs TAT Please
2	Val-133	10/09/2020	Soil	x1 Jar and x1 Bag			x								
3	Val-134	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
4	Val-135	10/09/2020	Soil	x1 Jar and x1 Bag			x								
5	Val-136	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
6	Val-137	10/09/2020	Soil	x1 Jar and x1 Bag			x								
7	Val 138	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
8	Val-139	10/09/2020	Soil	x1 Jar and x1 Bag			x								
9	Val-140	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	
10	Val-141	10/09/2020	Soil	x1 Jar and x1 Bag			x								
11	Val-142	10/09/2020	Soil	x1 Jar and x1 Bag			x							x	

I attest that the proper field sampling procedures were used during the collection of these samples

Relinquished By Sampler	Robin Birtles	Date/Time 14/09/2020	Received by		Date/Time 15.09.20 10:30am
Relinquished By		Date/Time	Received by		Date/Time
Relinquished By		Date/Time	Received by		Date/Time

Temperature Received:

Subcon / Forward Lab / Split WO ES2032260
Lab Analysis:
Organised By / Date: Newcastle - Asbestos
Relinquished By / Date:
Connote Courier:
WO No: ES2032454
Attach By PO Internal Sheet:

TAT

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS
PROJECT: John Stokes Square	LABORATORY ADDRESS:
PROJECT NUMBER: 630.10679	SAMPLER: Robin Birus
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirus@slrconsulting.com.au
COMMENTS OR ADDITIONAL DIRECTIONS ALS quote SY-333-20 SLR	

Turnaround Time (TAT): ☐ Standard TAT ☒ Non Standard or Urgent TAT

COC Number: 3 of 13

No.	Sample ID	Date & Time	Matrix	Containers and Preservatives	SVP (S-28, V-12, EA200)	VOC (S-04, S-12, EA200)	Asbestos ID/A in soil (EA200)	NEPM asbestos in soil only (EA200)	NEPM asbestos in soil + bulk (EA200)	Asbestos Bulk ID (EA200)	Potential bonded ACM fragment (EA200)	Biosolids (W-05, W-12)	HOLD	Additional Information
12	Val-143	10/09/2020	Soil	x1 Jar and x1 Bag		x								24 Hrs TAT Please
13	Val-144	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
14	Val-145	10/09/2020	Soil	x1 Jar and x1 Bag		x								
15	Val-146	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
16	Val-147	10/09/2020	Soil	x1 Jar and x1 Bag		x								
17	Val-148	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
18	Val-149	10/09/2020	Soil	x1 Jar and x1 Bag		x								
19	Val-150	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
20	Val-151	10/09/2020	Soil	x1 Jar and x1 Bag		x								
21	Val-152	10/09/2020	Soil	x1 Jar and x1 Bag		x							x	
22	Val-153	10/09/2020	Soil	x1 Jar and x1 Bag		x								

It is best that the proper field sampling procedures were used during the collection of these samples.

Relinquished by Sampler	Robin Birus	14/09/2020	Received by	5.09.20 10.2 am
Relinquished By			Received by	
Relinquished By			Received by	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS
PROJECT: John Stokes Square	LABORATORY ADDRESS:
PROJECT NUMBER: 680.10679	SAMPLER: Robin Blinn
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165
PM CONTACT No: 0427 642 492	Email Reports and Invoices to: sdoherty@slrconsulting.com; ptyrrell@slrconsulting.com; robinb@slrconsulting.com.au

Turnaround Time (TAT): ☐ Standard TAT ☒ Non Standard or Urgent TAT

COC Number: 10 of 13

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote EV-353-ZD SLR

No.	Sample ID	Date & Time	Matrix	Containers and Preservatives	PFOS/PFOA (Suite B5)	STP (F.Cn, > 12, FA/OH)	VAL (F.Cn, > 12, FA/OH)	Asbestos (FA/S in soil) (EA200)	Asbestos ID in soil (EA200)	Asbestos Bulk ID (EA200)	Asbestos ID in soil < 7mm (EA200)	Asbestos Bulk ID (EA200)	Potential bonded ACM fragment (EA200)	Phenols (SW-05, W-11)	Hold	Additional Information
23	Val-154	10/09/2020	Soil	x1 Jar and x1 Bag			X								X	24 Hrs TAT Please
24	Val-155	10/09/2020	Soil	x1 Jar and x1 Bag			X									
25	Val-156	10/09/2020	Soil	x1 Jar and x1 Bag			X								X	
26	Val 157	10/09/2020	Soil	x1 Jar and x1 Bag			X									
27	VAL-158	10/09/2020	Soil	x1 Jar and x1 Bag			X								X	
28	Val 159	10/09/2020	Soil	x1 Jar and x1 Bag			X									
29	Val-160	10/09/2020	Soil	x1 Jar and x1 Bag			X								X	
30	Val-161	10/09/2020	Soil	x1 Jar and x1 Bag			X									
31	Val-162	10/09/2020	Soil	x1 Jar and x1 Bag			X								X	
32	Val-163	10/09/2020	Soil	x1 Jar and x1 Bag			X									
33	VAL-164	10/09/2020	Soil	x1 Jar and x1 Bag			X								X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished by Sampler	Robin Blinn	14/09/2020	Received by: Kim 15.09.20 10.20am
Relinquished by			Received by
Relinquished by			Received by

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number: 13 of 13
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10579	SAMPLER: Robin Birua	☒ Non-Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0437 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix	Containers and Preservatives	REQUESTED ANALYSIS: STR (S-26, S-12, EA200)	VHC (S-26, S-12, EA200)	Asbestos ID/Fines in soil (EA200)	Asbestos in soil only (EA200)	NEPM asbestos (loose + bulk) (EA200)	Asbestos Bulk ID (EA200)	Potential Friable ACM Fragment (EA200)	Rinsates (W-26, W-12)	Hold	Additional Information
34	Val-165	10/09/2020	Soil	x1 Jar and x1 Bag		X								24 Hrs TAT Please
35	Val-166	10/09/2020	Soil	x1 Jar and x1 Bag		X							X	
36	Val-167	10/09/2020	Soil	x1 Jar and x1 Bag		X								
37	Val-168	10/09/2020	Soil	x1 Jar and x1 Bag		X							X	
38	Val-169	10/09/2020	Soil	x1 Jar and x1 Bag		X								
39	Val-170	10/09/2020	Soil	x1 Jar and x1 Bag		X							X	
40	Val-171	10/09/2020	Soil	x1 Jar and x1 Bag		X								
41	Val-172	10/09/2020	Soil	x1 Jar and x1 Bag		X							X	
42	Val-173	10/09/2020	Soil	x1 Jar and x1 Bag		X								
43	Val-174	10/09/2020	Soil	x1 Jar and x1 Bag		X							X	
44	Val-175	10/09/2020	Soil	x1 Jar and x1 Bag		X								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	10/09/2020	Received by	Kim	10.09.20 10.10am
Relinquished By			Received by		
Relinquished By			Received by		

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number
PROJECT: John Stokes Square	LABORATORY ADDRESS:		32 of 35
PROJECT NUMBER: 680.10679	SAMPLER: Robin Barua	☐ Standard TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 365	☒ Non-Standard or urgent TAT	
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com, rbarua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix	Containers and Preservatives	REQUESTED ANALYSIS	STP (S-No. 5-12, EA200)	VAF (S-26, F-17, EA200)	Asbestos W/A in soil (EA200)	NEPM asbestos in soil (EA200AF)	NEPM asbestos in soil + bulk (EA200AT)	Asbestos bulk ID (EA200)	Potential bonded ACM fragment (EA200)	Fibrosides (AF/AS, W-18)	Hold	Additional Information
45	Val-176	10/09/2020	Soil	x1 Jar and x1 Bag			X							X	24 Hrs TAT Please
46	Val-177	10/09/2020	Soil	x1 Jar and x1 Bag			X								
47	Val-178	10/09/2020	Soil	x1 Jar and x1 Bag			X							X	
48	Val-179	10/09/2020	Soil	x1 Jar and x1 Bag			X								
49	Val-180	10/09/2020	Soil	x1 Jar and x1 Bag			X							X	
50	Val-181	10/09/2020	Soil	x1 Jar and x1 Bag			X								
51	Val-182	10/09/2020	Soil	x1 Jar and x1 Bag			X							X	
52	Val-183	10/09/2020	Soil	x1 Jar and x1 Bag			X								
53	Val-184	10/09/2020	Soil	x1 Jar and x1 Bag			X							X	
54	Val-185	10/09/2020	Soil	x1 Jar and x1 Bag			X								

Critical that the proper field sampling procedures were used during the collection of these samples

Relinquished By Sampler	Robin Barua	14/09/2020	Received By		16.09.20 10.20am	Temperature Received:
Relinquished By			Received By			
Relinquished By			Received by			

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one) ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 13 of 13
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, PCM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragments (EA200B)	Rinsates (W-105, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
55	QC -19	10/09/2020	Soil	x1 Jar and x1 Bag		x								
56	QC -20	10/09/2020	Soil	x1 Jar and x1 Bag		x								
57	QC -21	10/09/2020	Soil	x1 Jar and x1 Bag		x								
58	QC -22	10/09/2020	Soil	x1 Jar and x1 Bag		x								
59	QC -23	10/09/2020	Soil	x1 Jar and x1 Bag		x								
60	RB01	8/09/2020	Soil	x1 Jar and x1 Bag								x		24 Hrs TAT Please
61	RB02	10/09/2020	Soil	x1 Jar and x1 Bag								x		
62	RB03	11/09/2020	Soil	x1 Jar and x1 Bag								x		
63	RB04	14/09/2020	Soil	x1 Jar and x1 Bag								x		
64	TB01	10/09/2020	Soil	x1 Jar and x1 Bag		x								
65	TB02	11/09/2020	Soil	x1 Jar and x1 Bag		x								

NR

Only Received Rel by Hller

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign Kim	Date / Time 15.09.20 10.10am
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time

Temperature Received:

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **ES2032454**		
Amendment	: **2**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 4
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 15-Sep-2020 10:20	Issue Date	: 22-Sep-2020
Client Requested Due Date	: 23-Sep-2020	Scheduled Reporting Date	: **23-Sep-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 7	Temperature	: 26.5' C
Receipt Detail	:	No. of samples received / analysed	: 66 / 38

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Workorder has been split into ES2032260 due to samples numbers.**
- **Samples #37, #55 - 59 were not received.**
- **Water samples #60 - 63 to be analysed for metals only as per bottles supplied.**
- **16/09/2020: This is an updated SRN which indicates the analyis for trip blanks be cancelled.**
- **18/09/2020: This is an updated SRN which indicates sample #38 received and re-number as #73 for Asbestos.**
- **18/09/2020: This is an updated SRN which indicates the analysis for samples #66-70.**
- **(21/09/2020) This is an updated SRN which reflects a change in ID for sample 066-070.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Any sample identifications that cannot be displayed entirely in the analysis summary table will be listed below.

ES2032454-064 : [10-Sep-2020] : TB01 - Received as TP01
ES2032454-065 : [11-Sep-2020] : TB02 - Received as TP02

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2032454-001	10-Sep-2020 00:00	Val-132	✓				
ES2032454-002	10-Sep-2020 00:00	Val-133		✓	✓	✓	✓
ES2032454-003	10-Sep-2020 00:00	Val-134	✓				
ES2032454-004	10-Sep-2020 00:00	Val-135		✓	✓	✓	✓
ES2032454-005	10-Sep-2020 00:00	Val-136	✓				
ES2032454-006	10-Sep-2020 00:00	Val-137		✓	✓	✓	✓
ES2032454-007	10-Sep-2020 00:00	Val-138	✓				
ES2032454-008	10-Sep-2020 00:00	Val-139		✓	✓	✓	✓
ES2032454-009	10-Sep-2020 00:00	Val-140	✓				
ES2032454-010	10-Sep-2020 00:00	Val-141		✓	✓	✓	✓
ES2032454-011	10-Sep-2020 00:00	Val-142	✓				
ES2032454-012	10-Sep-2020 00:00	Val-143		✓	✓	✓	✓
ES2032454-013	10-Sep-2020 00:00	Val-144	✓				
ES2032454-014	10-Sep-2020 00:00	Val-145		✓	✓	✓	✓
ES2032454-015	10-Sep-2020 00:00	Val-146	✓				
ES2032454-016	10-Sep-2020 00:00	Val-147		✓	✓	✓	✓
ES2032454-017	10-Sep-2020 00:00	Val-148			✓		
ES2032454-018	10-Sep-2020 00:00	Val-149		✓	✓	✓	✓
ES2032454-019	10-Sep-2020 00:00	Val-150			✓		
ES2032454-020	10-Sep-2020 00:00	Val-151		✓	✓	✓	✓
ES2032454-021	10-Sep-2020 00:00	Val-152	✓				
ES2032454-022	10-Sep-2020 00:00	Val-153		✓	✓	✓	✓
ES2032454-023	10-Sep-2020 00:00	Val-154	✓				
ES2032454-024	10-Sep-2020 00:00	Val-155		✓	✓	✓	✓
ES2032454-025	10-Sep-2020 00:00	Val-156	✓				
ES2032454-026	10-Sep-2020 00:00	Val-157		✓	✓	✓	✓
ES2032454-027	10-Sep-2020 00:00	Val-158	✓				
ES2032454-028	10-Sep-2020 00:00	Val-159		✓	✓	✓	✓
ES2032454-029	10-Sep-2020 00:00	Val-160	✓				
ES2032454-030	10-Sep-2020 00:00	Val-161		✓	✓	✓	✓
ES2032454-031	10-Sep-2020 00:00	Val-162	✓				
ES2032454-032	10-Sep-2020 00:00	Val-163		✓	✓	✓	✓

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2032454-033	10-Sep-2020 00:00	Val-164	✓				
ES2032454-034	10-Sep-2020 00:00	Val-165		✓	✓	✓	✓
ES2032454-035	10-Sep-2020 00:00	Val-166	✓				
ES2032454-036	10-Sep-2020 00:00	Val-167		✓	✓	✓	✓
ES2032454-039	10-Sep-2020 00:00	Val-170	✓				
ES2032454-040	10-Sep-2020 00:00	Val-171		✓	✓	✓	✓
ES2032454-041	10-Sep-2020 00:00	Val-172	✓				
ES2032454-042	10-Sep-2020 00:00	Val-173		✓	✓	✓	✓
ES2032454-043	10-Sep-2020 00:00	Val-174	✓				
ES2032454-044	10-Sep-2020 00:00	Val-175		✓	✓	✓	✓
ES2032454-045	10-Sep-2020 00:00	Val-176	✓				
ES2032454-046	10-Sep-2020 00:00	Val-177		✓	✓	✓	✓
ES2032454-047	10-Sep-2020 00:00	Val-178	✓				
ES2032454-048	10-Sep-2020 00:00	Val-179		✓	✓	✓	✓
ES2032454-049	10-Sep-2020 00:00	Val-180	✓				
ES2032454-050	10-Sep-2020 00:00	Val-181		✓	✓	✓	✓
ES2032454-051	10-Sep-2020 00:00	Val-182	✓				
ES2032454-052	10-Sep-2020 00:00	Val-183		✓	✓	✓	✓
ES2032454-053	10-Sep-2020 00:00	Val-184	✓				
ES2032454-054	10-Sep-2020 00:00	Val-185		✓	✓	✓	✓
ES2032454-066	10-Sep-2020 00:00	QC-19		✓		✓	✓
ES2032454-067	10-Sep-2020 00:00	QC-20		✓		✓	✓
ES2032454-068	10-Sep-2020 00:00	QC-21		✓		✓	✓
ES2032454-069	10-Sep-2020 00:00	QC-22		✓		✓	✓
ES2032454-070	10-Sep-2020 00:00	QC-23		✓		✓	✓
ES2032454-071	10-Sep-2020 00:00	QC4	✓				
ES2032454-072	10-Sep-2020 00:00	QC5	✓				
ES2032454-073	10-Sep-2020 00:00	Val-169			✓		

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-02T 8 metals (Total)
ES2032454-060	08-Sep-2020 00:00	RB01	✓
ES2032454-061	10-Sep-2020 00:00	RB02	✓
ES2032454-062	11-Sep-2020 00:00	RB03	✓
ES2032454-063	14-Sep-2020 00:00	RB04	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2032454**	Page	: 1 of 26
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020
Order number	: ----	Date Analysis Commenced	: 15-Sep-2020
C-O-C number	: ----	Issue Date	: 21-Sep-2020
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 66		
No. of samples analysed	: 36		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3258661)									
ES2032333-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	3	4	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
ES2032454-008	Val-139	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	112	112	0.00	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	7	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	7	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	11	23.9	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3258662)									
ES2032454-028	Val-159	EG005T: Chromium	7440-47-3	2	mg/kg	97	98	0.00	0% - 20%
ES2032454-028	Val-159	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	6	7	15.6	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	8	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	8	27.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	7	14	69.6	No Limit
ES2032454-050	Val-181	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	158	168	6.18	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	6	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3258662) - continued									
ES2032454-050	Val-181	EG005T: Arsenic	7440-38-2	5	mg/kg	9	9	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	13	12	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3264487)									
ES2032454-066	QC-19	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	82	88	7.06	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	9	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3258664)									
ES2032333-008	Anonymous	EA055: Moisture Content	----	0.1	%	7.0	6.3	9.81	No Limit
ES2032454-014	Val-145	EA055: Moisture Content	----	0.1	%	10.4	8.7	16.9	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3258665)									
ES2032454-032	Val-163	EA055: Moisture Content	----	0.1	%	7.6	7.8	2.68	No Limit
ES2032454-064	TB01 Received as TP01	EA055: Moisture Content	----	0.1	%	3.5	4.0	15.6	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3264489)									
ES2032454-068	QC-21	EA055: Moisture Content	----	0.1	%	12.0	12.2	1.27	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3258660)									
ES2032333-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032454-008	Val-139	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3258663)									
ES2032454-028	Val-159	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032454-050	Val-181	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3264486)									
ES2032454-066	QC-19	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3258425)									
ES2032454-002	Val-133	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3258425) - continued									
ES2032454-002	Val-133	EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032454-022	Val-153	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3258431)									
ES2032454-044	Val-175	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3258431) - continued									
ES2032454-044	Val-175	EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.06	0.06	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.18	0.15	16.9	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3264307)									
ES2032454-066	QC-19	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3258425)									
ES2032454-002	Val-133	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3258425) - continued									
ES2032454-002	Val-133	EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032454-022	Val-153	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3258431)									
ES2032454-044	Val-175	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3258431) - continued									
ES2032454-044	Val-175	EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3264307)									
ES2032454-066	QC-19	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3258424)									
ES2032454-002	Val-133	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3258424) - continued									
ES2032454-002	Val-133	EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2032454-022	Val-153	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3258429)									
ES2032454-044	Val-175	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3258429) - continued									
ES2032454-044	Val-175	EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3264306)									
ES2032454-066	QC-19	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3257633)									
ES2032454-002	Val-133	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3257633) - continued									
ES2032454-022	Val-153	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3257634)									
ES2032212-013	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032333-010	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3258423)									
ES2032454-002	Val-133	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032454-022	Val-153	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3258430)									
ES2032454-044	Val-175	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3264305)									
ES2032454-066	QC-19	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3264423)									
ES2031442-012	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032820-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3257633)									
ES2032454-002	Val-133	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032454-022	Val-153	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3257634)									
ES2032212-013	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	10	10	0.00	No Limit
ES2032333-010	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3258423)									
ES2032454-002	Val-133	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032454-022	Val-153	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3258430)									
ES2032454-044	Val-175	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3258430) - continued									
ES2032454-044	Val-175	EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3264305)									
ES2032454-066	QC-19	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3264423)									
ES2031442-012	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032820-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3257633)									
ES2032454-002	Val-133	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032454-022	Val-153	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3257634)									
ES2032212-013	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	0.2	0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	0.5	0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032333-010	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3264423)									

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 3264423) - continued									
ES2031442-012	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032820-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020T: Total Metals by ICP-MS (QC Lot: 3258192)									
ES2032280-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.002	0.002	0.00	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.002	0.002	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.037	0.038	0.00	0% - 20%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.016	0.017	0.00	0% - 50%
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.125	0.126	0.885	0% - 20%
ES2032137-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EG020T: Total Metals by ICP-MS (QC Lot: 3258195)									
ES2032454-062	RB03	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
ES2032507-003	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 3258195) - continued									
ES2032507-003	Anonymous	EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.001	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3258240)									
ES2032343-046	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3258661)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	127	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	107	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	130	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	126	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	130	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	127	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	118	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3258662)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	127	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	108	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	130	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	119	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	121	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	121	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	112	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3264487)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	116	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	103	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	116	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	116	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	121	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	118	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	111	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3258660)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	79.8	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3258663)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	79.7	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3264486)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	89.8	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258425)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.1	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	91.5	67.0	119

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258425) - continued								
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.6	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.1	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	88.4	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	104	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	102	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	92.2	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	77.3	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	87.6	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	79.4	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258431)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	102	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	99.3	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.9	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.8	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	96.8	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	100	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.3	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	79.4	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	76.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.2	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	100	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	64.0	122

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258431) - continued								
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	80.7	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264307)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.6	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.2	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	77.4	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	83.1	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	82.7	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258425)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	67.6	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	67.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.5	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	82.8	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	102	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	75.0	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	106	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	102	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	104	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	107	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	68.0	124

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258425) - continued								
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	105	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	106	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	74.6	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258431)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	77.1	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	77.2	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	96.8	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	105	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	83.5	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	97.5	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.3	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	85.0	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	70.7	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.1	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.1	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	95.9	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	74.7	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.9	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	61.8	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.5	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	89.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	89.3	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	75.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.1	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	74.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.7	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.9	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	66.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307) - continued								
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	80.9	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258424)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	90.7	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	102	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	102	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	101	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	103	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	105	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	98.8	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	95.5	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	102	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	96.8	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	97.9	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	91.8	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	96.0	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	93.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	92.1	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	93.7	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258429)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	97.9	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	102	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	104	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	99.8	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	104	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	100	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	95.9	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	97.4	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	99.0	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	97.9	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	93.4	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	96.5	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	93.2	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	93.6	61.0	121

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258429) - continued								
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	90.9	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	91.6	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264306)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	99.5	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	97.2	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	92.6	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	101	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	98.4	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	98.1	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	94.4	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	85.8	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	88.3	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	83.7	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	95.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	85.5	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	84.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	80.6	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	88.6	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257633)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	96.9	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257634)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	121	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3258423)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	91.4	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	98.4	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	98.9	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3258430)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	90.2	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	88.6	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	89.6	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264305)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	91.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	88.3	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	98.9	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264423)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	116	68.4	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257633)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	94.3	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257634)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	122	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3258423)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	93.7	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	100	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	84.1	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3258430)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	90.0	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	90.4	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	85.4	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264305)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	89.0	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	88.4	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	79.4	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264423)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	121	68.4	128
EP080: BTEXN (QCLot: 3257633)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	104	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	94.1	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	94.5	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	95.1	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	98.5	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	87.4	63.0	119
EP080: BTEXN (QCLot: 3257634)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	105	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	109	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	109	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	107	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	112	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	109	63.0	119
EP080: BTEXN (QCLot: 3264423)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	102	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	110	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	110	65.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 3264423) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	106	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	107	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	93.2	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 3258192)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	96.9	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	95.9	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	94.8	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	93.0	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	91.0	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	94.4	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	96.6	79.0	117
EG020T: Total Metals by ICP-MS (QCLot: 3258195)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	98.2	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	98.6	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	96.8	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	95.7	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	95.1	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	95.8	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	97.9	79.0	117
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3258240)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	102	77.0	111

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3258661)							
ES2032333-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	101	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	105	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	101	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	102	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3258661) - continued							
ES2032333-002	Anonymous	EG005T: Lead	7439-92-1	250 mg/kg	103	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	105	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	104	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3258662)							
ES2032454-028	Val-159	EG005T: Arsenic	7440-38-2	50 mg/kg	85.7	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.9	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	80.5	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	100	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	97.3	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	99.1	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	97.6	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3264487)							
ES2032454-066	QC-19	EG005T: Arsenic	7440-38-2	50 mg/kg	95.1	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	92.4	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	110	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	95.2	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	93.0	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	95.1	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	92.5	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3258660)							
ES2032333-002	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	88.0	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3258663)							
ES2032454-028	Val-159	EG035T: Mercury	7439-97-6	5 mg/kg	91.2	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3264486)							
ES2032454-066	QC-19	EG035T: Mercury	7439-97-6	5 mg/kg	85.4	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258425)							
ES2032454-002	Val-133	EP068: gamma-BHC	58-89-9	0.5 mg/kg	127	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	90.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	105	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	84.2	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	96.3	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	82.3	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258431)							
ES2032454-044	Val-175	EP068: gamma-BHC	58-89-9	0.5 mg/kg	81.8	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	82.3	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	91.0	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	74.8	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258431) - continued							
ES2032454-044	Val-175	EP068: Endrin	72-20-8	2 mg/kg	106	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	87.6	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264307)							
ES2032454-066	QC-19	EP068: gamma-BHC	58-89-9	0.5 mg/kg	93.4	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	71.2	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	83.8	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	77.8	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	93.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	88.6	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258425)							
ES2032454-002	Val-133	EP068: Diazinon	333-41-5	0.5 mg/kg	93.3	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	71.3	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	71.6	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	70.9	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	77.9	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258431)							
ES2032454-044	Val-175	EP068: Diazinon	333-41-5	0.5 mg/kg	80.2	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	73.9	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	73.8	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	95.1	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	91.2	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307)							
ES2032454-066	QC-19	EP068: Diazinon	333-41-5	0.5 mg/kg	79.4	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	93.4	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	102	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	91.6	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	90.4	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258424)							
ES2032454-002	Val-133	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	97.4	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	102	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258429)							
ES2032454-044	Val-175	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	96.8	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	103	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264306)							
ES2032454-066	QC-19	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	91.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	97.8	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257633)							
ES2032454-002	Val-133	EP080: C6 - C9 Fraction	----	32.5 mg/kg	107	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3257634)							
ES2032212-013	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	109	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3258423)							
ES2032454-002	Val-133	EP071: C10 - C14 Fraction	----	523 mg/kg	103	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	111	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	116	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3258430)							
ES2032454-044	Val-175	EP071: C10 - C14 Fraction	----	523 mg/kg	105	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	114	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	117	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264305)							
ES2032454-066	QC-19	EP071: C10 - C14 Fraction	----	523 mg/kg	110	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	119	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	130	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	111	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257633)							
ES2032454-002	Val-133	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	102	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3257634)							
ES2032212-013	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	105	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3258423)							
ES2032454-002	Val-133	EP071: >C10 - C16 Fraction	----	860 mg/kg	107	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	113	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	122	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3258430)							
ES2032454-044	Val-175	EP071: >C10 - C16 Fraction	----	860 mg/kg	109	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	116	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	124	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264305)							
ES2032454-066	QC-19	EP071: >C10 - C16 Fraction	----	860 mg/kg	124	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	121	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	124	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	113	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080: BTEXN (QCLot: 3257633)							
ES2032454-002	Val-133	EP080: Benzene	71-43-2	2.5 mg/kg	101	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	94.2	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	99.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	98.7	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	100	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	102	70.0	130
EP080: BTEXN (QCLot: 3257634)							
ES2032212-013	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	115	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	117	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	117	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	116	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	114	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	112	70.0	130
EP080: BTEXN (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	93.4	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	114	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	116	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	116	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	116	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	82.0	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 3258192)							
ES2032137-003	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	95.7	70.0	130
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	94.5	70.0	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	91.0	70.0	130
		EG020A-T: Copper	7440-50-8	1 mg/L	92.0	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	87.0	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	93.6	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	92.0	70.0	130
EG020T: Total Metals by ICP-MS (QCLot: 3258195)							
ES2032454-063	RB04	EG020A-T: Arsenic	7440-38-2	1 mg/L	95.0	70.0	130
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	99.6	70.0	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	99.6	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EG020T: Total Metals by ICP-MS (QCLot: 3258195) - continued							
ES2032454-063	RB04	EG020A-T: Copper	7440-50-8	1 mg/L	94.1	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	97.2	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	95.4	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	94.7	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3258240)							
ES2032343-049	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	97.6	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2032454**	Page	: 1 of 12
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020
Site	: ----	Issue Date	: 21-Sep-2020
Sampler	: ROBIN BIRUA	No. of samples received	: 66
Order number	: ----	No. of samples analysed	: 36

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173, Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	**10-Sep-2020**	**----**	----	----	**16-Sep-2020**	24-Sep-2020	✓
Soil Glass Jar - Unpreserved (EA055)							
QC-19, QC-20, QC-21, QC-22, QC-23	**10-Sep-2020**	**----**	----	----	**18-Sep-2020**	24-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173, Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	**10-Sep-2020**	**----**	----	----	**17-Sep-2020**	09-Mar-2021	✓
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
Val-169	**10-Sep-2020**	**----**	----	----	**18-Sep-2020**	09-Mar-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173, Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	**10-Sep-2020**	**16-Sep-2020**	09-Mar-2021	✓	**17-Sep-2020**	09-Mar-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
QC-19, QC-20, QC-21, QC-22, QC-23	**10-Sep-2020**	**18-Sep-2020**	09-Mar-2021	✓	**18-Sep-2020**	09-Mar-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173, Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	**10-Sep-2020**	**16-Sep-2020**	08-Oct-2020	✓	**17-Sep-2020**	08-Oct-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
QC-19, QC-20, QC-21, QC-22, QC-23	**10-Sep-2020**	**18-Sep-2020**	08-Oct-2020	✓	**18-Sep-2020**	08-Oct-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173	**10-Sep-2020**	**16-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	26-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	**10-Sep-2020**	**16-Sep-2020**	24-Sep-2020	✓	**17-Sep-2020**	26-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
QC-19, QC-20, QC-21, QC-22, QC-23	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173	**10-Sep-2020**	**16-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	26-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	**10-Sep-2020**	**16-Sep-2020**	24-Sep-2020	✓	**17-Sep-2020**	26-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
QC-19, QC-20, QC-21, QC-22, QC-23	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173, Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	**10-Sep-2020**	**16-Sep-2020**	24-Sep-2020	✓	**17-Sep-2020**	26-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
QC-19, QC-20, QC-21, QC-22, QC-23	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP080)								
Val-133,	Val-135,	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**17-Sep-2020**	24-Sep-2020	✓
Val-137,	Val-139,							
Val-141,	Val-143,							
Val-145,	Val-147,							
Val-149,	Val-151,							
Val-153,	Val-155,							
Val-157,	Val-159,							
Val-161,	Val-163,							
Val-165,	Val-167,							
Val-171,	Val-173,							
Val-175,	Val-177,							
Val-179,	Val-181,							
Val-183,	Val-185							
Soil Glass Jar - Unpreserved (EP071)								
Val-133,	Val-135,	**10-Sep-2020**	**16-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	26-Oct-2020	✓
Val-137,	Val-139,							
Val-141,	Val-143,							
Val-145,	Val-147,							
Val-149,	Val-151,							
Val-153,	Val-155,							
Val-157,	Val-159,							
Val-161,	Val-163,							
Val-165,	Val-167,							
Val-171,	Val-173,							
Val-175,	Val-177,							
Val-179,	Val-181,							
Val-183,	Val-185							
Soil Glass Jar - Unpreserved (EP080)								
QC-19,	QC-20,	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	24-Sep-2020	✓
QC-21,	QC-22,							
QC-23								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Soil Glass Jar - Unpreserved (EP080)								
Val-133,	Val-135,	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**17-Sep-2020**	24-Sep-2020	✓
Val-137,	Val-139,							
Val-141,	Val-143,							
Val-145,	Val-147,							
Val-149,	Val-151,							
Val-153,	Val-155,							
Val-157,	Val-159,							
Val-161,	Val-163,							
Val-165,	Val-167,							
Val-171,	Val-173,							
Val-175,	Val-177,							
Val-179,	Val-181,							
Val-183,	Val-185							
Soil Glass Jar - Unpreserved (EP071)								
Val-133,	Val-135,	**10-Sep-2020**	**16-Sep-2020**	24-Sep-2020	✓	**16-Sep-2020**	26-Oct-2020	✓
Val-137,	Val-139,							
Val-141,	Val-143,							
Val-145,	Val-147,							
Val-149,	Val-151,							
Val-153,	Val-155,							
Val-157,	Val-159,							
Val-161,	Val-163,							
Val-165,	Val-167,							
Val-171,	Val-173,							
Val-175,	Val-177,							
Val-179,	Val-181,							
Val-183,	Val-185							
Soil Glass Jar - Unpreserved (EP080)								
QC-19,	QC-20,	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	24-Sep-2020	✓
QC-21,	QC-22,							
QC-23								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
Val-133, Val-135, Val-137, Val-139, Val-141, Val-143, Val-145, Val-147, Val-149, Val-151, Val-153, Val-155, Val-157, Val-159, Val-161, Val-163, Val-165, Val-167, Val-171, Val-173, Val-175, Val-177, Val-179, Val-181, Val-183, Val-185	**10-Sep-2020**	**15-Sep-2020**	24-Sep-2020	✓	**17-Sep-2020**	24-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
QC-19, QC-20, QC-21, QC-22, QC-23	**10-Sep-2020**	**18-Sep-2020**	24-Sep-2020	✓	**18-Sep-2020**	24-Sep-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-T)							
RB01	**08-Sep-2020**	**16-Sep-2020**	07-Mar-2021	✓	**16-Sep-2020**	07-Mar-2021	✓
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-T)							
RB02	**10-Sep-2020**	**16-Sep-2020**	09-Mar-2021	✓	**16-Sep-2020**	09-Mar-2021	✓
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-T)							
RB03	**11-Sep-2020**	**16-Sep-2020**	10-Mar-2021	✓	**16-Sep-2020**	10-Mar-2021	✓
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-T)							
RB04	**14-Sep-2020**	**16-Sep-2020**	13-Mar-2021	✓	**16-Sep-2020**	13-Mar-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035T)							
RB01	**08-Sep-2020**	**----**	----	----	**16-Sep-2020**	06-Oct-2020	✓
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035T)							
RB02	**10-Sep-2020**	**----**	----	----	**16-Sep-2020**	08-Oct-2020	✓
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035T)							
RB03	**11-Sep-2020**	**----**	----	----	**16-Sep-2020**	09-Oct-2020	✓
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035T)							
RB04	**14-Sep-2020**	**----**	----	----	**16-Sep-2020**	12-Oct-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	5	38	**13.16**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	4	36	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	4	35	**11.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	5	38	**13.16**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	6	38	**15.79**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	36	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	6	50	**12.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	3	36	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	35	**8.57**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	38	**7.89**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	38	**7.89**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	36	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	50	**6.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	3	36	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	35	**8.57**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	38	**7.89**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	38	**7.89**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	36	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	50	**6.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	3	36	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	35	**8.57**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	38	**7.89**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	38	**7.89**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	36	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	50	**6.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Total Mercury by FIMS	EG035T	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	4	17	**23.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS) - Continued							
Total Mercury by FIMS	EG035T	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	17	**11.76**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Total Mercury by FIMS	EG035T	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	17	**11.76**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Total Mercury by FIMS	EG035T	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	17	**11.76**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).

Preparation Methods	Method	Matrix	Method Descriptions

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2032454**	Page	: 1 of 33
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020 10:20
Order number	: ----	Date Analysis Commenced	: 15-Sep-2020
C-O-C number	: ----	Issue Date	: 21-Sep-2020 15:19
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 66		
No. of samples analysed	: 36		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- Amendment (21/09/2020): This report has been amended to allow a change in ID for samples 066-070. All analysis results are as per the previous report.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-133	Val-135	Val-137	Val-139	Val-141
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032454-002	ES2032454-004	ES2032454-006	ES2032454-008	ES2032454-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.0	4.4	5.3	6.0	5.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	85.3	81.5	76.9	70.3	76.2
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	6	6	6	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	149	146	110	112	142
Copper	7440-50-8	5	mg/kg	7	6	8	7	8
Lead	7439-92-1	5	mg/kg	11	11	12	8	9
Nickel	7440-02-0	2	mg/kg	4	6	7	6	9
Zinc	7440-66-6	5	mg/kg	15	<5	24	<5	30
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-133	Val-135	Val-137	Val-139	Val-141
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-002	ES2032454-004	ES2032454-006	ES2032454-008	ES2032454-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-133	Val-135	Val-137	Val-139	Val-141
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-002	ES2032454-004	ES2032454-006	ES2032454-008	ES2032454-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-133	Val-135	Val-137	Val-139	Val-141
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032454-002	ES2032454-004	ES2032454-006	ES2032454-008	ES2032454-010
				Result	Result	Result	Result	Result
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**91.4**	**85.5**	**76.0**	**81.4**	**83.1**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**94.5**	**103**	**74.8**	**77.6**	**88.2**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**102**	**101**	**103**	**103**	**102**
2-Chlorophenol-D4	93951-73-6	0.5	%	**89.6**	**93.2**	**88.8**	**89.5**	**90.3**
2.4.6-Tribromophenol	118-79-6	0.5	%	**94.0**	**89.2**	**86.8**	**82.7**	**85.1**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**97.4**	**99.1**	**95.7**	**96.5**	**97.2**
Anthracene-d10	1719-06-8	0.5	%	**89.5**	**92.3**	**89.2**	**89.6**	**90.2**
4-Terphenyl-d14	1718-51-0	0.5	%	**81.8**	**83.3**	**80.8**	**81.1**	**82.6**
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**99.0**	**98.4**	**103**	**109**	**106**
Toluene-D8	2037-26-5	0.2	%	**102**	**99.4**	**108**	**108**	**112**
4-Bromofluorobenzene	460-00-4	0.2	%	**103**	**104**	**109**	**106**	**112**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-143	Val-145	Val-147	Val-149	Val-151
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-012	ES2032454-014	ES2032454-016	ES2032454-018	ES2032454-020
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		7.8	10.4	8.9	11.6	6.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No*	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	Ch + Am	-
Sample weight (dry)	----	0.01	g		65.9	78.6	69.8	63.1	70.9
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		7	6	6	7	8
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		147	130	115	139	159
Copper	7440-50-8	5	mg/kg		5	6	8	7	7
Lead	7439-92-1	5	mg/kg		12	9	11	10	11
Nickel	7440-02-0	2	mg/kg		5	4	8	8	6
Zinc	7440-66-6	5	mg/kg		8	6	8	<5	30
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		0.09	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-143	Val-145	Val-147	Val-149	Val-151
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032454-012	ES2032454-014	ES2032454-016	ES2032454-018	ES2032454-020
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.09**	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-143	Val-145	Val-147	Val-149	Val-151
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-012	ES2032454-014	ES2032454-016	ES2032454-018	ES2032454-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-143	Val-145	Val-147	Val-149	Val-151
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-012	ES2032454-014	ES2032454-016	ES2032454-018	ES2032454-020
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**82.4**	**72.7**	**81.6**	**79.0**	**78.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**86.6**	**72.6**	**76.9**	**100**	**79.9**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**103**	**103**	**104**	**104**	**96.1**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.9**	**89.6**	**90.1**	**91.0**	**92.5**
2.4.6-Tribromophenol	118-79-6	0.5	%		**84.2**	**83.1**	**81.8**	**82.2**	**79.1**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**96.4**	**95.3**	**96.0**	**97.3**	**96.5**
Anthracene-d10	1719-06-8	0.5	%		**89.9**	**88.0**	**89.4**	**90.7**	**90.1**
4-Terphenyl-d14	1718-51-0	0.5	%		**81.2**	**80.2**	**81.9**	**82.1**	**81.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**98.4**	**95.0**	**97.8**	**99.4**	**101**
Toluene-D8	2037-26-5	0.2	%		**102**	**95.1**	**103**	**98.2**	**98.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**102**	**99.5**	**107**	**101**	**94.8**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-153	Val-155	Val-157	Val-159	Val-161
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032454-022	ES2032454-024	ES2032454-026	ES2032454-028	ES2032454-030
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.0	5.8	6.0	7.6	8.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	69.5	74.7	88.7	53.0	91.7
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	8	6	8	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	163	165	125	97	137
Copper	7440-50-8	5	mg/kg	5	8	7	6	7
Lead	7439-92-1	5	mg/kg	8	14	14	12	11
Nickel	7440-02-0	2	mg/kg	6	6	6	6	8
Zinc	7440-66-6	5	mg/kg	<5	22	23	7	15
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-153	Val-155	Val-157	Val-159	Val-161
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-022	ES2032454-024	ES2032454-026	ES2032454-028	ES2032454-030
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-153	Val-155	Val-157	Val-159	Val-161
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-022	ES2032454-024	ES2032454-026	ES2032454-028	ES2032454-030
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-153	Val-155	Val-157	Val-159	Val-161
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-022	ES2032454-024	ES2032454-026	ES2032454-028	ES2032454-030
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**78.9**	**79.8**	**90.3**	**73.1**	**81.3**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**77.7**	**84.3**	**86.9**	**74.4**	**93.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**100**	**104**	**103**	**102**	**103**
2-Chlorophenol-D4	93951-73-6	0.5	%		**90.1**	**90.3**	**88.6**	**90.6**	**92.2**
2.4.6-Tribromophenol	118-79-6	0.5	%		**78.9**	**80.1**	**78.3**	**77.2**	**78.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**94.7**	**96.5**	**94.6**	**96.3**	**96.4**
Anthracene-d10	1719-06-8	0.5	%		**88.2**	**90.1**	**88.7**	**89.5**	**89.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**80.0**	**81.0**	**89.8**	**81.0**	**81.3**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**104**	**98.2**	**99.4**	**104**	**101**
Toluene-D8	2037-26-5	0.2	%		**99.6**	**93.0**	**99.0**	**108**	**103**
4-Bromofluorobenzene	460-00-4	0.2	%		**97.6**	**92.9**	**95.7**	**100**	**96.7**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-163	Val-165	Val-167	Val-171	Val-173
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032454-032	ES2032454-034	ES2032454-036	ES2032454-040	ES2032454-042
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.6	7.9	10.1	6.1	5.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	52.3	64.6	84.4	64.6	68.3
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	8	6	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	155	134	161	158	173
Copper	7440-50-8	5	mg/kg	5	7	6	<5	<5
Lead	7439-92-1	5	mg/kg	12	11	10	8	10
Nickel	7440-02-0	2	mg/kg	4	7	6	4	4
Zinc	7440-66-6	5	mg/kg	5	<5	<5	<5	22
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-163	Val-165	Val-167	Val-171	Val-173
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-032	ES2032454-034	ES2032454-036	ES2032454-040	ES2032454-042
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-163	Val-165	Val-167	Val-171	Val-173
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-032	ES2032454-034	ES2032454-036	ES2032454-040	ES2032454-042
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-163	Val-165	Val-167	Val-171	Val-173
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-032	ES2032454-034	ES2032454-036	ES2032454-040	ES2032454-042
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**73.4**	**74.5**	**74.7**	**108**	**80.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**75.1**	**72.6**	**71.8**	**120**	**77.8**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**99.1**	**103**	**102**	**101**	**102**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.0**	**93.2**	**87.3**	**90.3**	**90.7**
2.4.6-Tribromophenol	118-79-6	0.5	%		**84.0**	**85.2**	**80.2**	**81.3**	**79.7**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**95.5**	**101**	**95.7**	**97.5**	**96.5**
Anthracene-d10	1719-06-8	0.5	%		**88.8**	**92.8**	**89.2**	**88.9**	**90.4**
4-Terphenyl-d14	1718-51-0	0.5	%		**81.4**	**85.0**	**81.0**	**82.6**	**82.3**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**103**	**103**	**100**	**104**	**96.8**
Toluene-D8	2037-26-5	0.2	%		**105**	**103**	**99.7**	**105**	**101**
4-Bromofluorobenzene	460-00-4	0.2	%		**100**	**98.1**	**96.0**	**100**	**97.5**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-175	Val-177	Val-179	Val-181	Val-183
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032454-044	ES2032454-046	ES2032454-048	ES2032454-050	ES2032454-052
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	5.1	4.1	5.9	9.2	1.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	76.4	64.4	60.1	61.5	80.0
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	8	6	9	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	122	215	145	158	171
Copper	7440-50-8	5	mg/kg	5	6	5	6	6
Lead	7439-92-1	5	mg/kg	10	16	11	13	10
Nickel	7440-02-0	2	mg/kg	4	6	5	6	6
Zinc	7440-66-6	5	mg/kg	16	10	12	<5	8
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	0.06	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	0.06	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	0.18	0.10	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-175	Val-177	Val-179	Val-181	Val-183
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-044	ES2032454-046	ES2032454-048	ES2032454-050	ES2032454-052
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		**0.18**	**0.10**	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-175	Val-177	Val-179	Val-181	Val-183
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-044	ES2032454-046	ES2032454-048	ES2032454-050	ES2032454-052
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-175	Val-177	Val-179	Val-181	Val-183
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-044	ES2032454-046	ES2032454-048	ES2032454-050	ES2032454-052
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**81.0**	**78.5**	**75.8**	**81.3**	**92.8**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**90.6**	**87.2**	**75.0**	**97.1**	**112**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**95.9**	**97.9**	**101**	**102**	**101**
2-Chlorophenol-D4	93951-73-6	0.5	%		**84.3**	**86.3**	**87.3**	**85.1**	**89.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**72.4**	**73.3**	**73.8**	**75.6**	**70.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**92.7**	**94.5**	**93.6**	**92.1**	**95.0**
Anthracene-d10	1719-06-8	0.5	%		**85.9**	**88.1**	**87.8**	**85.7**	**88.9**
4-Terphenyl-d14	1718-51-0	0.5	%		**86.3**	**87.9**	**89.1**	**87.0**	**87.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**105**	**95.7**	**102**	**104**	**112**
Toluene-D8	2037-26-5	0.2	%		**119**	**130**	**118**	**119**	**124**
4-Bromofluorobenzene	460-00-4	0.2	%		**118**	**127**	**118**	**120**	**122**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-185	QC-19	QC-20	QC-21	QC-22
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-054	ES2032454-066	ES2032454-067	ES2032454-068	ES2032454-069
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		<1.0	5.3	21.7	12.0	9.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres		No	----	----	----	----
Asbestos Type	1332-21-4	-	--		-	----	----	----	----
Sample weight (dry)	----	0.01	g		69.9	----	----	----	----
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg		No	----	----	----	----
Organic Fibre	----	0.1	g/kg		No	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		7	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		110	82	78	137	72
Copper	7440-50-8	5	mg/kg		8	<5	<5	<5	6
Lead	7439-92-1	5	mg/kg		9	8	8	7	8
Nickel	7440-02-0	2	mg/kg		7	4	4	3	7
Zinc	7440-66-6	5	mg/kg		6	<5	11	<5	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	0.19	0.27	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	0.19	0.27	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	0.40	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-185	QC-19	QC-20	QC-21	QC-22
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-054	ES2032454-066	ES2032454-067	ES2032454-068	ES2032454-069
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	**0.40**	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-185	QC-19	QC-20	QC-21	QC-22
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-054	ES2032454-066	ES2032454-067	ES2032454-068	ES2032454-069
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-185	QC-19	QC-20	QC-21	QC-22
				Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00	10-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032454-054	ES2032454-066	ES2032454-067	ES2032454-068	ES2032454-069
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**91.8**	**80.0**	**90.9**	**74.9**	**80.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**105**	**71.7**	**102**	**85.6**	**73.7**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**98.8**	**103**	**95.2**	**94.4**	**100**
2-Chlorophenol-D4	93951-73-6	0.5	%		**97.5**	**103**	**95.9**	**96.7**	**99.9**
2.4.6-Tribromophenol	118-79-6	0.5	%		**65.9**	**51.0**	**55.5**	**52.9**	**56.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**99.1**	**109**	**100**	**102**	**105**
Anthracene-d10	1719-06-8	0.5	%		**101**	**103**	**101**	**98.5**	**98.2**
4-Terphenyl-d14	1718-51-0	0.5	%		**88.4**	**106**	**100**	**93.5**	**96.7**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**109**	**94.7**	**75.6**	**78.9**	**91.3**
Toluene-D8	2037-26-5	0.2	%		**124**	**102**	**101**	**87.2**	**97.3**
4-Bromofluorobenzene	460-00-4	0.2	%		**120**	**99.8**	**97.0**	**84.2**	**93.7**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	QC-23	Val-169	----	----	----
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2032454-070	ES2032454-073	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**6.2**	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	----	**No**	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	----	**No**	----	----	----
Asbestos Type	1332-21-4	-	--	----	-	----	----	----
Sample weight (dry)	----	0.01	g	----	**84.7**	----	----	----
APPROVED IDENTIFIER:	----	-	--	----	**A. SMYLIE**	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	----	**No**	----	----	----
Organic Fibre	----	0.1	g/kg	----	**No**	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	----	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg	**114**	----	----	----	----
Copper	7440-50-8	5	mg/kg	<5	----	----	----	----
Lead	7439-92-1	5	mg/kg	**9**	----	----	----	----
Nickel	7440-02-0	2	mg/kg	**5**	----	----	----	----
Zinc	7440-66-6	5	mg/kg	<5	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	QC-23	Val-169	----	----	----
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2032454-070	ES2032454-073	--------	--------	--------
				Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	QC-23	Val-169	----	----	----
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2032454-070	ES2032454-073	--------	--------	--------
				Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	QC-23	Val-169	----	----	----
			Client sampling date / time	10-Sep-2020 00:00	10-Sep-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2032454-070	ES2032454-073	--------	--------	--------
				Result	Result	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**81.1**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**75.9**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**100**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**100**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**58.8**	----	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**104**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%	**101**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**100**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**93.0**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%	**100**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	**94.7**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB01	RB02	RB03	RB04	----
				Client sampling date / time	08-Sep-2020 00:00	10-Sep-2020 00:00	11-Sep-2020 00:00	14-Sep-2020 00:00	----
Compound	CAS Number	LOR	Unit		ES2032454-060	ES2032454-061	ES2032454-062	ES2032454-063	--------
					Result	Result	Result	Result	----
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Copper	7440-50-8	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	<0.005	<0.005	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	Val-133 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-135 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-137 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-139 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-141 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-143 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-145 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-147 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-149 - 10-Sep-2020 00:00	Mid brown soil containing several fragments of asbestos fibre board approximately 3x2x0.5mm.
EA200: Description	Val-151 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-153 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-155 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-157 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-159 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-161 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-163 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-165 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-167 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-171 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-173 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-175 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-177 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-179 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-181 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-183 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-185 - 10-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-169 - 10-Sep-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

21.9.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT ☐ ☐ ☐ ☐ ☐

OFFICE ☐ ☐ ☐ ☐ ☐

(Tick one) ☐ ☐ ☐ ☐ ☐

Environmental Division
Sydney
Work Order Reference
ES2032486

Telephone : +61-2-8784 8555

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 1 of 6
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10579	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix (Soil, Water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos F/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	Val-T-01	11/09/2020	Soil	x1 Jar and x1 Bag		x								24 Hrs TAT Please
2	Val-T-02	11/09/2020	Soil	x1 Jar and x1 Bag		x								
3	Val T 03	11/09/2020	Soil	x1 Jar and x1 Bag		x								
4	Val-T-04	11/09/2020	Soil	x1 Jar and x1 Bag		x								
5	Val-T-05	11/09/2020	Soil	x1 Jar and x1 Bag		x								
6	Val-T-06	11/09/2020	Soil	x1 Jar and x1 Bag		x								
7	Val-T-07	11/09/2020	Soil	x1 Jar and x1 Bag		x								
8	Val-T-08	11/09/2020	Soil	x1 Jar and x1 Bag		x								
9	Val-T-09	11/09/2020	Soil	x1 Jar and x1 Bag		x								
10	Val-T-10	11/09/2020	Soil	x1 Jar and x1 Bag		x								
11	Val-T-11	11/09/2020	Soil	x1 Jar and x1 Bag		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By / Date:
Relinquished By / Date:
Connote / Courier:
WO No: 2032486
Attach By PO / Internal Sheet:

SLR Consulting Australia Pty Ltd

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

CLIENT: SLR Consulting

PROJECT: John Stokes Square

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Sarah Doherty

PM CONTACT No: 0417 647 498

LABORATORY: ALS

LABORATORY ADDRESS:

SAMPLER: Robin Birua

SAMPLER CONTACT No: 0482 680 165

Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au

Turnaround Time (TAT)

☐ Standard TAT

☒ Non Standard or Urgent TAT

COC Number: 2 of 6

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, Water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	HEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200W)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
12	Val-T-12	11/09/2020	Soil	x1 Jar and x1 Bag		x								24 Hrs TAT Please
13	Val-T-13	11/09/2020	Soil	x1 Jar and x1 Bag		x								
14	Val-T-14	11/09/2020	Soil	x1 Jar and x1 Bag		x								
15	Val-T-15	11/09/2020	Soil	x1 Jar and x1 Bag		x								
16	Val T 16	11/09/2020	Soil	x1 Jar and x1 Bag		x								
17	Val-1-17	11/09/2020	Soil	x1 Jar and x1 Bag		x								
18	Val T 18	11/09/2020	Soil	x1 Jar and x1 Bag		x								
19	Val-1-19	11/09/2020	Soil	x1 Jar and x1 Bag		x								
20	Val-T-20	11/09/2020	Soil	x1 Jar and x1 Bag		x								
21	Val-T-21	11/09/2020	Soil	x1 Jar and x1 Bag		x								
22	Val-T-22	11/09/2020	Soil	x1 Jar and x1 Bag		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign	Date / Time
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time

Temperature Received.

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT ☐ ☐ ☐ ☐ ☐
OFFICE ☐ ☐ ☐ ☐ ☐
(Tick one) ☐ ☐ ☐ ☐ ☐

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 3 of 6
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200W)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
23	Val-T-23	14/09/2020	Soil	x1 Jar and x1 Bag		x								24 Hrs TAT Please
24	Val-T-24	14/09/2020	Soil	x1 Jar and x1 Bag		x								
25	Val-T-25	14/09/2020	Soil	x1 Jar and x1 Bag		x								
26	Val-T-26	14/09/2020	Soil	x1 Jar and x1 Bag		x								
27	Val-T-27	14/09/2020	Soil	x1 Jar and x1 Bag		x								
28	Val-T-28	14/09/2020	Soil	x1 Jar and x1 Bag		x								
29	Val-T-29	14/09/2020	Soil	x1 Jar and x1 Bag		x								
30	Val-T-30	14/09/2020	Soil	x1 Jar and x1 Bag		x								
31	Val-T-31	14/09/2020	Soil	x1 Jar and x1 Bag		x								
32	Val-T-32	14/09/2020	Soil	x1 Jar and x1 Bag		x								
33	Val-T-33	14/09/2020	Soil	x1 Jar and x1 Bag		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SLR Consulting Australia Pty Ltd

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT CLIENT (Tick one)

☐		☐		☐		☐		☐	
☐		☐		☐		☐		☐	
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CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 4 of 6
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT	
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165		
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: STP (S-26, S-12, EA200F)	VAL (S-16, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
34	Val-T-34	14/09/2020	Soil	x1 Jar and x1 Bag		x								24 Hrs TAT Please
35	Val-T-35	15/09/2020	Soil	x1 Jar and x1 Bag		x								
36	Val-T-36	16/09/2020	Soil	x1 Jar and x1 Bag		x								
37	Val-T-37	17/09/2020	Soil	x1 Jar and x1 Bag		x								
38	Val-T-38	18/09/2020	Soil	x1 Jar and x1 Bag		x								
39	Val-T-39	19/09/2020	Soil	x1 Jar and x1 Bag		x								
40	Val-T-40	20/09/2020	Soil	x1 Jar and x1 Bag		x								
41	Val-T-41	21/09/2020	Soil	x1 Jar and x1 Bag		x								
42	Val-T-42	22/09/2020	Soil	x1 Jar and x1 Bag		x								
43	Val-T-43	23/09/2020	Soil	x1 Jar and x1 Bag		x								
44	Val-T-44	24/09/2020	Soil	x1 Jar and x1 Bag		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

						Temperature Received:
Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT / OFFICE (Tick one)

CLIENT: SLR Consulting	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 5 of 6	
PROJECT: John Stokes Square	LABORATORY ADDRESS:	☐ Standard TAT		
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua	☒ Non Standard or Urgent TAT		
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165			
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com.au			

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos (in soil only) (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
45	Val-T-45	14/09/2020	Soil	x1 Jar and x1 Bag		x								24 Hrs TAT Please
46	Val-T-46	14/09/2020	Soil	x1 Jar and x1 Bag		x								
47	Val-T-47	14/09/2020	Soil	x1 Jar and x1 Bag		x								
48	Val-T-48	14/09/2020	Soil	x1 Jar and x1 Bag		x								
49	Val-T-49	14/09/2020	Soil	x1 Jar and x1 Bag		x								
50	Val-T-50	14/09/2020	Soil	x1 Jar and x1 Bag		x								
51	QC24	14/09/2020	Soil	x1 Jar and x1 Bag		x								
52	QC25	14/09/2020	Soil	x1 Jar and x1 Bag		x								
53	NR QC26	14/09/2020	Soil	x1 Jar and x1 Bag		x								
54	TB03	14/09/2020	Soil	X1 Jar		x	No EA200 for TB03							
55	Val-QC01													

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time 14/09/2020	Received by	Sign	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

Extra

56. QC02 - 10.9.20
57. QC03 - 10.9.20
58. QC04 - 10.9.20
59. QC05 10.9.20

60. Val-T-QC-1 - 14.9.20
61. QC2
62. QC3

63. Val-18C 10.09.20
64. TP03 11.09.20
65. TP-04 14.09.20

Kim Phan

From: Adrian Degenaar
Sent: Wednesday, 16 September 2020 8:39 AM
To: Kim Phan; Uma Nagendiram
Cc: Helen Simpson
Subject: FW: [EXTERNAL] - RE: COC for soil samples from yesterday
Attachments: CoC- JSS_Val_14092020 Updated.xlsx; CoC- JSS-STP-14092020 Updated.xlsx; CoC- JSS-T-14092020 Updated.xlsx

Hi Kim and Uma

Robin has requested that the analysis for the trip blanks be cancelled for these work orders. Please see email below.

Kind regards,

ES2032486

Adrian Degenaar
Services Representative, Environmental
Darwin

T +61 8 8942 2608 M +0488 073 271
adrian.degenaar@alsglobal.com
Unit 4/16 Charlton Court
Woolner NT 0820 AUSTRALIA

Environmental Division
Sydney
Work Order Reference
ES2032486

Telephone : - 61-2-8784 8555

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EnviroMail™ 128 – Revised PFAS Bottle Requirements

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From: Robin Birua <RBirua@slrconsulting.com>
Sent: Tuesday, 15 September 2020 3:56 PM
To: Adrian Degenaar <adrian.degenaar@ALSGlobal.com>
Subject: [EXTERNAL] - RE: COC for soil samples from yesterday

CAUTION: This email originated from outside of ALS. Do not click links or open attachments unless you recognize the sender and are sure content is relevant to you.

Hi Adrian,
Please ignore the analysis of trip blanks from all three COCs. I was notified that we do not submit separate trip blanks.
Thanks heaves.

Robin Birua
Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government,
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

+61 8 8998 0100
RBirua@slrconsulting.com

SLR Consulting Australia Pty Ltd
21 Parap Rd, Parap, NT, Australia, 0820

Follow us on LinkedIn Winner: RoSPA President's Award 2020

From: Robin Birua <RBirua@slrconsulting.com>
Sent: Tuesday, 15 September 2020 12:22 PM
To: Adrian Degenaar <adrian.degenaar@ALSGlobal.com>
Subject: COC for soil samples from yesterday

Hi mate,
Please see attached coc for soil samples we submitted yesterday.
Cheers

SLR

Robin Birua
Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government,
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

+61 8 8998 0100
RBirua@slrconsulting.com

SLR Consulting Australia Pty Ltd
21 Parap Rd, Parap, NT, Australia, 0820

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SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2032486**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 4
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 15-Sep-2020 10:20	Issue Date	: 18-Sep-2020
Client Requested Due Date	: 21-Sep-2020	Scheduled Reporting Date	: **21-Sep-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: 7	Temperature	: 26.5' C
Receipt Detail	:	No. of samples received / analysed	: 55 / 53

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Samples #51 - 54 were not received.**
- **Samples #55 - 65 received extra, placed on hold**
- **18/09/2020: This is an updated SRN which indicates analysis for samples #60 - #62 and removed samples #55-#59 to ES2032454, sample #63 to ES2032260.**
- **18/09/2020: This is an updated SRN which indicates analyis for samples 60-62.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2032486-001	11-Sep-2020 00:00	Val-T-01		✓	✓	✓	✓
ES2032486-002	11-Sep-2020 00:00	Val-T-02		✓	✓	✓	✓
ES2032486-003	11-Sep-2020 00:00	Val-T-03		✓	✓	✓	✓
ES2032486-004	11-Sep-2020 00:00	Val-T-04		✓	✓	✓	✓
ES2032486-005	11-Sep-2020 00:00	Val-T-05		✓	✓	✓	✓
ES2032486-006	11-Sep-2020 00:00	Val-T-06		✓	✓	✓	✓
ES2032486-007	11-Sep-2020 00:00	Val-T-07		✓	✓	✓	✓
ES2032486-008	11-Sep-2020 00:00	Val-T-08		✓	✓	✓	✓
ES2032486-009	11-Sep-2020 00:00	Val-T-09		✓	✓	✓	✓
ES2032486-010	11-Sep-2020 00:00	Val-T-10		✓	✓	✓	✓
ES2032486-011	11-Sep-2020 00:00	Val-T-11		✓	✓	✓	✓
ES2032486-012	11-Sep-2020 00:00	Val-T-12		✓	✓	✓	✓
ES2032486-013	11-Sep-2020 00:00	Val-T-13		✓	✓	✓	✓
ES2032486-014	11-Sep-2020 00:00	Val-T-14		✓	✓	✓	✓
ES2032486-015	11-Sep-2020 00:00	Val-T-15		✓	✓	✓	✓
ES2032486-016	11-Sep-2020 00:00	Val-T-16		✓	✓	✓	✓
ES2032486-017	11-Sep-2020 00:00	Val-T-17		✓	✓	✓	✓
ES2032486-018	11-Sep-2020 00:00	Val-T-18		✓	✓	✓	✓
ES2032486-019	11-Sep-2020 00:00	Val-T-19		✓	✓	✓	✓
ES2032486-020	11-Sep-2020 00:00	Val-T-20		✓	✓	✓	✓
ES2032486-021	11-Sep-2020 00:00	Val-T-21		✓	✓	✓	✓
ES2032486-022	11-Sep-2020 00:00	Val-T-22		✓	✓	✓	✓
ES2032486-023	14-Sep-2020 00:00	Val-T-23		✓	✓	✓	✓
ES2032486-024	14-Sep-2020 00:00	Val-T-24		✓	✓	✓	✓
ES2032486-025	14-Sep-2020 00:00	Val-T-25		✓	✓	✓	✓
ES2032486-026	14-Sep-2020 00:00	Val-T-26		✓	✓	✓	✓
ES2032486-027	14-Sep-2020 00:00	Val-T-27		✓	✓	✓	✓
ES2032486-028	14-Sep-2020 00:00	Val-T-28		✓	✓	✓	✓
ES2032486-029	14-Sep-2020 00:00	Val-T-29		✓	✓	✓	✓
ES2032486-030	14-Sep-2020 00:00	Val-T-30		✓	✓	✓	✓
ES2032486-031	14-Sep-2020 00:00	Val-T-31		✓	✓	✓	✓
ES2032486-032	14-Sep-2020 00:00	Val-T-32		✓	✓	✓	✓
ES2032486-033	14-Sep-2020 00:00	Val-T-33		✓	✓	✓	✓
ES2032486-034	14-Sep-2020 00:00	Val-T-34		✓	✓	✓	✓
ES2032486-035	14-Sep-2020 00:00	Val-T-35		✓	✓	✓	✓

			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2032486-036	14-Sep-2020 00:00	Val-T-36		✓	✓	✓	✓
ES2032486-037	14-Sep-2020 00:00	Val-T-37		✓	✓	✓	✓
ES2032486-038	14-Sep-2020 00:00	Val-T-38		✓	✓	✓	✓
ES2032486-039	14-Sep-2020 00:00	Val-T-39		✓	✓	✓	✓
ES2032486-040	14-Sep-2020 00:00	Val-T-40		✓	✓	✓	✓
ES2032486-041	14-Sep-2020 00:00	Val-T-41		✓	✓	✓	✓
ES2032486-042	14-Sep-2020 00:00	Val-T-42		✓	✓	✓	✓
ES2032486-043	14-Sep-2020 00:00	Val-T-43		✓	✓	✓	✓
ES2032486-044	14-Sep-2020 00:00	Val-T-44		✓	✓	✓	✓
ES2032486-045	14-Sep-2020 00:00	Val-T-45		✓	✓	✓	✓
ES2032486-046	14-Sep-2020 00:00	Val-T-46		✓	✓	✓	✓
ES2032486-047	14-Sep-2020 00:00	Val-T-47		✓	✓	✓	✓
ES2032486-048	14-Sep-2020 00:00	Val-T-48		✓	✓	✓	✓
ES2032486-049	14-Sep-2020 00:00	Val-T-49		✓	✓	✓	✓
ES2032486-050	14-Sep-2020 00:00	Val-T-50		✓	✓	✓	✓
ES2032486-060	14-Sep-2020 00:00	QC24		✓	✓	✓	✓
ES2032486-061	14-Sep-2020 00:00	QC-2		✓	✓	✓	✓
ES2032486-062	14-Sep-2020 00:00	QC-3		✓	✓	✓	✓
ES2032486-064	11-Sep-2020 00:00	TP-03	✓				
ES2032486-065	14-Sep-2020 00:00	TP-04	✓				

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2032486**	Page	: 1 of 49
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020 10:20
Order number	: ----	Date Analysis Commenced	: 16-Sep-2020
C-O-C number	: ----	Issue Date	: 21-Sep-2020 17:44
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 55		
No. of samples analysed	: 53		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Christopher Owler	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005: Poor precision was obtained for Chromium on sample ES2032486-11 Results have been confirmed by re-extraction and reanalysis.
- EP068: Positive result has been confirmed by re-extraction and re-analysis.
- EG005: Poor precision was obtained for Chromium on sample ES2032486-41. Results have been confirmed by re-extraction and re-analysis.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-01	Val-T-02	Val-T-03	Val-T-04	Val-T-05
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-001	ES2032486-002	ES2032486-003	ES2032486-004	ES2032486-005
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		14.9	15.3	12.9	7.9	11.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No*	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		Ch	-	-	-	-
Sample weight (dry)	----	0.01	g		76.9	62.8	61.7	48.3	53.8
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		6	<5	5	6	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		62	60	140	74	80
Copper	7440-50-8	5	mg/kg		<5	5	<5	5	5
Lead	7439-92-1	5	mg/kg		11	8	10	9	9
Nickel	7440-02-0	2	mg/kg		4	5	5	6	5
Zinc	7440-66-6	5	mg/kg		<5	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-01	Val-T-02	Val-T-03	Val-T-04	Val-T-05
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-001	ES2032486-002	ES2032486-003	ES2032486-004	ES2032486-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-01	Val-T-02	Val-T-03	Val-T-04	Val-T-05
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-001	ES2032486-002	ES2032486-003	ES2032486-004	ES2032486-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-01	Val-T-02	Val-T-03	Val-T-04	Val-T-05
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-001	ES2032486-002	ES2032486-003	ES2032486-004	ES2032486-005
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**90.4**	**73.7**	**73.9**	**71.2**	**79.7**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**88.3**	**68.7**	**61.2**	**63.0**	**64.7**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**97.6**	**102**	**86.3**	**101**	**96.6**
2-Chlorophenol-D4	93951-73-6	0.5	%		**102**	**99.9**	**95.6**	**99.5**	**102**
2.4.6-Tribromophenol	118-79-6	0.5	%		**85.2**	**83.9**	**77.7**	**78.1**	**77.5**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**99.8**	**100**	**95.5**	**99.3**	**98.5**
Anthracene-d10	1719-06-8	0.5	%		**98.4**	**101**	**96.7**	**102**	**100**
4-Terphenyl-d14	1718-51-0	0.5	%		**91.2**	**92.4**	**92.6**	**92.2**	**91.8**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**94.2**	**96.1**	**90.9**	**91.4**	**93.8**
Toluene-D8	2037-26-5	0.2	%		**100**	**103**	**93.7**	**89.8**	**93.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**104**	**105**	**99.3**	**97.9**	**100**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-06	Val-T-07	Val-T-08	Val-T-09	Val-T-10
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-006	ES2032486-007	ES2032486-008	ES2032486-009	ES2032486-010
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		3.2	7.5	8.8	9.7	12.7
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		60.3	52.6	49.4	51.6	31.7
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	No	No	No
Organic Fibre	----	0.1	g/kg		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	6	5	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		68	67	63	66	127
Copper	7440-50-8	5	mg/kg		6	6	6	6	<5
Lead	7439-92-1	5	mg/kg		8	8	9	8	8
Nickel	7440-02-0	2	mg/kg		7	7	7	6	3
Zinc	7440-66-6	5	mg/kg		<5	<5	7	6	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	0.14	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-06	Val-T-07	Val-T-08	Val-T-09	Val-T-10
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-006	ES2032486-007	ES2032486-008	ES2032486-009	ES2032486-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	**0.14**	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-06	Val-T-07	Val-T-08	Val-T-09	Val-T-10
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-006	ES2032486-007	ES2032486-008	ES2032486-009	ES2032486-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-06	Val-T-07	Val-T-08	Val-T-09	Val-T-10
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-006	ES2032486-007	ES2032486-008	ES2032486-009	ES2032486-010
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**80.5**	**77.1**	**79.8**	**79.2**	**66.2**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**62.2**	**59.5**	**77.0**	**52.8**	**52.3**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**99.8**	**103**	**99.8**	**101**	**92.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**94.5**	**101**	**94.5**	**96.5**	**95.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**50.7**	**57.6**	**71.7**	**73.6**	**71.2**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**97.9**	**98.9**	**97.1**	**97.4**	**93.8**
Anthracene-d10	1719-06-8	0.5	%		**99.6**	**99.4**	**95.3**	**97.6**	**95.1**
4-Terphenyl-d14	1718-51-0	0.5	%		**89.7**	**90.6**	**89.1**	**90.2**	**87.8**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**96.5**	**101**	**94.9**	**90.9**	**92.4**
Toluene-D8	2037-26-5	0.2	%		**102**	**100**	**96.8**	**93.0**	**94.8**
4-Bromofluorobenzene	460-00-4	0.2	%		**109**	**108**	**105**	**97.1**	**103**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-11	Val-T-12	Val-T-13	Val-T-14	Val-T-15
			Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-011	ES2032486-012	ES2032486-013	ES2032486-014	ES2032486-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.0	8.5	9.1	14.3	9.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	56.6	61.7	70.3	42.8	50.0
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	25	36	28	79	75
Copper	7440-50-8	5	mg/kg	6	<5	<5	<5	6
Lead	7439-92-1	5	mg/kg	7	6	<5	6	7
Nickel	7440-02-0	2	mg/kg	6	4	3	4	6
Zinc	7440-66-6	5	mg/kg	11	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-11	Val-T-12	Val-T-13	Val-T-14	Val-T-15
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-011	ES2032486-012	ES2032486-013	ES2032486-014	ES2032486-015
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-11	Val-T-12	Val-T-13	Val-T-14	Val-T-15
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-011	ES2032486-012	ES2032486-013	ES2032486-014	ES2032486-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-11	Val-T-12	Val-T-13	Val-T-14	Val-T-15
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-011	ES2032486-012	ES2032486-013	ES2032486-014	ES2032486-015
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**66.8**	**73.6**	**91.5**	**82.2**	**96.8**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**61.7**	**70.3**	**54.9**	**67.7**	**59.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**90.3**	**101**	**102**	**96.9**	**101**
2-Chlorophenol-D4	93951-73-6	0.5	%		**92.1**	**102**	**101**	**97.3**	**99.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**71.8**	**83.6**	**85.1**	**74.2**	**73.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**95.5**	**97.4**	**97.9**	**94.7**	**99.3**
Anthracene-d10	1719-06-8	0.5	%		**99.6**	**97.7**	**99.2**	**96.6**	**100**
4-Terphenyl-d14	1718-51-0	0.5	%		**88.0**	**90.7**	**91.8**	**89.5**	**92.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**93.4**	**74.7**	**84.9**	**92.3**	**82.9**
Toluene-D8	2037-26-5	0.2	%		**100**	**90.7**	**95.7**	**101**	**91.7**
4-Bromofluorobenzene	460-00-4	0.2	%		**110**	**93.1**	**101**	**105**	**95.8**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-16	Val-T-17	Val-T-18	Val-T-19	Val-T-20
			Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-016	ES2032486-017	ES2032486-018	ES2032486-019	ES2032486-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	10.8	5.0	9.0	6.3	5.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	59.8	62.3	53.4	47.3	60.3
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	43	122	80	95	9
Copper	7440-50-8	5	mg/kg	5	6	7	7	6
Lead	7439-92-1	5	mg/kg	7	8	9	8	6
Nickel	7440-02-0	2	mg/kg	5	5	5	4	3
Zinc	7440-66-6	5	mg/kg	<5	<5	17	<5	16
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-16	Val-T-17	Val-T-18	Val-T-19	Val-T-20
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-016	ES2032486-017	ES2032486-018	ES2032486-019	ES2032486-020
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-16	Val-T-17	Val-T-18	Val-T-19	Val-T-20
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-016	ES2032486-017	ES2032486-018	ES2032486-019	ES2032486-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-16	Val-T-17	Val-T-18	Val-T-19	Val-T-20
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00	11-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-016	ES2032486-017	ES2032486-018	ES2032486-019	ES2032486-020
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**91.3**	**76.4**	**72.8**	**57.0**	**83.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**108**	**80.2**	**87.5**	**71.8**	**70.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**94.6**	**101**	**101**	**101**	**102**
2-Chlorophenol-D4	93951-73-6	0.5	%		**97.7**	**96.2**	**102**	**99.7**	**97.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		**75.1**	**59.8**	**75.9**	**62.3**	**48.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**96.5**	**95.2**	**97.9**	**97.6**	**98.7**
Anthracene-d10	1719-06-8	0.5	%		**96.8**	**97.4**	**99.0**	**99.0**	**100**
4-Terphenyl-d14	1718-51-0	0.5	%		**89.4**	**89.2**	**91.1**	**91.2**	**92.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**77.7**	**82.9**	**80.7**	**82.9**	**85.0**
Toluene-D8	2037-26-5	0.2	%		**86.9**	**94.5**	**91.4**	**90.0**	**90.4**
4-Bromofluorobenzene	460-00-4	0.2	%		**90.2**	**97.2**	**93.9**	**92.1**	**92.5**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-21	Val-T-22	Val-T-23	Val-T-24	Val-T-25
			Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-021	ES2032486-022	ES2032486-023	ES2032486-024	ES2032486-025
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.4	4.8	4.6	5.6	7.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	72.0	62.9	57.6	62.1	71.5
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	73	35	43	57	36
Copper	7440-50-8	5	mg/kg	9	6	<5	<5	10
Lead	7439-92-1	5	mg/kg	9	8	6	8	5
Nickel	7440-02-0	2	mg/kg	7	5	4	4	4
Zinc	7440-66-6	5	mg/kg	<5	5	<5	<5	5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-21	Val-T-22	Val-T-23	Val-T-24	Val-T-25
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-021	ES2032486-022	ES2032486-023	ES2032486-024	ES2032486-025
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-21	Val-T-22	Val-T-23	Val-T-24	Val-T-25
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-021	ES2032486-022	ES2032486-023	ES2032486-024	ES2032486-025
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-21	Val-T-22	Val-T-23	Val-T-24	Val-T-25
				Client sampling date / time	11-Sep-2020 00:00	11-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-021	ES2032486-022	ES2032486-023	ES2032486-024	ES2032486-025
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**101**	**96.8**	**84.8**	**79.9**	**81.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**96.0**	**54.7**	**84.3**	**63.2**	**68.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**106**	**103**	**104**	**103**	**101**
2-Chlorophenol-D4	93951-73-6	0.5	%		**104**	**104**	**104**	**104**	**100**
2.4.6-Tribromophenol	118-79-6	0.5	%		**51.7**	**47.8**	**48.1**	**50.3**	**41.9**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**114**	**109**	**103**	**108**	**105**
Anthracene-d10	1719-06-8	0.5	%		**107**	**104**	**107**	**109**	**103**
4-Terphenyl-d14	1718-51-0	0.5	%		**105**	**98.4**	**104**	**97.9**	**98.0**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**83.8**	**81.3**	**85.2**	**80.4**	**83.7**
Toluene-D8	2037-26-5	0.2	%		**90.0**	**89.9**	**93.0**	**89.8**	**92.2**
4-Bromofluorobenzene	460-00-4	0.2	%		**92.3**	**90.4**	**94.5**	**90.0**	**93.2**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-26	Val-T-27	Val-T-28	Val-T-29	Val-T-30
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-026	ES2032486-027	ES2032486-028	ES2032486-029	ES2032486-030
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	5.9	9.4	8.5	9.4	7.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	63.2	53.2	71.4	89.5	60.9
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	41	35	60	56	63
Copper	7440-50-8	5	mg/kg	26	<5	5	5	6
Lead	7439-92-1	5	mg/kg	6	<5	9	6	7
Nickel	7440-02-0	2	mg/kg	4	2	4	5	4
Zinc	7440-66-6	5	mg/kg	<5	<5	12	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-26	Val-T-27	Val-T-28	Val-T-29	Val-T-30
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-026	ES2032486-027	ES2032486-028	ES2032486-029	ES2032486-030
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-26	Val-T-27	Val-T-28	Val-T-29	Val-T-30
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-026	ES2032486-027	ES2032486-028	ES2032486-029	ES2032486-030
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-26	Val-T-27	Val-T-28	Val-T-29	Val-T-30
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-026	ES2032486-027	ES2032486-028	ES2032486-029	ES2032486-030
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**77.0**	**79.9**	**83.2**	**70.4**	**79.2**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**64.2**	**72.4**	**94.5**	**79.2**	**98.5**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**103**	**101**	**106**	**102**	**97.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**104**	**100**	**106**	**103**	**100**
2.4.6-Tribromophenol	118-79-6	0.5	%		**46.0**	**44.5**	**51.0**	**41.9**	**48.5**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**108**	**107**	**111**	**109**	**102**
Anthracene-d10	1719-06-8	0.5	%		**104**	**101**	**110**	**106**	**102**
4-Terphenyl-d14	1718-51-0	0.5	%		**103**	**103**	**110**	**104**	**98.5**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**84.6**	**79.0**	**84.9**	**84.5**	**86.0**
Toluene-D8	2037-26-5	0.2	%		**89.6**	**88.6**	**89.1**	**88.1**	**91.8**
4-Bromofluorobenzene	460-00-4	0.2	%		**92.8**	**89.2**	**90.6**	**90.8**	**93.8**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-31	Val-T-32	Val-T-33	Val-T-34	Val-T-35
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-031	ES2032486-032	ES2032486-033	ES2032486-034	ES2032486-035
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.9	8.3	8.4	14.4	12.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	83.0	77.4	61.4	41.2	65.4
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	6	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	20	23	43	88	103
Copper	7440-50-8	5	mg/kg	5	<5	<5	5	5
Lead	7439-92-1	5	mg/kg	5	<5	5	7	7
Nickel	7440-02-0	2	mg/kg	5	2	3	3	4
Zinc	7440-66-6	5	mg/kg	10	126	8	<5	58
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-31	Val-T-32	Val-T-33	Val-T-34	Val-T-35
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-031	ES2032486-032	ES2032486-033	ES2032486-034	ES2032486-035
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-31	Val-T-32	Val-T-33	Val-T-34	Val-T-35
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-031	ES2032486-032	ES2032486-033	ES2032486-034	ES2032486-035
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-31	Val-T-32	Val-T-33	Val-T-34	Val-T-35
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-031	ES2032486-032	ES2032486-033	ES2032486-034	ES2032486-035
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**83.2**	**71.7**	**64.2**	**114**	**70.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**88.6**	**86.6**	**79.3**	**114**	**79.5**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**99.8**	**100**	**94.3**	**101**	**104**
2-Chlorophenol-D4	93951-73-6	0.5	%		**99.4**	**102**	**96.2**	**101**	**107**
2.4.6-Tribromophenol	118-79-6	0.5	%		**40.0**	**49.4**	**52.4**	**53.1**	**57.7**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**112**	**114**	**102**	**105**	**111**
Anthracene-d10	1719-06-8	0.5	%		**102**	**103**	**95.0**	**100**	**110**
4-Terphenyl-d14	1718-51-0	0.5	%		**102**	**106**	**97.5**	**95.4**	**105**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**87.6**	**92.6**	**97.1**	**95.6**	**90.2**
Toluene-D8	2037-26-5	0.2	%		**88.7**	**94.1**	**99.2**	**99.2**	**91.4**
4-Bromofluorobenzene	460-00-4	0.2	%		**92.6**	**93.6**	**98.1**	**98.1**	**91.4**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-36	Val-T-37	Val-T-38	Val-T-39	Val-T-40
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-036	ES2032486-037	ES2032486-038	ES2032486-039	ES2032486-040
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.4	8.4	20.8	8.8	6.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	67.7	41.3	88.0	55.1	62.1
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	78	48	80	27	41
Copper	7440-50-8	5	mg/kg	6	6	<5	<5	6
Lead	7439-92-1	5	mg/kg	8	7	6	<5	6
Nickel	7440-02-0	2	mg/kg	6	6	4	2	5
Zinc	7440-66-6	5	mg/kg	<5	51	7	5	14
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-36	Val-T-37	Val-T-38	Val-T-39	Val-T-40
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-036	ES2032486-037	ES2032486-038	ES2032486-039	ES2032486-040
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-36	Val-T-37	Val-T-38	Val-T-39	Val-T-40
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-036	ES2032486-037	ES2032486-038	ES2032486-039	ES2032486-040
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-36	Val-T-37	Val-T-38	Val-T-39	Val-T-40
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-036	ES2032486-037	ES2032486-038	ES2032486-039	ES2032486-040
				Result	Result	Result	Result	Result
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**90.6**	**90.1**	**118**	**78.0**	**67.0**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**112**	**116**	**88.7**	**70.1**	**76.1**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**102**	**102**	**112**	**101**	**104**
2-Chlorophenol-D4	93951-73-6	0.5	%	**104**	**103**	**111**	**102**	**104**
2.4.6-Tribromophenol	118-79-6	0.5	%	**47.4**	**51.4**	**67.2**	**50.8**	**51.7**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**114**	**110**	**116**	**109**	**110**
Anthracene-d10	1719-06-8	0.5	%	**105**	**104**	**110**	**103**	**104**
4-Terphenyl-d14	1718-51-0	0.5	%	**107**	**105**	**106**	**106**	**105**
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**95.8**	**93.7**	**80.9**	**92.0**	**90.6**
Toluene-D8	2037-26-5	0.2	%	**101**	**100**	**78.5**	**93.0**	**92.3**
4-Bromofluorobenzene	460-00-4	0.2	%	**99.8**	**99.0**	**81.6**	**90.3**	**89.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-41	Val-T-42	Val-T-43	Val-T-44	Val-T-45
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-041	ES2032486-042	ES2032486-043	ES2032486-044	ES2032486-045
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.6	6.9	3.0	3.9	5.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	81.0	72.9	92.0	84.1	72.5
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	6	<5	6	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	69	70	43	55	51
Copper	7440-50-8	5	mg/kg	9	8	5	9	8
Lead	7439-92-1	5	mg/kg	7	8	6	6	7
Nickel	7440-02-0	2	mg/kg	8	6	6	6	8
Zinc	7440-66-6	5	mg/kg	19	15	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-41	Val-T-42	Val-T-43	Val-T-44	Val-T-45
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-041	ES2032486-042	ES2032486-043	ES2032486-044	ES2032486-045
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-41	Val-T-42	Val-T-43	Val-T-44	Val-T-45
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-041	ES2032486-042	ES2032486-043	ES2032486-044	ES2032486-045
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-41	Val-T-42	Val-T-43	Val-T-44	Val-T-45
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-041	ES2032486-042	ES2032486-043	ES2032486-044	ES2032486-045
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**83.8**	**85.0**	**84.5**	**81.0**	**82.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**72.9**	**81.8**	**91.8**	**80.3**	**67.8**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**83.2**	**86.1**	**84.9**	**86.4**	**86.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**86.4**	**88.4**	**88.0**	**88.2**	**88.9**
2.4.6-Tribromophenol	118-79-6	0.5	%		**53.1**	**52.0**	**55.1**	**52.7**	**52.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**96.8**	**99.2**	**99.6**	**99.5**	**100**
Anthracene-d10	1719-06-8	0.5	%		**69.0**	**71.5**	**88.2**	**89.8**	**89.2**
4-Terphenyl-d14	1718-51-0	0.5	%		**118**	**120**	**100**	**99.6**	**102**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.3**	**95.8**	**95.9**	**96.8**	**98.7**
Toluene-D8	2037-26-5	0.2	%		**98.3**	**98.1**	**99.0**	**99.6**	**102**
4-Bromofluorobenzene	460-00-4	0.2	%		**96.0**	**95.6**	**96.8**	**97.1**	**96.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	Val-T-46	Val-T-47	Val-T-48	Val-T-49	Val-T-50
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2032486-046	ES2032486-047	ES2032486-048	ES2032486-049	ES2032486-050
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.9	4.1	2.7	6.0	5.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	69.1	67.5	73.4	64.2	73.3
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	6	6	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	66	40	42	40	51
Copper	7440-50-8	5	mg/kg	7	6	6	7	113
Lead	7439-92-1	5	mg/kg	7	6	6	6	7
Nickel	7440-02-0	2	mg/kg	8	7	5	6	8
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	<5	6
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-46	Val-T-47	Val-T-48	Val-T-49	Val-T-50
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-046	ES2032486-047	ES2032486-048	ES2032486-049	ES2032486-050
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-46	Val-T-47	Val-T-48	Val-T-49	Val-T-50
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-046	ES2032486-047	ES2032486-048	ES2032486-049	ES2032486-050
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-T-46	Val-T-47	Val-T-48	Val-T-49	Val-T-50
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2032486-046	ES2032486-047	ES2032486-048	ES2032486-049	ES2032486-050
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**83.0**	**82.2**	**70.6**	**70.9**	**79.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**78.9**	**74.2**	**68.5**	**72.4**	**86.8**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**85.3**	**85.2**	**85.2**	**85.6**	**82.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**88.0**	**87.9**	**86.9**	**88.3**	**85.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**50.7**	**48.0**	**41.4**	**47.1**	**48.9**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**97.6**	**98.4**	**98.1**	**99.5**	**94.9**
Anthracene-d10	1719-06-8	0.5	%		**86.7**	**87.4**	**88.2**	**88.1**	**84.1**
4-Terphenyl-d14	1718-51-0	0.5	%		**100**	**101**	**100**	**102**	**98.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.5**	**98.6**	**99.8**	**99.1**	**97.0**
Toluene-D8	2037-26-5	0.2	%		**95.3**	**98.6**	**104**	**101**	**98.6**
4-Bromofluorobenzene	460-00-4	0.2	%		**92.2**	**97.7**	**99.9**	**97.9**	**95.1**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	QC24	QC-2	QC-3	----	----
			Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2032486-060	ES2032486-061	ES2032486-062	--------	--------
				Result	Result	Result	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.2	3.2	13.1	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	----	----
Asbestos Type	1332-21-4	-	--	-	-	-	----	----
Sample weight (dry)	----	0.01	g	90.3	71.2	37.7	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	----	----
Organic Fibre	----	0.1	g/kg	No	No	No	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	7	12	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	70	126	195	----	----
Copper	7440-50-8	5	mg/kg	7	6	6	----	----
Lead	7439-92-1	5	mg/kg	8	9	13	----	----
Nickel	7440-02-0	2	mg/kg	8	6	8	----	----
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC24	QC-2	QC-3	----	----
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2032486-060	ES2032486-061	ES2032486-062	--------	--------
					Result	Result	Result	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC24	QC-2	QC-3	----	----
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2032486-060	ES2032486-061	ES2032486-062	--------	--------
					Result	Result	Result	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC24	QC-2	QC-3	----	----
				Client sampling date / time	14-Sep-2020 00:00	14-Sep-2020 00:00	14-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2032486-060	ES2032486-061	ES2032486-062	--------	--------
					Result	Result	Result	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**74.4**	**72.4**	**85.1**	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**67.0**	**61.4**	**70.5**	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**95.9**	**95.3**	**94.4**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**98.2**	**97.4**	**97.9**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**58.0**	**50.1**	**55.1**	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**108**	**103**	**101**	----	----
Anthracene-d10	1719-06-8	0.5	%		**100**	**102**	**98.3**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**100**	**98.2**	**98.2**	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**92.0**	**89.9**	**79.5**	----	----
Toluene-D8	2037-26-5	0.2	%		**105**	**85.4**	**89.4**	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**113**	**87.0**	**98.0**	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	Val-T-01 - 11-Sep-2020 00:00	Mid brown soil containing one fragment of asbestos fibre board approximately 1x1x0.5mm.
EA200: Description	Val-T-02 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-03 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-04 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-05 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-06 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-07 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-08 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-09 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-10 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-11 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-12 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-13 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-14 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-15 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-16 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-17 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-18 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-19 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-20 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-21 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-22 - 11-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-23 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-24 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-25 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-26 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-27 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-28 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-29 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-30 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-31 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-32 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-33 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-34 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-35 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-36 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-37 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-38 - 14-Sep-2020 00:00	Mid brown soil.

Sub-Matrix: **SOIL**

Method: Compound	*Client sample ID - Client sampling date / time*	*Analytical Results*
EA200: Description	Val-T-39 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-40 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-41 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-42 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-43 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-44 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-45 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-46 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-47 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-48 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-49 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-T-50 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	QC24 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	QC-2 - 14-Sep-2020 00:00	Mid brown soil.
EA200: Description	QC-3 - 14-Sep-2020 00:00	Mid brown soil.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2032486**	Page	: 1 of 34
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020
Order number	: ----	Date Analysis Commenced	: 16-Sep-2020
C-O-C number	: ----	Issue Date	: 21-Sep-2020
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 55		
No. of samples analysed	: 53		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Christopher Owler	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3262328)									
ES2032486-002	Val-T-02	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	60	58	5.17	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	5	5	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	5	6	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	10	22.7	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
ES2032486-011	Val-T-11	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	25	# 43	52.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	5	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	7	7	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	11	8	33.3	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3262329)									
ES2032486-021	Val-T-21	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	73	78	7.47	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	7	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	9	9	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	9	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
ES2032486-031	Val-T-31	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	20	31	43.5	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	5	4	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3262329) - continued									
ES2032486-031	Val-T-31	EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	5	5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	5	5	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	10	9	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3262333)									
ES2032486-041	Val-T-41	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	69	# 56	21.2	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	8	7	14.8	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	6	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	9	8	13.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	7	8	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	19	14	29.3	No Limit
ES2032561-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	24	23	0.00	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	8	8	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	27	27	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	14	13	8.20	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3263863)									
ES2032260-077	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	252	273	8.05	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	7	19.1	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	15	14	12.6	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	6	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	15	15	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	7	39.0	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3264775)									
ES2032486-060	QC24	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	70	70	0.00	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	8	8	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	7	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	7	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3262331)									
ES2032486-003	Val-T-03	EA055: Moisture Content	----	0.1	%	12.9	13.4	3.62	0% - 50%
ES2032486-014	Val-T-14	EA055: Moisture Content	----	0.1	%	14.3	14.2	0.772	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3262332)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3262332) - continued									
ES2032486-023	Val-T-23	EA055: Moisture Content	----	0.1	%	4.6	4.8	3.75	No Limit
ES2032486-034	Val-T-34	EA055: Moisture Content	----	0.1	%	14.4	14.9	3.39	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3262335)									
ES2032486-043	Val-T-43	EA055: Moisture Content	----	0.1	%	3.0	3.7	20.0	No Limit
ES2032561-004	Anonymous	EA055: Moisture Content	----	0.1	%	9.7	9.4	3.24	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3263867)									
ES2032486-062	QC-3	EA055: Moisture Content	----	0.1	%	13.1	13.8	4.72	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3264776)									
ES2032820-002	Anonymous	EA055: Moisture Content	----	0.1	%	10.4	10.2	1.97	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3262327)									
ES2032486-002	Val-T-02	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032486-011	Val-T-11	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3262330)									
ES2032486-021	Val-T-21	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032486-031	Val-T-31	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3262334)									
ES2032486-041	Val-T-41	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2032561-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3263862)									
ES2032260-077	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3264774)									
ES2032486-060	QC24	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3258610)									
ES2032486-001	Val-T-01	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3258610) - continued									
ES2032486-001	Val-T-01	EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032486-011	Val-T-11	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3258616)									
ES2032486-021	Val-T-21	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3258616) - continued									
ES2032486-021	Val-T-21	EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032486-031	Val-T-31	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3264307)									
ES2032454-066	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3264307) - continued									
ES2032454-066	Anonymous	EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3264399)									
ES2032486-041	Val-T-41	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032486-049	Val-T-49	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3264399) - continued									
ES2032486-049	Val-T-49	EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3258610)									
ES2032486-001	Val-T-01	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032486-011	Val-T-11	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3258610) - continued									
ES2032486-011	Val-T-11	EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3258616)									
ES2032486-021	Val-T-21	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032486-031	Val-T-31	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3258616) - continued									
ES2032486-031	Val-T-31	EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3264307)									
ES2032454-066	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3264399)									
ES2032486-041	Val-T-41	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3264399) - continued									
ES2032486-041	Val-T-41	EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2032486-049	Val-T-49	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3258609)									
ES2032486-001	Val-T-01	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3258609) - continued									
ES2032486-001	Val-T-01	EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2032486-011	Val-T-11	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3258618)									
ES2032486-021	Val-T-21	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3258618) - continued									
ES2032486-021	Val-T-21	EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2032486-031	Val-T-31	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3264306)									
ES2032454-066	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3264306) - continued									
ES2032454-066	Anonymous	EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3264398)									
ES2032486-041	Val-T-41	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2032486-049	Val-T-49	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3264398) - continued									
ES2032486-049	Val-T-49	EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3258608)									
ES2032486-001	Val-T-01	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032486-011	Val-T-11	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3258617)									
ES2032486-021	Val-T-21	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032486-031	Val-T-31	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3259965)									
ES2032265-021	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032486-002	Val-T-02	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3260525)									
ES2032486-012	Val-T-12	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032486-022	Val-T-22	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3260594)									
ES2032486-032	Val-T-32	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032486-041	Val-T-41	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3264305)									
ES2032454-066	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3264397)									
ES2032486-041	Val-T-41	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032486-049	Val-T-49	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3264423)									
ES2031442-012	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2032820-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3258608)									
ES2032486-001	Val-T-01	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032486-011	Val-T-11	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3258617)									
ES2032486-021	Val-T-21	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032486-031	Val-T-31	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3259965)									
ES2032265-021	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032486-002	Val-T-02	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3260525)									
ES2032486-012	Val-T-12	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032486-022	Val-T-22	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3260594)									
ES2032486-032	Val-T-32	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032486-041	Val-T-41	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3264305)									
ES2032454-066	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3264305) - continued									
ES2032454-066	Anonymous	EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3264397)									
ES2032486-041	Val-T-41	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2032486-049	Val-T-49	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3264423)									
ES2031442-012	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2032820-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3259965)									
ES2032265-021	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032486-002	Val-T-02	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3260525)									
ES2032486-012	Val-T-12	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032486-022	Val-T-22	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3260525) - continued									
ES2032486-022	Val-T-22	EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3260594)									
ES2032486-032	Val-T-32	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032486-041	Val-T-41	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3264423)									
ES2031442-012	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2032820-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262328)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	103	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	91.6	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	112	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	102	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	103	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	104	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	75.9	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262329)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	116	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	91.7	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	125	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	108	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	114	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	112	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	81.4	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262333)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	121	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	74.3	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	117	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	108	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	108	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	128	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	92.7	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3263863)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	120	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	116	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	130	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	129	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	117	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	118	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	126	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3264775)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	98 mg/kg	121	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	89.6	70.0	130

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3264775) - continued								
EG005T: Chromium	7440-47-3	2	mg/kg	<2	15.4 mg/kg	130	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	48 mg/kg	109	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	50 mg/kg	121	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	12.4 mg/kg	117	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	115 mg/kg	106	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262327)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	73.2	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262330)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	78.1	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262334)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	78.7	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3263862)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	91.1	70.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3264774)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	90.2	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258610)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	95.1	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	98.0	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.0	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.8	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.4	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	108	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	99.6	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.9	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	109	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	107	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	102	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	99.6	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	95.0	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	103	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258616)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258616) - continued								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.8	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	106	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	103	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.9	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.2	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	95.1	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.1	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	81.7	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.6	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	96.2	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	100	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264307)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.6	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.2	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	77.4	56.0	120

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264307) - continued								
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	83.1	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	82.7	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264399)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.8	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	95.0	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.4	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.9	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.2	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.3	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	81.0	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	83.2	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	77.7	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258610)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	77.8	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	88.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	108	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	105	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	98.7	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	105	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	99.4	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	107	70.0	116

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258610) - continued								
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	102	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	104	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	105	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	107	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	105	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	84.5	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258616)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	79.9	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.3	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	86.3	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.1	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	95.3	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	90.0	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	94.9	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	87.9	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	79.0	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.8	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	94.9	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.5	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	89.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	89.3	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	75.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.1	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	74.8	64.0	122

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307) - continued								
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.7	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.9	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	80.9	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264399)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	84.9	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	79.7	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	82.8	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.1	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	95.3	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	76.6	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.3	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	76.6	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.2	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.5	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	75.0	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	62.3	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258609)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	99.3	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	98.0	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	98.7	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	98.0	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	98.2	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	98.0	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	97.5	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	99.7	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	97.1	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	97.6	75.0	127

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report		
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258609) - continued								
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	99.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	94.6	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	96.9	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	93.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	90.1	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	87.5	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258618)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	105	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	106	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	97.6	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	106	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	101	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	106	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	97.5	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	91.6	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	93.9	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	87.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	94.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	88.8	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	95.2	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	90.5	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	99.7	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264306)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	99.5	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	97.2	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	92.6	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	101	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	98.4	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	98.1	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	94.4	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	85.8	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	88.3	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	83.7	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	95.4	74.0	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264306) - continued								
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	85.5	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	84.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	80.6	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	88.6	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264398)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	92.1	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	85.2	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	88.6	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	89.6	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	94.2	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	93.0	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	94.7	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	94.6	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	81.3	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	90.2	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	77.2	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	87.2	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	126	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	116	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	112	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	120	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3258608)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	107	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	110	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	104	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3258617)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	95.1	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	94.1	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	98.3	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259965)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	117	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3260525)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	108	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3260594)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	88.5	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264305)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	91.6	75.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264305) - continued								
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	88.3	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	98.9	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264397)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	94.5	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	97.0	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	104	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264423)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	116	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3258608)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	103	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	108	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	93.0	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3258617)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	97.1	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	98.1	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	79.0	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259965)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	117	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3260525)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	108	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3260594)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	89.0	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264305)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	89.0	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	88.4	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	79.4	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264397)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	97.8	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	97.2	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	87.4	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264423)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	121	68.4	128
EP080: BTEXN (QCLot: 3259965)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	113	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	111	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	109	65.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 3259965) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	105	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	113	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	107	63.0	119
EP080: BTEXN (QCLot: 3260525)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	93.2	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	99.8	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	97.5	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	97.2	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	102	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	93.3	63.0	119
EP080: BTEXN (QCLot: 3260594)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	92.6	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	87.6	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	88.8	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	85.1	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	90.1	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	87.8	63.0	119
EP080: BTEXN (QCLot: 3264423)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	102	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	110	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	110	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	106	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	107	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	93.2	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262328)							
ES2032486-002	Val-T-02	EG005T: Arsenic	7440-38-2	50 mg/kg	80.8	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262328) - continued							
ES2032486-002	Val-T-02	EG005T: Cadmium	7440-43-9	50 mg/kg	90.6	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	112	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	93.3	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	91.0	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	92.5	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	72.1	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262329)							
ES2032486-021	Val-T-21	EG005T: Arsenic	7440-38-2	50 mg/kg	77.9	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.3	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	93.4	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	97.2	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	94.1	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	92.2	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	74.8	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3262333)							
ES2032486-041	Val-T-41	EG005T: Arsenic	7440-38-2	50 mg/kg	88.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	122	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	92.9	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	93.2	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	91.1	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	83.0	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3263863)							
ES2032260-077	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	78.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	# Not Determined	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	99.7	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	94.9	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	99.2	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	95.5	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3264775)							
ES2032486-060	QC24	EG005T: Arsenic	7440-38-2	50 mg/kg	77.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	92.2	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	88.8	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	92.8	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	91.1	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	91.2	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3264775) - continued							
ES2032486-060	QC24	EG005T: Zinc	7440-66-6	250 mg/kg	92.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262327)							
ES2032486-002	Val-T-02	EG035T: Mercury	7439-97-6	5 mg/kg	78.4	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262330)							
ES2032486-021	Val-T-21	EG035T: Mercury	7439-97-6	5 mg/kg	79.0	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3262334)							
ES2032486-041	Val-T-41	EG035T: Mercury	7439-97-6	5 mg/kg	81.2	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3263862)							
ES2032260-077	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	79.8	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3264774)							
ES2032486-060	QC24	EG035T: Mercury	7439-97-6	5 mg/kg	75.4	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258610)							
ES2032486-001	Val-T-01	EP068: gamma-BHC	58-89-9	0.5 mg/kg	102	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	89.9	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	86.5	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	108	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	95.0	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	102	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3258616)							
ES2032486-021	Val-T-21	EP068: gamma-BHC	58-89-9	0.5 mg/kg	96.4	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	89.3	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	74.7	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	95.6	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	109	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	99.4	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264307)							
ES2032454-066	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	93.4	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	71.2	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	83.8	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	77.8	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	93.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	88.6	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264399)							
ES2032486-041	Val-T-41	EP068: gamma-BHC	58-89-9	0.5 mg/kg	108	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	96.2	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	92.4	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3264399) - continued							
ES2032486-041	Val-T-41	EP068: Dieldrin	60-57-1	0.5 mg/kg	90.1	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	86.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	80.4	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258610)							
ES2032486-001	Val-T-01	EP068: Diazinon	333-41-5	0.5 mg/kg	103	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	91.2	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	77.6	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	75.5	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	80.6	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3258616)							
ES2032486-021	Val-T-21	EP068: Diazinon	333-41-5	0.5 mg/kg	101	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	112	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	85.6	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	91.8	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	74.4	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264307)							
ES2032454-066	Anonymous	EP068: Diazinon	333-41-5	0.5 mg/kg	79.4	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	93.4	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	102	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	91.6	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	90.4	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3264399)							
ES2032486-041	Val-T-41	EP068: Diazinon	333-41-5	0.5 mg/kg	89.4	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	100	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	85.6	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	86.3	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	74.3	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258609)							
ES2032486-001	Val-T-01	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	101	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	107	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3258618)							
ES2032486-021	Val-T-21	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	88.4	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	88.0	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264306)							
ES2032454-066	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	91.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	97.8	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3264398)							
ES2032486-041	Val-T-41	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	92.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	98.8	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3258608)							
ES2032486-001	Val-T-01	EP071: C10 - C14 Fraction	----	523 mg/kg	100	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	76.4	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	103	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3258617)							
ES2032486-021	Val-T-21	EP071: C10 - C14 Fraction	----	523 mg/kg	101	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	65.6	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	101	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3259965)							
ES2032265-021	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	120	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3260525)							
ES2032486-012	Val-T-12	EP080: C6 - C9 Fraction	----	32.5 mg/kg	113	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3260594)							
ES2032486-032	Val-T-32	EP080: C6 - C9 Fraction	----	32.5 mg/kg	98.9	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264305)							
ES2032454-066	Anonymous	EP071: C10 - C14 Fraction	----	523 mg/kg	110	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	119	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	130	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264397)							
ES2032486-041	Val-T-41	EP071: C10 - C14 Fraction	----	523 mg/kg	111	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	116	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	131	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	111	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3258608)							
ES2032486-001	Val-T-01	EP071: >C10 - C16 Fraction	----	860 mg/kg	99.0	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	86.4	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	87.9	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3258617)							
ES2032486-021	Val-T-21	EP071: >C10 - C16 Fraction	----	860 mg/kg	109	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	73.1	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	101	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259965)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3259965) - continued							
ES2032265-021	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	120	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3260525)							
ES2032486-012	Val-T-12	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	114	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3260594)							
ES2032486-032	Val-T-32	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	99.0	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264305)							
ES2032454-066	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	124	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	121	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	124	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264397)							
ES2032486-041	Val-T-41	EP071: >C10 - C16 Fraction	----	860 mg/kg	111	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	126	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	112	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	113	70.0	130
EP080: BTEXN (QCLot: 3259965)							
ES2032265-021	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	108	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	106	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	108	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	104	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	109	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	102	70.0	130
EP080: BTEXN (QCLot: 3260525)							
ES2032486-012	Val-T-12	EP080: Benzene	71-43-2	2.5 mg/kg	86.1	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	94.1	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	94.8	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	96.1	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	95.8	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	90.0	70.0	130
EP080: BTEXN (QCLot: 3260594)							
ES2032486-032	Val-T-32	EP080: Benzene	71-43-2	2.5 mg/kg	102	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	97.2	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	99.5	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080: BTEXN (QCLot: 3260594) - continued							
ES2032486-032	Val-T-32	EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	96.6	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	101	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	94.5	70.0	130
EP080: BTEXN (QCLot: 3264423)							
ES2031442-012	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	93.4	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	114	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	116	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	116	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	116	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	82.0	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2032486**	Page	: 1 of 14
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 15-Sep-2020
Site	: ----	Issue Date	: 21-Sep-2020
Sampler	: ROBIN BIRUA	No. of samples received	: 55
Order number	: ----	No. of samples analysed	: 53

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	ES2032486--041	Val-T-41	**Chromium**	7440-47-3	21.2 %	0% - 20%	**RPD exceeds LOR based limits**
EG005(ED093)T: Total Metals by ICP-AES	ES2032486--011	Val-T-11	**Chromium**	7440-47-3	52.0 %	0% - 20%	**RPD exceeds LOR based limits**
Matrix Spike (MS) Recoveries							
EG005(ED093)T: Total Metals by ICP-AES	ES2032260--077	Anonymous	**Chromium**	7440-47-3	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
Val-T-01, Val-T-02,	**11-Sep-2020**	**----**	----	----	**17-Sep-2020**	25-Sep-2020	✓
Val-T-03, Val-T-04,							
Val-T-05, Val-T-06,							
Val-T-07, Val-T-08,							
Val-T-09, Val-T-10,							
Val-T-11, Val-T-12,							
Val-T-13, Val-T-14,							
Val-T-15, Val-T-16,							
Val-T-17, Val-T-18,							
Val-T-19, Val-T-20,							
Val-T-21, Val-T-22							
Soil Glass Jar - Unpreserved (EA055)							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C) - Continued								
Val-T-23,	Val-T-24,	**14-Sep-2020**	**----**	----	----	**17-Sep-2020**	28-Sep-2020	✓
Val-T-25,	Val-T-26,							
Val-T-27,	Val-T-28,							
Val-T-29,	Val-T-30,							
Val-T-31,	Val-T-32,							
Val-T-33,	Val-T-34,							
Val-T-35,	Val-T-36,							
Val-T-37,	Val-T-38,							
Val-T-39,	Val-T-40,							
Val-T-41,	Val-T-42,							
Val-T-43,	Val-T-44,							
Val-T-45,	Val-T-46,							
Val-T-47,	Val-T-48,							
Val-T-49,	Val-T-50							
Soil Glass Jar - Unpreserved (EA055)								
QC24,	QC-2,	**14-Sep-2020**	**----**	----	----	**18-Sep-2020**	28-Sep-2020	✓
QC-3								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**----**	----	----	**17-Sep-2020**	10-Mar-2021	✓
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40, Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50	**14-Sep-2020**	**----**	----	----	**17-Sep-2020**	13-Mar-2021	✓
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
QC24, QC-2, QC-3	**14-Sep-2020**	**----**	----	----	**18-Sep-2020**	13-Mar-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**17-Sep-2020**	10-Mar-2021	✓	**18-Sep-2020**	10-Mar-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40, Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50	**14-Sep-2020**	**17-Sep-2020**	13-Mar-2021	✓	**18-Sep-2020**	13-Mar-2021	✓
Soil Glass Jar - Unpreserved (EG005T)							
QC24, QC-2, QC-3	**14-Sep-2020**	**18-Sep-2020**	13-Mar-2021	✓	**18-Sep-2020**	13-Mar-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**17-Sep-2020**	09-Oct-2020	✓	**18-Sep-2020**	09-Oct-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40, Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50	**14-Sep-2020**	**17-Sep-2020**	12-Oct-2020	✓	**18-Sep-2020**	12-Oct-2020	✓
Soil Glass Jar - Unpreserved (EG035T)							
QC24, QC-2, QC-3	**14-Sep-2020**	**18-Sep-2020**	12-Oct-2020	✓	**19-Sep-2020**	12-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**17-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	27-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	27-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50, QC24, QC-2, QC-3	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**17-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	27-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	27-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP068)							
Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50, QC24, QC-2, QC-3	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**17-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	27-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	27-Oct-2020	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50, QC24, QC-2, QC-3	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Oct-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11	**11-Sep-2020**	**16-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	25-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**17-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	25-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40, Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50, QC24, QC-2, QC-3	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11	**11-Sep-2020**	**16-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	25-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11, Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**17-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	25-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40, Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50, QC24, QC-2, QC-3	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
Val-T-01, Val-T-02, Val-T-03, Val-T-04, Val-T-05, Val-T-06, Val-T-07, Val-T-08, Val-T-09, Val-T-10, Val-T-11	**11-Sep-2020**	**16-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	25-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-T-12, Val-T-13, Val-T-14, Val-T-15, Val-T-16, Val-T-17, Val-T-18, Val-T-19, Val-T-20, Val-T-21, Val-T-22	**11-Sep-2020**	**17-Sep-2020**	25-Sep-2020	✓	**18-Sep-2020**	25-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
Val-T-23, Val-T-24, Val-T-25, Val-T-26, Val-T-27, Val-T-28, Val-T-29, Val-T-30, Val-T-31, Val-T-32, Val-T-33, Val-T-34, Val-T-35, Val-T-36, Val-T-37, Val-T-38, Val-T-39, Val-T-40, Val-T-41, Val-T-42, Val-T-43, Val-T-44, Val-T-45, Val-T-46, Val-T-47, Val-T-48, Val-T-49, Val-T-50	**14-Sep-2020**	**17-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
QC24, QC-2, QC-3	**14-Sep-2020**	**18-Sep-2020**	28-Sep-2020	✓	**18-Sep-2020**	28-Sep-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	8	70	**11.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	7	61	**11.48**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	7	61	**11.48**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	8	71	**11.27**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	8	70	**11.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	7	61	**11.48**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	8	71	**11.27**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	5	71	**7.04**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	70	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	71	**5.63**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	5	71	**7.04**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	70	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	71	**5.63**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	5	71	**7.04**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	70	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	61	**6.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	71	**5.63**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one): ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill QLD 4000 ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes QLD 4227 ☐ SOUTH COAST: 194 Varsity Parade, Varsity Lakes QLD 4227 ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305 ☐ AUCKLAND: 65 Beach Road, Auckland 1010 NZ ☐ CANBERRA: GPO 410, Canberra ACT 2600 ☐ MACKAY: 21 Shepperson, Mt Pleasant, QLD 4740 ☐ MACKAY: 21 River Street, Mackay, QLD 4740 ☐ PERTH: Ground Floor, 503 Murray Street, Perth, WA 6000 ☐ NELSON: 5 Duncan Street, Port Nelson 7010 NZ ☐ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820 ☐ MELBOURNE: Suite 2 / 2 Domville Avenue, Hawthorn, VIC 3122 ☐ MELBOURNE: Suite 2 / 2 Domville Avenue, Hawthorn, VIC 3122 ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting	LABORATORY: ALS
PROJECT: John Stokes Square	LABORATORY ADDRESS:
PROJECT NUMBER: 680.10679	SAMPLER: Robin Birua
PROJECT MANAGER: Sarah Doherty	SAMPLER CONTACT No: 0482 680 165
PM CONTACT No: 0417 647 498	Email Reports and Invoices to: sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com

Turnaround Time (TAT): ☐ Standard TAT ☒ Non Standard or Urgent TAT

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold
1	Val-T-93-1	18/09/2020	Soil	x1 Bag			x						
2	Val-T-94-1	18/09/2020	Soil	x1 Bag			x						
3	Val-T-95-1	18/09/2020	Soil	x1 Bag			x						
4													
5													
6													
7													
8													
9													
10													
11													

TAT

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By / Date: Asbestos
Relinquished By / Date: 3
Connote / Courier:
WO No: ES2032556
Attach By PO / Internal Sheet:

Additional Information (Comment on any gross contamination or specific requirements): 24 Hrs TAT Please

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time	18/09/2020
Relinquished by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	

Received by	Sign	Date / Time	5:30pm 18/09/20
Received by	Sign	Date / Time	21/9/20
Received by	Sign	Date / Time	10:50am

Temperature Received: 31.2°C

Environmental Division Sydney
Work Order Reference
ES2032556

Telephone : 61-2-8784 8555

LAB OF ORIGIN. DARWIN

ALS Environmental

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **ES2032556**		
Amendment	: **1**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 21-Sep-2020 10:50	Issue Date	: 23-Sep-2020
Client Requested Due Date	: 22-Sep-2020	Scheduled Reporting Date	: **22-Sep-2020**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: ----	Temperature	: 31.2' C
Receipt Detail	:	No. of samples received / analysed	: 3 / 3

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA200G Asbestos Identification in Soils -
ES2032556-001	18-Sep-2020 00:00	Val-T-94-2	✓
ES2032556-002	18-Sep-2020 00:00	Val-T-94-1	✓
ES2032556-003	18-Sep-2020 00:00	Val-T-94-3	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
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- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2032556**	Page	: 1 of 3
Amendment	: **2**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 21-Sep-2020 10:50
Order number	: ----	Date Analysis Commenced	: 22-Sep-2020
C-O-C number	: ----	Issue Date	: 23-Sep-2020 16:13
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Amendment 23/09/2020: This report has been amended and re-released to allow for amendments to sample IDs as per Robin Birua. All analysis results are as per the previous report.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	Val-94-2	Val-94-1	Val-94-3	----	----
				Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2032556-001	ES2032556-002	ES2032556-003	--------	--------
					Result	Result	Result	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**No**	**No**	**----**	**----**
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	**No**	**No**	**----**	**----**
Asbestos Type	1332-21-4	-	--		**-**	**-**	**-**	**----**	**----**
Sample weight (dry)	----	0.01	g		**47.5**	**55.4**	**64.3**	**----**	**----**
APPROVED IDENTIFIER:	----	-	--		**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**----**	**----**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**No**	**----**	**----**
Organic Fibre	----	0.1	g/kg		**No**	**No**	**No**	**----**	**----**

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	Val-94-2 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-94-1 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	Val-94-3 - 18-Sep-2020 00:00	Mid brown soil.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2032556**	Page	: 1 of 3
Amendment	: **2**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 21-Sep-2020
Order number	: ----	Date Analysis Commenced	: 22-Sep-2020
C-O-C number	: ----	Issue Date	: 23-Sep-2020
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2032556**	Page	: 1 of 4
Amendment	: **2**		
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 21-Sep-2020
Site	: ----	Issue Date	: 23-Sep-2020
Sampler	: ROBIN BIRUA	No. of samples received	: 3
Order number	: ----	No. of samples analysed	: 3

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
Val-94-2, Val-94-1, Val-94-3	**18-Sep-2020**	**----**	----	----	**22-Sep-2020**	17-Mar-2021	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining

23.09.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one):
- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ AUCKLAND: 60 Beach Road, Auckland 1010 NZ
- ☐ CANBERRA: GPO 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: Ground Floor, 503 Murray Street, Perth, WA 6000
- ☐ NELSON: 6 Durham Street, Port Nelson, 7010 NZ
- ☐ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820
- ☑ MELBOURNE: Suite 7, 7 Gwenville Avenue, Hawthorn, VIC 3122
- ☐ MELBOURNE: Suite 7, 7 Gwenville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ NEW PLYMOUTH: Level 1, 12 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting	**LABORATORY:** ALS
PROJECT: John Stokes Square	**LABORATORY ADDRESS:**
PROJECT NUMBER: 680.10679	**SAMPLER:** Robin Birua
PROJECT MANAGER: Sarah Doherty	**SAMPLER CONTACT No:** 0482 680 165
PM CONTACT No: 0417 647 498	**Email Reports and Invoices to:** sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com

Turnaround Time (TAT): ☐ Standard TAT ☒ Non Standard or Urgent TAT — Required TAT: 1 day

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	STP [S-26, S-12, EA200F]	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	STP32-01	18/09/2020	Soil	X1 Bag and X1 Glass Jar	x									
2	STP32-02	18/09/2020	Soil	X1 Bag and X1 Glass Jar	x									
3	STP32-03	18/09/2020	Soil	X1 Bag and X1 Glass Jar	x									
4	33.1 STP32-03 STP33-01	18/09/2020	Soil	X1 Bag and X1 Glass Jar	x									
5	2 STP32-03 STP33-02	18/09/2020	Soil	X1 Bag and X1 Glass Jar	x									
6	3 STP32-03 STP33-03	18/09/2020	Soil	X1 Bag and X1 Glass Jar	x									
7	QC-29	18/09/2020	Soil	X1 Bag and X1 Glass Jar	x									NO testing for EA200F (Only
8	Rinsate	18/09/2020	Water	X4 bottles (100 amber, x2 VOCs, x1 Metal)								x		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time	18/09/2020	**Received by**	Sign ALS	Date / Time 2:30pm 18/09/20	**Temperature Received:**
Relinquished By	Sign	Date / Time		**Received by**	Sign Kim	Date / Time 22.09.20 9.00 am	29.6°C
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Subcon / Forward Lab / Split WO
Laby Analysis: Newcastle
Organised By / Date: Asbestos
Relinquished By / Date: 1-6
Connote / Courier:
WO No: ES2033114
Attach By PO / Internal Sheet:

Environmental Division Sydney
Work Order Reference
ES2033114

Telephone : 61-2-8784 8555

LAB OF ORIGIN. DARWIN

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2033114**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: 1	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 22-Sep-2020 09:00	Issue Date	: 22-Sep-2020
Client Requested Due Date	: 23-Sep-2020	Scheduled Reporting Date	: **23-Sep-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 29.6
Receipt Detail	:	No. of samples received / analysed	: 8 / 8

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method Client sample ID	Sample Container Received	Preferred Sample Container for Analysis
Dissolved Mercury by FIMS : EG035F		
Rinsate	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered
Dissolved Metals by ICP-MS - Suite A : EG020A-F		
Rinsate	- Clear Plastic Bottle - Unspecified; Lab-acidified	- Clear Plastic Bottle - Nitric Acid; Filtered

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - S-12 OC/OP Pesticides	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2033114-001	18-Sep-2020 00:00	STP32-01	✓	✓	✓	✓
ES2033114-002	18-Sep-2020 00:00	STP32-02	✓	✓	✓	✓
ES2033114-003	18-Sep-2020 00:00	STP32-03	✓	✓	✓	✓
ES2033114-004	18-Sep-2020 00:00	STP32-03 STP33-01	✓	✓	✓	✓
ES2033114-005	18-Sep-2020 00:00	STP32-03 STP33-02	✓	✓	✓	✓
ES2033114-006	18-Sep-2020 00:00	STP32-03 STP33-03	✓	✓	✓	✓
ES2033114-007	18-Sep-2020 00:00	QC-29	✓		✓	✓

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - W-05 TRH/BTEXN/8 Metals	WATER - W-12 OC/OP Pesticides
ES2033114-008	18-Sep-2020 00:00	Rinsate	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2033114**	Page	: 1 of 15
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 22-Sep-2020 09:00
Order number	: ----	Date Analysis Commenced	: 22-Sep-2020
C-O-C number	: 1	Issue Date	: 23-Sep-2020 17:29
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 8		
No. of samples analysed	: 8		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005: Poor precision was obtained for Chromium on sample ES2033114-1. Results were confirmed by re-extraction and re-analysis.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.

- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP32-01	STP32-02	STP32-03	STP33-01	STP33-02
			Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2033114-001	ES2033114-002	ES2033114-003	ES2033114-004	ES2033114-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.7	8.5	7.9	7.3	6.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	712	744	669	742	751
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø Weight Used for % Calculation	----	0.0001	kg	0.712	0.744	0.669	0.742	0.751
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	<5	6	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	96	57	77	75	80
Copper	7440-50-8	5	mg/kg	5	6	<5	10	9
Lead	7439-92-1	5	mg/kg	9	7	9	15	11
Nickel	7440-02-0	2	mg/kg	4	4	4	6	6
Zinc	7440-66-6	5	mg/kg	9	11	9	58	51
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP32-01	STP32-02	STP32-03	STP33-01	STP33-02
			Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	ES2033114-001	ES2033114-002	ES2033114-003	ES2033114-004	ES2033114-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	**0.05**	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	**0.05**	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	**0.38**	**0.06**
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	**0.38**	**0.06**
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP32-01	STP32-02	STP32-03	STP33-01	STP33-02
				Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2033114-001	ES2033114-002	ES2033114-003	ES2033114-004	ES2033114-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP32-01	STP32-02	STP32-03	STP33-01	STP33-02
				Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00	18-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		ES2033114-001	ES2033114-002	ES2033114-003	ES2033114-004	ES2033114-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**67.9**	**85.4**	**75.1**	**64.9**	**71.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**67.9**	**130**	**104**	**87.3**	**90.9**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**86.2**	**86.2**	**83.2**	**82.6**	**85.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**90.2**	**92.6**	**90.2**	**87.0**	**90.9**
2.4.6-Tribromophenol	118-79-6	0.5	%		**83.6**	**77.4**	**73.0**	**77.2**	**75.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**98.0**	**100**	**98.0**	**96.4**	**101**
Anthracene-d10	1719-06-8	0.5	%		**109**	**112**	**109**	**107**	**107**
4-Terphenyl-d14	1718-51-0	0.5	%		**95.8**	**96.7**	**95.4**	**91.6**	**99.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**86.2**	**92.5**	**88.2**	**82.1**	**76.4**
Toluene-D8	2037-26-5	0.2	%		**80.9**	**88.4**	**83.7**	**115**	**107**
4-Bromofluorobenzene	460-00-4	0.2	%		**84.5**	**88.1**	**85.7**	**116**	**106**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP33-03	QC-29	----	----	----
			Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2033114-006	ES2033114-007	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.3	8.2	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No*	----	----	----	----
Asbestos Type	1332-21-4	-	--	Ch + Am	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	----	----
Sample weight (dry)	----	0.01	g	749	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	----	----
Organic Fibre	----	0.1	g/kg	No	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	----	----	----
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	0.0083	----	----	----	----
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	0.001	----	----	----	----
ø Weight Used for % Calculation	----	0.0001	kg	0.749	----	----	----	----
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	52	77	----	----	----
Copper	7440-50-8	5	mg/kg	12	<5	----	----	----
Lead	7439-92-1	5	mg/kg	12	8	----	----	----
Nickel	7440-02-0	2	mg/kg	6	4	----	----	----
Zinc	7440-66-6	5	mg/kg	64	9	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP33-03	QC-29	----	----	----
			Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2033114-006	ES2033114-007	--------	--------	--------
				Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	**0.13**	<0.05	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	**0.13**	<0.05	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP33-03	QC-29	----	----	----
				Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2033114-006	ES2033114-007	--------	--------	--------
					Result	Result	----	----	----
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	STP33-03	QC-29	----	----	----
				Client sampling date / time	18-Sep-2020 00:00	18-Sep-2020 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2033114-006	ES2033114-007	--------	--------	--------
					Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**71.0**	**65.1**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**92.6**	**74.0**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**85.4**	**88.1**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**90.2**	**95.8**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**74.9**	**73.8**	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**99.0**	**104**	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**112**	**105**	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**96.3**	**102**	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**76.4**	**74.2**	----	----	----
Toluene-D8	2037-26-5	0.2	%		**106**	**104**	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**105**	**108**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	Rinsate	----	----	----	----
				Client sampling date / time	18-Sep-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2033114-008	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	Rinsate	----	----	----	----
				Client sampling date / time	18-Sep-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2033114-008	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	Rinsate	----	----	----	----
				Client sampling date / time	18-Sep-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2033114-008	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**79.5**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**92.0**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**85.0**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**104**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**107**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP32-01 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP32-02 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP32-03 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP33-01 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP33-02 - 18-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP33-03 - 18-Sep-2020 00:00	Mid brown soil containing one fragment of asbestos fibre board debris approximately 5x4x1mm and one loose asbestos fibre bundle.

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2033114**	Page	: 1 of 12
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 22-Sep-2020
Order number	: ----	Date Analysis Commenced	: 22-Sep-2020
C-O-C number	: 1	Issue Date	: 23-Sep-2020
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 8		
No. of samples analysed	: 8		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3269419)									
ES2033114-001	STP32-01	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	96	# 65	38.5	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	5	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	9	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	9	9	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3269420)									
ES2033114-003	STP32-03	EA055: Moisture Content	----	0.1	%	7.9	7.9	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3269418)									
ES2033114-001	STP32-01	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3269371)									
ES2033114-001	STP32-01	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3269371) - continued									
ES2033114-001	STP32-01	EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3269371)									
ES2033114-001	STP32-01	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3269370)									
ES2033114-001	STP32-01	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3269370) - continued									
ES2033114-001	STP32-01	EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3269369)									
ES2033114-001	STP32-01	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3269398)									
ES2033114-001	STP32-01	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3269369)									
ES2033114-001	STP32-01	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3269398)									
ES2033114-001	STP32-01	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3269398)									
ES2033114-001	STP32-01	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3269805)									
ES2033114-008	Rinsate	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3269805) - continued									
ES2033114-008	Rinsate	EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3270644)									
ES2033420-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	70	80	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3270644)									
ES2033420-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	70	70	0.00	No Limit
EP080: BTEXN (QC Lot: 3270644)									
ES2033420-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	3	3	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	5	6	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	3	4	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	15	16	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3269419)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	99.4	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	99.0	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	96.9	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	100	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.1 mg/kg	97.8	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	94.4	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	75.6	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3269418)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.0847 mg/kg	86.2	70.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3269371)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	88.6	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	98.6	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	84.7	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	95.6	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	103	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	95.0	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3269371)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	89.7	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	62.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3269371) - continued								
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	96.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	80.2	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.3	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	99.6	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	80.1	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	76.6	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	77.4	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	80.1	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	79.6	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.1	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	80.4	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	106	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	81.8	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3269370)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	96.0	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	100.0	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	96.8	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	99.9	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	98.2	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	93.9	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	98.2	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	98.6	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	94.5	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	96.4	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	92.5	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	91.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	92.0	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	94.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	89.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	92.5	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3269369)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	106	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	97.5	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	84.4	71.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3269398)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	90.2	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3269369)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	97.6	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	94.3	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	82.0	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3269398)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	89.0	68.4	128
EP080: BTEXN (QCLot: 3269398)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	86.7	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	86.7	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	85.2	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	87.3	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	89.9	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	105	63.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 3269805)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	95.4	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	97.2	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	92.1	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	91.7	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	93.3	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	92.7	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	96.6	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 3269806)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	89.4	83.0	105
EP068A: Organochlorine Pesticides (OC) (QCLot: 3269373)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	78.9	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	80.3	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	89.6	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	84.6	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	88.1	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	91.5	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	104	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	83.1	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	82.2	64.1	110

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 3269373) - continued								
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	84.8	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	79.7	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	81.4	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	78.4	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	84.3	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	85.0	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	84.7	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	87.3	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	80.1	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	81.1	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	79.2	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	88.3	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3269373)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	91.9	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	103	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	24.1	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	84.3	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	89.8	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	89.5	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	82.4	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	90.4	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	82.7	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	86.0	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	80.0	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	82.1	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	89.4	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	81.5	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	83.3	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	83.1	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	84.9	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	86.0	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	102	51.6	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3269374)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	75.4	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	85.6	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	77.2	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3270644)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	77.2	75.0	127

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3269374)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	66.7	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	77.0	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	76.8	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3270644)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	78.8	75.0	127
EP080: BTEXN (QCLot: 3270644)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	79.9	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	95.2	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	90.7	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	92.0	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	94.0	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	89.1	70.0	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3269419)							
ES2033114-001	STP32-01	EG005T: Arsenic	7440-38-2	50 mg/kg	98.2	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	114	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	104	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	111	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	115	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	115	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	112	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3269418)							
ES2033114-001	STP32-01	EG035T: Mercury	7439-97-6	5 mg/kg	80.5	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3269371)							
ES2033114-001	STP32-01	EP068: gamma-BHC	58-89-9	0.5 mg/kg	87.3	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	81.4	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	89.4	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	86.8	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	95.9	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	84.5	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3269371)							
ES2033114-001	STP32-01	EP068: Diazinon	333-41-5	0.5 mg/kg	95.7	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	78.9	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	87.9	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	87.9	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	84.9	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3269370)							
ES2033114-001	STP32-01	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	82.7	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	91.4	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3269369)							
ES2033114-001	STP32-01	EP071: C10 - C14 Fraction	----	523 mg/kg	90.4	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	90.1	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	123	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3269398)							
ES2033114-001	STP32-01	EP080: C6 - C9 Fraction	----	32.5 mg/kg	84.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3269369)							
ES2033114-001	STP32-01	EP071: >C10 - C16 Fraction	----	860 mg/kg	96.8	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	100	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	124	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3269398)							
ES2033114-001	STP32-01	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	83.0	70.0	130
EP080: BTEXN (QCLot: 3269398)							
ES2033114-001	STP32-01	EP080: Benzene	71-43-2	2.5 mg/kg	81.9	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	81.6	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	82.0	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	83.0	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	87.1	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	92.0	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035F: Dissolved Mercury by FIMS (QCLot: 3269806)							
ES2033114-008	Rinsate	EG035F: Mercury	7439-97-6	0.01 mg/L	76.6	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3270644)							
ES2033420-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	104	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3270644)							

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3270644) - continued							
ES2033420-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	102	70.0	130
EP080: BTEXN (QCLot: 3270644)							
ES2033420-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	84.2	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	96.4	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	100	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	101	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	101	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	105	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2033114**	Page	: 1 of 9
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 22-Sep-2020
Site	: ----	Issue Date	: 23-Sep-2020
Sampler	: ROBIN BIRUA	No. of samples received	: 8
Order number	: ----	No. of samples analysed	: 8

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	ES2033114--001	STP32-01	**Chromium**	7440-47-3	38.5 %	0% - 20%	**RPD exceeds LOR based limits**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Dissolved Mercury by FIMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Dissolved Metals by ICP-MS - Suite A	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**----**	----	----	**22-Sep-2020**	02-Oct-2020	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03	**18-Sep-2020**	**----**	----	----	**23-Sep-2020**	17-Mar-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03	**18-Sep-2020**	**----**	----	----	**23-Sep-2020**	17-Mar-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	17-Mar-2021	✓	**22-Sep-2020**	17-Mar-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	16-Oct-2020	✓	**23-Sep-2020**	16-Oct-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**22-Sep-2020**	01-Nov-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**22-Sep-2020**	01-Nov-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**22-Sep-2020**	01-Nov-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**22-Sep-2020**	01-Nov-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**23-Sep-2020**	02-Oct-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**22-Sep-2020**	01-Nov-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**23-Sep-2020**	02-Oct-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP32-01, STP32-02, STP32-03, STP33-01, STP33-02, STP33-03, QC-29	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**23-Sep-2020**	02-Oct-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG020A-F)							
Rinsate	**18-Sep-2020**	**----**	----	----	**22-Sep-2020**	17-Mar-2021	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Unspecified; Lab-acidified (EG035F)							
Rinsate	**18-Sep-2020**	**----**	----	----	**23-Sep-2020**	02-Oct-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
Rinsate	**18-Sep-2020**	**22-Sep-2020**	25-Sep-2020	✓	**22-Sep-2020**	01-Nov-2020	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
Rinsate	**18-Sep-2020**	**22-Sep-2020**	25-Sep-2020	✓	**22-Sep-2020**	01-Nov-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
Rinsate	**18-Sep-2020**	**22-Sep-2020**	25-Sep-2020	✓	**23-Sep-2020**	01-Nov-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**22-Sep-2020**	02-Oct-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
Rinsate	**18-Sep-2020**	**22-Sep-2020**	25-Sep-2020	✓	**23-Sep-2020**	01-Nov-2020	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**22-Sep-2020**	02-Oct-2020	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate	**18-Sep-2020**	**22-Sep-2020**	02-Oct-2020	✓	**22-Sep-2020**	02-Oct-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	1	7	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	1	7	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	7	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	7	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	7	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	14.29	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	100.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
TRH - Semivolatile Fraction	EP071	0	1	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	3	**33.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	1	**100.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	1	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

23.09.20

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one): ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000; ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227; ☐ SUNCOAST: 13/4 Variety Parade, Varsity Lakes, QLD 4227; ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305; ☐ AUCKLAND: 6-8 Beach Road, Auckland 1010 NZ; ☐ CANBERRA: GPO 410, Canberra ACT 2600; ☐ SYDNEY: 21 Barr Street, Wickham, NSW 2293; ☐ MACKAY: 21 River Street, Mackay, QLD 4740; ☐ PERTH: Ground Floor, 503 Murray Street, Perth, WA 6000; ☐ NELSON: 5 Duncan Street, Port Nelson, 7010 NZ; ☐ DARWIN: Unit 5, 21 Scrub Road, Berrimah NT 0828; ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122; ☐ ADELAIDE: for.champion@slrconsulting.com; ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting	**LABORATORY:** ALS
PROJECT: John Stokes Square	**LABORATORY ADDRESS:**
PROJECT NUMBER: 680.10679	**SAMPLER:** Robin Birua
PROJECT MANAGER: Sarah Doherty	**SAMPLER CONTACT No:** 0482 680 165
PM CONTACT No: 0417 647 498	**Email Reports and Invoices to:** sdoherty@slrconsulting.com; pturyn@slrconsulting.com; rbirua@slrconsulting.com

Turnaround Time (TAT): ☐ Standard TAT ☒ Non Standard or Urgent TAT — **Required TAT:** 1 day

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS quote SY-333-20 SLR

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc.)	Containers and Preservatives	STP (S-26, S-12, EA200F)	VAL (S-26, S-12, EA200)	Asbestos P/A in soil (EA200)	NEPM asbestos in soil only (EA200F)	NEPM asbestos in soil + bulk (EA200N)	Asbestos Bulk ID (EA200B)	Potential bonded ACM fragment (EA200B)	Rinsates (W-05, W-12)	Hold	Additional information (Comment on any gross contamination or specific requirements)
1	STP21- Val-01	7/09/2020	Soil	x1 Soil Bag X1			X							
2	STP21- Val-02	7/09/2020	Soil	x1 Soil Bag			X							
3	STP21- Val-03	7/09/2020	Soil	x1 Soil Bag			X							

TAT

Subcon / Forward Lab / Split WO
Lab / Analysis: Newcastle
Organised By / Date: Asbestos
Relinquished By / Date:
Connote / Courier:
WO No: ES2033117
Attach by PO / Internal Sheet:

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Robin Birua	Date / Time	21/09/2020	**Received by**	Sign	Date / Time	11:50 am 21/09/20
Relinquished By	Sign	Date / Time		**Received by**	Sign kim	Date / Time	22/09/20 9:00 am
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 32.8°C 0.25

Environmental Division Sydney
Work Order Reference
ES2033117

Telephone : 61-2-8784 8555

LAB OF ORIGIN. DARWIN

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2033117**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: sdoherty@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.10679 John Stokes Square	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0005 (SY/333/20 V2)
C-O-C number	: 1	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 22-Sep-2020 09:00	Issue Date	: 22-Sep-2020
Client Requested Due Date	: 23-Sep-2020	Scheduled Reporting Date	: **23-Sep-2020**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 32.8
Receipt Detail	:	No. of samples received / analysed	: 3 / 3

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA200G Asbestos Identification in Soils -
ES2033117-001	07-Sep-2020 00:00	STP21-Val-01	✓
ES2033117-002	07-Sep-2020 00:00	STP21-Val-02	✓
ES2033117-003	07-Sep-2020 00:00	STP21-Val-03	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	pturyn@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	rbirua@slrconsulting.com

Sarah Dorherty

- *AU Certificate of Analysis - NATA (COA)	Email	sdoherty@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	sdoherty@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	sdoherty@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	sdoherty@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	sdoherty@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	sdoherty@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	sdoherty@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	sdoherty@slrconsulting.com
- EDI Format - XTab (XTAB)	Email	sdoherty@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2033117**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 22-Sep-2020 09:00
Order number	: ----	Date Analysis Commenced	: 23-Sep-2020
C-O-C number	: 1	Issue Date	: 23-Sep-2020 10:52
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	STP21-Val-01	STP21-Val-02	STP21-Val-03	----	----
			Client sampling date / time	07-Sep-2020 00:00	07-Sep-2020 00:00	07-Sep-2020 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2033117-001	ES2033117-002	ES2033117-003	--------	--------
				Result	Result	Result	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**----**	**----**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**----**	**----**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**----**	**----**
Sample weight (dry)	----	0.01	g	**82.9**	**92.9**	**84.1**	**----**	**----**
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**----**	**----**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	**----**	**----**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**----**	**----**

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STP21-Val-01 - 07-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP21-Val-02 - 07-Sep-2020 00:00	Mid brown soil.
EA200: Description	STP21-Val-03 - 07-Sep-2020 00:00	Mid brown soil.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2033117**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 22-Sep-2020
Order number	: ----	Date Analysis Commenced	: 23-Sep-2020
C-O-C number	: 1	Issue Date	: 23-Sep-2020
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: SY/333/20 V2		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2033117**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Sarah Dorherty	Telephone	: +61 2 8784 8555
Project	: 680.10679 John Stokes Square	Date Samples Received	: 22-Sep-2020
Site	: ----	Issue Date	: 23-Sep-2020
Sampler	: ROBIN BIRUA	No. of samples received	: 3
Order number	: ----	No. of samples analysed	: 3

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
STP21-Val-01, STP21-Val-02, STP21-Val-03	**07-Sep-2020**	**----**	----	----	**23-Sep-2020**	06-Mar-2021	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Wednesday, 29/07/2020

Our ref: C110151:NT84922

James Murdoch
SLR Consulting
21 Parap Road
PARAP NT 0820

Dear James,

Re: Asbestos Identification Analysis - John Stokes Square, 47 Progress Drive, Nightcliff NT 0810

This letter presents the results of asbestos fibre identification analysis performed on 6 samples as received by Greencap on Wednesday, 29 July 2020. The samples were stated to be from John Stokes Square, 47 Progress Drive, Nightcliff NT 0810.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Darwin Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation .

The analysis was completed on Wednesday, 29 July 2020.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact Darren Kenny .

Yours sincerely,
Greencap

Darren Kenny : Approved Identifier

Darren Kenny : Approved Signatory

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Accreditation No. 5450, Site No. 24550 Darwin Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Sampling was not conducted by Greencap and is therefore outside the scope of our NATA accreditation.

Report Date: Wednesday, 29/07/2020 Our ref: C110151:NT84922

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	NT84922 - 001	As Received - "Bulk 1" Unpainted dirty grey compressed fibre cement sheet material ~ 66x54x5mm	Chrysotile (white asbestos) Amosite (brown asbestos)
2	NT84922 - 002	As Received - "Bulk 2" Unpainted dirty grey weathered fibre cement sheet material ~ 100x78x5mm	Chrysotile (white asbestos) Amosite (brown asbestos)
3	NT84922 - 003	As Received - "Bulk 3" Unpainted dirty weathered fibre cement sheet material ~ 106x49x5mm	Chrysotile (white asbestos)
4	NT84922 - 004	As Received - "Bulk 4" Unpainted dirty grey compressed fibre cement sheet material ~ 36x30x6mm	Chrysotile (white asbestos) Amosite (brown asbestos)
5	NT84922 - 005	As Received - "Bulk 5" Unpainted grey compressed fibre cement sheet material ~ 76x59x5mm	No Asbestos Detected Organic Fibres
6	NT84922 - 006	As Received - "Bulk 6" White painted grey weathered fibre cement sheet material ~ 48x24x4mm	Chrysotile (white asbestos)

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.
If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.
PLEASE NOTE The samples in this report are 'As Received'. Greencap does not take responsibility for the sampling procedure or accuracy of the sample location descriptions which have been provided by the client.

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Friday, 31/07/2020

Our ref: C110151:NT84924

Gemma Sheridan
SLR Consulting
21 Parap Road
PARAP NT 0820

Dear Gemma,

Re: Asbestos Identification Analysis - John Stokes Square, 47 Progress Drive, Nightcliff NT 0810

This letter presents the results of asbestos fibre identification analysis performed on 3 samples as received by Greencap on Friday, 31 July 2020. The samples were stated to be from John Stokes Square, 47 Progress Drive, Nightcliff NT 0810.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Darwin Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation .

The analysis was completed on Friday, 31 July 2020.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact Darren Kenny.

Yours sincerely,
Greencap

Darren Kenny : Approved Identifier

Darren Kenny : Approved Signatory

WORLD RECOGNISED ACCREDITATION

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Accreditation No. 5450, Site No. 24550 Darwin Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Sampling was not conducted by Greencap and is therefore outside the scope of our NATA accreditation.

Report Date: Friday, 31/07/2020 Our ref: C110151:NT84924

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	NT84924 - 001	As Received - Val 49B" Red brown soil with small and medium stones included, charcoal fragments and mixed organic material ~ 53.00g	No Asbestos Detected Organic Fibres
2	NT84924 - 002	As Received - Val 65B" Red brown soil with small rocks included ~ 60.34g	No Asbestos Detected
3	NT84924 - 003	As Received - Val 64B" Red brown soil with small and medium rocks included ~ 66.20g	No Asbestos Detected

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.
If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.
PLEASE NOTE The samples in this report are 'As Received'. Greencap does not take responsibility for the sampling procedure or accuracy of the sample location descriptions which have been provided by the client.

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Thursday, 06/08/2020

Our ref: C110151:NT84925

Gemma Sheridan
SLR Consulting
21 Parap Road
PARAP NT 0820

Dear Gemma,

Re: Asbestos Identification Analysis - John Stokes Square, 47 Progress Drive, Nightcliff NT 0810

This letter presents the results of asbestos fibre identification analysis performed on 10 samples as received by Greencap on Wednesday, 05 August 2020. The samples were stated to be from John Stokes Square, 47 Progress Drive, Nightcliff NT 0810.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Darwin Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation .

The analysis was completed on Wednesday, 05 August 2020.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact Darren Kenny.

Yours sincerely,
Greencap

Darren Kenny : Approved Identifier

Darren Kenny : Approved Signatory

WORLD RECOGNISED ACCREDITATION

This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No. 5450, Site No. 24550 Darwin Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Sampling was not conducted by Greencap and is therefore outside the scope of our NATA accreditation.

Report Date: Thursday, 06/08/2020 Our ref: C110151:NT84925

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	NT84925 - 001	As Received - "STP7-11, 2 x bags" Brown soil with small to medium stones included. Various fragments of vegetation, charcoal fragments & one cement sheet fragment >10mm fraction. ~ 520.52g	No Asbestos Detected Organic Fibres See NOTES
2	NT84925 - 002	As Received - "STP10-7" Dark brown soil with small to medium rocks included. Various fragments of vegetation, charcoal fragments & insect fragments. ~ 588x73g	No Asbestos Detected Organic Fibres See NOTES
3	NT84925 - 003	As Received - "STP10-8" Dark brown to red brown soil with small to medium rocks included. Various fragments of vegetation & charcoal fragments. ~ 530.59g	No Asbestos Detected Organic Fibres See NOTES
4	NT84925 - 004	As Received - "STP10-9, 2 x bags" A: One unpainted grey weathered fibre cement fragment & one unpainted grey compressed fibre cement sheet fragment. B: Dark brown to red brown soil with small to medium rocks included. Various fragments of vegetation, black plastic fragments & charcoal fragments. Two discrete white asbestos fibre bundles (1.4x0.15x0.15mm & 1.55x0.13x0.12mm) ~ 592.62g	A & B: Chrysotile (white asbestos) B: Organic Fibres See NOTES 2 & 3
5	NT84925 - 005	As Received - "STP10-10, 2 x bags" A: One unpainted grey weathered fibre cement fragment. B: Dark brown soil with small to medium rocks included. Various fragments of vegetation & charcoal fragments. One discrete synthetic mineral fibre bundle. ~ 585.30g	B: No Asbestos Detected A: Chrysotile (white asbestos) A: Amosite (brown asbestos) B: Organic Fibres B: Synthetic Mineral Fibres B: See NOTES
6	NT84925 - 006	As Received - "STP10-11" Dark brown to red brown soil with small to medium rocks included. Various fragments of vegetation & charcoal fragments. ~ 586.50g	No Asbestos Detected Organic Fibres See NOTES
7	NT84925 - 007	As Received - "STP10-12" Dark brown soil with small to medium rocks included. Various fragments of vegetation & charcoal fragments. Small synthetic mineral fibe bundles. ~ 555.72g	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres See NOTES

Report Date: Thursday, 06/08/2020 Our ref: C110151:NT84925

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
8	NT84925 - 008	As Received - "STP13-4" Dark brown soil with small to medium rocks included. Various fragments of vegetation & charcoal fragments. ~ 581.93g	No Asbestos Detected Organic Fibres See NOTES
9	NT84925 - 009	As Received - "STP13-5" Dark brown to red brown soil with small to medium rocks included. Various fragments of vegetation & charcoal fragments. ~ 545.19g	No Asbestos Detected Organic Fibres See NOTES
10	NT84925 - 010	As Received - "STP13-6" Dark brown soil with small to medium rocks included. Various fragments of vegetation & charcoal fragments. Small synthetic mineral fibe bundles. ~ 572.22g	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres See NOTES

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.
If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.

PLEASE NOTE The samples in this report are 'As Received'. Greencap does not take responsibility for the sampling procedure or accuracy of the sample location descriptions which have been provided by the client.

NOTE 1 The reporting limit for this analysis is 0.1g/kg (0.01%) by application of polarised light microscopy, dispersion staining and trace analysis techniques. The above result can be interpreted that the sample contains no detectable 'respirable' asbestos fibres (AS4964-2004 Clause 9.5).

NOTE 2 Due to the size of the sample submitted, Greencap has undertaken sub-sampling of the <2 mm fraction to reduce the sample size to approximately 30-60 g, as per AS4964, clause 8.2.3. The process of sub-sampling followed ISO 3082 (2000 (E)) Part 10.4.2.4 “The manual increment division method”. Due to the non-homogenous nature of the sample sub-sampling may not be fully representative of the initial sample. This is a NATA required disclaimer.

NOTE 3 Soil analysis conducted in accordance with WA Guidelines for the assessment, remediation and management of asbestos-contaminated sites (May 2009), Recommended procedures for laboratory analysis of asbestos in soil (June 2011) and NEPM Schedule B1: Guideline on investigation levels for soil & groundwater, Schedule B2: Guideline on site characterisation.

NOTE 4 Trace analysis has been performed and the above result can be interpreted that the sample contains no detectable 'respirable' asbestos fibres (AS4964-2004 Clause 9.5).

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Thursday, 20/08/2020

Our ref: C110151:NT84930

Sarah Doherty
SLR Consulting
21 Parap Road
PARAP NT 0820

Dear Sarah,

Re: Asbestos Identification Analysis - John Stokes Square, 47 Progress Drive, Nightcliff NT 0810

This letter presents the results of asbestos fibre identification analysis performed on 57 samples as received by Greencap on Tuesday, 18 August 2020. The samples were stated to be from John Stokes Square, 47 Progress Drive, Nightcliff NT 0810.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Darwin Laboratory. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation.

The analysis was completed on Thursday, 20 August 2020.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table."Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact Darren Kenny.

Yours sincerely,
Greencap

Darren Kenny : Identifier

This document shall not be reproduced except in full.

Report Date: Thursday, 20/08/2020 Our ref: C110151:NT84930

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	NT84930 - 001	As Received - "Val-t-1" Red brown soil and stones and organic material ~ 78.31g	No Asbestos Detected Organic Fibres
2	NT84930 - 002	As Received - "Val-t-2" Brown soil, stones, rocks, charcoal and organic material ~ 85.14g	No Asbestos Detected Organic Fibres
3	NT84930 - 003	As Received - "Val-t-3" Brown soil, stones, rocks and organic material ~ 82.43g	No Asbestos Detected Organic Fibres
4	NT84930 - 004	As Received - "Val-t-4" Red brown soil, stones, charcoal and organic material ~ 85.22g	No Asbestos Detected Organic Fibres
5	NT84930 - 005	As Received - "Val-t-5" Brown soil stones, plastic fragments, charcoal and organic material ~ 92.72g	No Asbestos Detected Organic Fibres
6	NT84930 - 006	As Received - "Val-t-6" Red brown soil and stones, charcoal & organic material ~ 75.91g	No Asbestos Detected Organic Fibres
7	NT84930 - 007	As Received - "Val-t-7" Brown soil rocks and stones, charcoal & organic material ~ 80.31g	No Asbestos Detected Organic Fibres
8	NT84930 - 008	As Received - "Val-t-8" Mixed red brown soil, stones and sand material, charcoal & organic material ~ 101.83g	No Asbestos Detected Organic Fibres
9	NT84930 - 009	As Received - "Val-t-9" Brown soil & stones, charcoal & organic material ~ 82.76g	No Asbestos Detected Organic Fibres

Report Date: Thursday, 20/08/2020 Our ref: C110151:NT84930

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
10	NT84930 - 010	As Received - "Val-t-10" Red brown soil and stones, charcoal and organic material ~ 84.75g	No Asbestos Detected Organic Fibres
11	NT84930 - 011	As Received - "Val-t-11" Brown soil and stones, charcoal and organic material ~ 95.58g	No Asbestos Detected Organic Fibres
12	NT84930 - 012	As Received - "Val-t-12" Brown soil and stones, charcoal and organic material ~ 96.08g	No Asbestos Detected Organic Fibres
13	NT84930 - 013	As Received - "Val-t-13" Brown soil and stones with some sand included and organic material ~ 117.00g	No Asbestos Detected Organic Fibres
14	NT84930 - 014	As Received - "Val-t-14" Brown soil and stones, charcoal and organic material ~ 95.30g	No Asbestos Detected Organic Fibres
15	NT84930 - 015	As Received - "Val-t-15" Brown soil and stones, charcoal and organic material ~ 82.55g	No Asbestos Detected Organic Fibres
16	NT84930 - 016	As Received - "Val-t-16" Brown soil and stones, charcoal and organic material ~ 84.75g	No Asbestos Detected Organic Fibres
17	NT84930 - 017	As Received - "Val-t-17" Brown soil and stones, charcoal and organic material ~ 95.50g	No Asbestos Detected Organic Fibres
18	NT84930 - 018	As Received - "Val-t-18" Brown soil and stones and organic material ~ 74.22g	No Asbestos Detected Organic Fibres

Report Date: Thursday, 20/08/2020 Our ref: C110151:NT84930

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
19	NT84930 - 019	As Received - "Val-t-19" Brown soil, stones and rocks, charcoal and organic material ~ 90.84g	No Asbestos Detected Organic Fibres
20	NT84930 - 020	As Received - "Val-t-20" Brown soil, stones and rocks, charcoal and organic material ~ 98.86g	No Asbestos Detected Organic Fibres
21	NT84930 - 021	As Received - "Val-t-21" Brown soil and stones, charcoal and organic material ~ 88.16g	No Asbestos Detected Organic Fibres
22	NT84930 - 022	As Received - "Val-t-22" Brown soil and stones, charcoal and organic material ~ 88.80g	No Asbestos Detected Organic Fibres
23	NT84930 - 023	As Received - "Val-t-23" Brown soil and stones and organic material ~ 78.99g	No Asbestos Detected Organic Fibres
24	NT84930 - 024	As Received - "Val-t-24" Red brown soil and stones, charcoal and organic material ~ 69.18g	No Asbestos Detected Organic Fibres
25	NT84930 - 025	As Received - "Val-t-25" Brown soil stones and rocks, charcoal and organic material ~ 92.52g	No Asbestos Detected Organic Fibres
26	NT84930 - 026	As Received - "Val-t-26" Brown soil and stones combined with sand material, charcoal and organic material ~ 88.02g	No Asbestos Detected Organic Fibres
27	NT84930 - 027	As Received - "Val-t-27" Brown soil and stones, charcoal, organic material and one discrete white asbestos fibre bundle ~ 71.90g	Chrysotile (white asbestos) Organic Fibres

Report Date: Thursday, 20/08/2020 Our ref: C110151:NT84930

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
28	NT84930 - 028	As Received - "Val-t-28" Brown soil, stones and sand material and organic material ~ 88.14g	No Asbestos Detected Organic Fibres
29	NT84930 - 029	As Received - "Val-t-29" Brown soil, stones and sand material, charcoal and organic material ~ 87.07g	No Asbestos Detected Organic Fibres
30	NT84930 - 030	As Received - "Val-t-30" Brown soil and stones, charcoal and organic material ~ 82.76g	No Asbestos Detected Organic Fibres
31	NT84930 - 031	As Received - "Val-t-31" Brown soil and stones, charcoal and organic material ~ 72.33g	No Asbestos Detected Organic Fibres
32	NT84930 - 032	As Received - "Val-t-32" Light brown soil, stones and rocks, charcoal and organic material ~ 88.65g	No Asbestos Detected Organic Fibres
33	NT84930 - 033	As Received - "Val-t-33" Red brown soil stones and rocks mixed with sand material, charcoal and organic material ~ 104.00g	No Asbestos Detected Organic Fibres
34	NT84930 - 034	As Received - "Val-t-34" Red brown soil stones and rocks ~ 78.96g	No Asbestos Detected
35	NT84930 - 035	As Received - "Val-t-35" Ligth brown soil stones and rocks, charcoal and organic material ~ 60.31g	No Asbestos Detected Organic Fibres
36	NT84930 - 036	As Received - "Val-t-36" Red brown soil, stones and rocks, charcoal and organic material ~ 79.48g	No Asbestos Detected Organic Fibres

Report Date: Thursday, 20/08/2020 Our ref: C110151:NT84930

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
37	NT84930 - 037	As Received - "Val-t-37" Red brown soil, stones and rocks, charcoal and organic material ~ 84.32g	No Asbestos Detected Organic Fibres
38	NT84930 - 038	As Received - "Val-t-38" Red brown soil, stones and rocks, charcoal and organic material ~ 76.29g	No Asbestos Detected Organic Fibres
39	NT84930 - 039	As Received - "Val-t-39" Brown soil, stones and rocks, charcoal and organic material ~ 85.59g	No Asbestos Detected Organic Fibres
40	NT84930 - 040	As Received - "Val-t-40" Red brown soil, stones and rocks, charcoal and organic material ~ 70.62g	No Asbestos Detected Organic Fibres
41	NT84930 - 041	As Received - "Val-t-41" Red brown soil, stones and rocks, charcoal and organic material ~ 80.81g	No Asbestos Detected Organic Fibres
42	NT84930 - 042	As Received - "Val-t-42" Red brown soil, stones and rocks, charcoal and organic material ~ 84.06g	No Asbestos Detected Organic Fibres
43	NT84930 - 043	As Received - "Val-t-43" Red brown soil, stones and rocks ~ 84.50g	No Asbestos Detected
44	NT84930 - 044	As Received - "Val-t-44" Red brown soil, stones and rocks, charcoal and organic material ~ 75.44g	No Asbestos Detected Organic Fibres
45	NT84930 - 045	As Received - "Val-t-45" Red brown soil, stones and rocks, charcoal and organic material ~ 80.65g	No Asbestos Detected Organic Fibres

Report Date: Thursday, 20/08/2020 Our ref: C110151:NT84930

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
46	NT84930 - 046	As Received - "Val-t-46" Red brown soil, stones and rocks, charcoal and organic material ~ 87.39g	No Asbestos Detected Organic Fibres
47	NT84930 - 047	As Received - "Val-t-47" Red brown soil, stones and rocks, insect fragments and organic material ~ 50.65g	No Asbestos Detected Organic Fibres
48	NT84930 - 048	As Received - "Val-t-48" Brown soil, stones and rocks, charcoal and organic material ~ 85.22g	No Asbestos Detected Organic Fibres
49	NT84930 - 049	As Received - "Val-t-49" Red brown soil, stones and rocks, charcoal and organic material ~ 61.29g	No Asbestos Detected Organic Fibres
50	NT84930 - 050	As Received - "Val-t-50" Brown soil, stones and rocks, charcoal and organic material ~ 67.85g	No Asbestos Detected Organic Fibres
51	NT84930 - 051	As Received - "Val-t-51" Red brown soil, stones and rocks, charcoal and organic material ~ 71.42g	No Asbestos Detected Organic Fibres
52	NT84930 - 052	As Received - "Val-t-52" Red brown soil, stones and rocks, charcoal and organic material ~ 76.64g	No Asbestos Detected Organic Fibres
53	NT84930 - 053	As Received - "Val-t-53" Brown soil, stones and rocks, charcoal and organic material ~ 96.79g	No Asbestos Detected Organic Fibres
54	NT84930 - 054	As Received - "Val-t-54" Brown soil, stones and rocks, charcoal and organic material ~ 77.42g	No Asbestos Detected Organic Fibres

Report Date: Thursday, 20/08/2020 Our ref: C110151:NT84930

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
55	NT84930 - 055	As Received - "Val-t-55" Light brown soil, stones and rocks, charcoal and organic material ~ 71.13g	No Asbestos Detected Organic Fibres
56	NT84930 - 056	As Received - "Val-t-192a" Light brown soil, stones and rocks, free occuarnce of loose synthetic mineral fibres, charcoal and organic material ~ 63.96g	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres
57	NT84930 - 057	As Received - "Val-t-100" Red brown soil, stones and rocks, charcoal and organic material ~ 53.01g	No Asbestos Detected Organic Fibres

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.
If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.
PLEASE NOTE The samples in this report are 'As Received'. Greencap does not take responsibility for the sampling procedure or accuracy of the sample location descriptions which have been provided by the client.

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Friday, 21/08/2020

Our ref: C110151:NT84930a

Sarah Doherty
SLR Consulting
21 Parap Road
PARAP NT 0820

Dear Sarah,

Re: Asbestos Identification Analysis - John Stokes Square, 47 Progress Drive, Nightcliff NT 0810

This letter presents the results of asbestos fibre identification analysis performed on 12 samples as received by Greencap on Tuesday, 18 August 2020. The samples were stated to be from John Stokes Square, 47 Progress Drive, Nightcliff NT 0810.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Darwin Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation .

The analysis was completed on Friday, 21 August 2020.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact Darren Kenny.

Yours sincerely,
Greencap

Darren Kenny : Approved Identifier

Darren Kenny : Approved Signatory

WORLD RECOGNISED ACCREDITATION

This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No. 5450, Site No. 24550 Darwin Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Sampling was not conducted by Greencap and is therefore outside the scope of our NATA accreditation.

Report Date: Friday, 21/08/2020

Our ref: C110151:NT84930a

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	NT84930a - 001	As Received - "STP22-1" Red brown soil and stones, metal fragments, charcoal and organic material ~ 591.61g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
2	NT84930a - 002	As Received - "STP22-2" Red brown soil and stones, charcoal and organic material ~ 541.11g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
3	NT84930a - 003	As Received - "STP22-3" Red brown soil and stones, charcoal and organic material ~ 579.44g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
4	NT84930a - 004	As Received - "STP22-4" Red brown soil and stones, charcoal and organic material ~ 604.93g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
5	NT84930a - 005	As Received - "STP22-5" Red brown soil and stones, charcoal and organic material ~ 590.81g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
6	NT84930a - 006	As Received - "STP22-6" Red brown soil and stones, charcoal and organic material ~ 571.65g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
7	NT84930a - 007	As Received - "STP22-7" Red brown soil and stones, charcoal and organic material ~ 566.57g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
8	NT84930a - 008	As Received - "STP21-1a" Red brown soil and stones, charcoal and organic material ~ 561.90g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
9	NT84930a - 009	As Received - "STP21-2a" Red brown soil and stones, charcoal and organic material ~ 527.90g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES

Report Date: Friday, 21/08/2020 Our ref: C110151:NT84930a

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
10	NT84930a - 010	As Received - "STP21-3a" Red brown soil and stones, one discrete brown asbestos fibre bundle and one discrete white asbestos fibre bundle, charcoal and organic material ~ 540.74g	Chrysotile (white asbestos) Amosite (brown asbestos) Organic Fibres See NOTES 2 & 3
11	NT84930a - 011	As Received - "STP16-1a" Dark brown soil and stones, glass fragments, charcoal and organic material ~ 559.73g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTES
12	NT84930a - 012	As Received - "STP16-2a" Dark brown soil and stones, one fragment of cement sheet containing white and brown asbestos (<10mm - >2mm fraction), one discrete white asbestos fibre bundle, glass fragments, charcoal and organic material ~ 564.31g	Chrysotile (white asbestos) Amosite (brown asbestos) Organic Fibres See NOTES 2 & 3

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.

If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.

PLEASE NOTE The samples in this report are 'As Received'. Greencap does not take responsibility for the sampling procedure or accuracy of the sample location descriptions which have been provided by the client.

NOTE 1 The reporting limit for this analysis is 0.1g/kg (0.01%) by application of polarised light microscopy, dispersion staining and trace analysis techniques. The above result can be interpreted that the sample contains no detectable 'respirable' asbestos fibres (AS4964-2004 Clause 9.5).

NOTE 2 Due to the size of the sample submitted, Greencap has undertaken sub-sampling of the <2 mm fraction to reduce the sample size to approximately 30-60 g, as per AS4964, clause 8.2.3. The process of sub-sampling followed ISO 3082 (2000 (E)) Part 10.4.2.4 “The manual increment division method”. Due to the non-homogenous nature of the sample sub-sampling may not be fully representative of the initial sample. This is a NATA required disclaimer.

NOTE 3 Soil analysis conducted in accordance with WA Guidelines for the assessment, remediation and management of asbestos-contaminated sites (May 2009), Recommended procedures for laboratory analysis of asbestos in soil (June 2011) and NEPM Schedule B1: Guideline on investigation levels for soil & groundwater, Schedule B2: Guideline on site characterisation.

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Thursday, 17/09/2020

Our ref: C110151:NT84930a - V2

Sarah Doherty
SLR Consulting
21 Parap Road
PARAP NT 0820

Dear Sarah,

Re: Asbestos Identification Analysis - John Stokes Square, 47 Progress Drive, Nightcliff NT 0810

This letter presents the results of asbestos fibre identification analysis performed on 12 samples as received by Greencap on Tuesday, 18 August 2020. The samples were stated to be from John Stokes Square, 47 Progress Drive, Nightcliff NT 0810.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Darwin Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation .

The analysis was completed on Wednesday, 16 September 2020.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client. Please note this report replaces the previous version issued on Friday, 21 August 2020 . Amendments were made to samples 010 and 012. Several errors have been corrected. Samples 010 and 012 contain asbestos fibres however the quantity is below the reporting limit of 0.1g/kg for the AS4964 test method.

Should you require further information please contact Darren Kenny.

Yours sincerely,
Greencap

Darren Kenny : Approved Identifier

Darren Kenny : Approved Signatory

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Accreditation No. 5450, Site No. 24550 Darwin Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Sampling was not conducted by Greencap and is therefore outside the scope of our NATA accreditation.

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Friday, 21/08/2020

Our ref: C110151:NT84930b

Sarah Doherty
SLR Consulting
21 Parap Road
PARAP NT 0820

Dear Sarah,

Re: Asbestos Identification Analysis - John Stokes Square, 47 Progress Drive, Nightcliff NT 0810

This letter presents the results of asbestos fibre identification analysis performed on 1 sample as received by Greencap on Friday, 21 August 2020. The sample was stated to be from John Stokes Square, 47 Progress Drive, Nightcliff NT 0810.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Darwin Laboratory. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation.

The analysis was completed on Friday, 21 August 2020.

The sample will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table."Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact Darren Kenny.

Yours sincerely,
Greencap

Darren Kenny : Identifier

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Sampling was not conducted by Greencap and is therefore outside the scope of our NATA accreditation.

Report Date: Friday, 21/08/2020 Our ref: C110151:NT84930b

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	NT84930b - 001	As Received - "Val-t-27a" Red brown soil, stones and rocks, charcoal and organic material ~ 84.22g	No Asbestos Detected Organic Fibres

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.
If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.
PLEASE NOTE The sample in this report is 'As Received'. Greencap does not take responsibility for the sampling procedure or accuracy of the sample location descriptions which have been provided by the client.

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Wednesday, 16/09/2020

Our ref: C110151:NT84933 - V2

Robin Birua
SLR Consulting
21 Parap Road
PARAP NT 0820

Dear Robin,

Re: Asbestos Identification Analysis - John Stokes Square, 47 Progress Drive, Nightcliff NT 0810

This letter presents the results of asbestos fibre identification analysis performed on 12 samples as received by Greencap on Wednesday, 26 August 2020. The samples were stated to be from John Stokes Square, 47 Progress Drive, Nightcliff NT 0810.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Darwin Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation .

The analysis was completed on Wednesday, 16 September 2020.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client. Please note this report replaces the previous version issued on Thursday, 27 August 2020 . Amendments were made to sample numbers 003, 004, 010 & 012. Several errors have been corrected. Samples 003, 004, 005, 006, 009, 010 & 012 contain asbestos fibres however the quantity is below the reporting limit of 0.1g/kg for the AS4964 test method.

Should you require further information please contact Darren Kenny.

Yours sincerely,
Greencap

Darren Kenny : Approved Identifier

Darren Kenny : Approved Signatory

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Accreditation No. 5450, Site No. 24550 Darwin Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Sampling was not conducted by Greencap and is therefore outside the scope of our NATA accreditation.

Report Date: Wednesday, 16/09/2020 Our ref: C110151:NT84933 - V2

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	NT84933 - 001	As Received - "STP16B-1b" Brown soil, stones and rocks, one fibre cement sheet fragment containing Chrysotile and Amosite asbestos(>2mm fraction), one fibre cement fragment containing Chrysotile asbestos (<2mm fraction), three discrete Chrysotile asbestos bundles and one discrete Amosite asbestos bundle (<2mm fraction) one discrete SMF bundle, plastic fragments, glass fragments, charcoal and organic material. Total approximate mass of 0.09 grams of Chrysotile and 0.05 grams of Amosite. ~ 598.62g	Chrysotile (white asbestos) Amosite (brown asbestos) Organic Fibres Synthetic Mineral Fibres See NOTE 1 & 2
2	NT84933 - 002	As Received - "STP16B-2b" Brown soil, stones and rocks, charcoal & organic material ~ 617.70g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2
3	NT84933 - 003	As Received - "STP16B-3b" Brown soil stones and rocks, seven discrete Chrysotile asbestos bundles and three discrete Amosite asbestos fibre bundles (<2mm fraction), charcoal and organic material. Total approximate mass of 0.01 grams of Chrysotile and 1927.2 micrograms of Amosite. ~ 578.33g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2
4	NT84933 - 004	As Received - "STP16B-4b" Brown soil, stones and rocks, three discrete Chrysotile asbestos bundles and one cement sheet fragment, paint flakes, charcoal and organic material. Total approximate mass of 0.01 grams of Chrysotile. ~ 617.66g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2
5	NT84933 - 005	As Received - "STP16B-5b" Brown soil, stones and rocks, one discrete Chrysotile asbestos bundle, one discrete mineral fibre of unknown type bundle, paint flakes, charcoal and organic material. Total approximate mass of 203.1 micrograms of Chrysotile. ~ 589.83g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2
6	NT84933 - 006	As Received - "STP16B-6b" Brown soil, stones and rocks, four discrete Chrysotile asbestos bundles, one discrete mineral fibre of unknown type bundle, aluminium foil fragment, paint flakes, charcoal and organic material. Total approximate mass of 2855.6 micrograms of Chrysotile. ~ 595.53g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2
7	NT84933 - 007	As Received - "STP21B-1b" Red brown soil, stones and rocks, charcoal and organic material ~ 583.41g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2

Report Date: Wednesday, 16/09/2020 Our ref: C110151:NT84933 - V2

Site Location:	John Stokes Square, 47 Progress Drive, Nightcliff NT 0810		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
8	NT84933 - 008	As Received - "STP21B-2b" Red brown soil, stones and rocks, charcoal and organic material ~ 531.78g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2
9	NT84933 - 009	As Received - "STP21B-3b" Red brown soil, stones and rocks, six discrete Chrysotile asbestos bundles (<2mm fraction), one discrete Amosite asbestos bundle (<2mm fraction), charcoal and organic material. Total approximate mass of 2841.6 micrograms of Chrysotile and 105.0 micrograms of Amosite. ~ 522.03g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2
10	NT84933 - 010	As Received - "STP21B-4b" Red brown soil, stones and rocks, three discrete Chrysotile asbestos bundles (<2mm fraction), one discrete SMF bundle, charcoal and organic material. Total approximate mass of 1851.3 micrograms of Chrysotile. ~ 600.32g	No Asbestos Detected At or Above Reporting Limit Organic Fibres Synthetic Mineral Fibres See NOTE 1 & 2
11	NT84933 - 011	As Received - "STP21B-5b" Red brown soil, stones and rocks, charcoal and organic material. ~ 588.07g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2
12	NT84933 - 012	As Received - "STP21B-6b" Red brown soil, stones and rocks, One discrete Chroysotile asbestos bundle (<2mm fraction), one discrete Amosite asbestos bundle (<2mm fraction), charcoal and organic material. Total approximate mass of 877.5 micrograms of Chrysotile and 437.5 micrograms of Amosite. ~ 601.14g	No Asbestos Detected At or Above Reporting Limit Organic Fibres See NOTE 1 & 2

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.
If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.

PLEASE NOTE The samples in this report are 'As Received'. Greencap does not take responsibility for the sampling procedure or accuracy of the sample location descriptions which have been provided by the client.

NOTE 1 The reporting limit for this analysis is 0.1g/kg (0.01%) by application of polarised light microscopy, dispersion staining and trace analysis techniques. The above result can be interpreted that the sample contains no detectable 'respirable' asbestos fibres (AS4964-2004 Clause 9.5).

NOTE 2 Soil analysis conducted in accordance with WA Guidelines for the assessment, remediation and management of asbestos-contaminated sites (May 2009), Recommended procedures for laboratory analysis of asbestos in soil (June 2011) and NEPM Schedule B1: Guideline on investigation levels for soil & groundwater, Schedule B2: Guideline on site characterisation.

APPENDIX I

Air Quality Monitoring Reports

SLR Consulting Australia Laboratory Services - Darwin Office
ABN: 29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-15
Date of Issue: Tuesday, 21 July 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
20/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
20/07/2020	JLP-45	10	9	1.00	1.00	1.00	07:07	17:05	598	100	1	<0.01	
20/07/2020	JLP-46	10	10	1.00	1.00	1.00	07:05	17:01	596	100	1	<0.01	
20/07/2020	JLP-47	10	11	1.00	1.00	1.00	07:00	17:00	600	100	0.5	<0.01	
20/07/2020	JLP-48	10	12	1.00	1.00	1.00	07:02	17:03	601	100	0	<0.01	108698

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
11 Southwest boundary of work area - adjacent to childcare centre
12 Northwest boundary of work area - adjacent to site offices

Sample Types:

10 Control

Remarks:

108698 Reject sample - filter obscured by grit

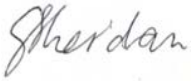
Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
This report cannot be reproduced except in full.

Approved Fibre Counter: Gemma Sheridan



Approved Fibre Signatory: Gemma Sheridan

SLR Consulting Australia Laboratory Services - Darwin Office
ABN: 29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-16
Date of Issue: Wednesday, 22 July 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
21/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
21/07/2020	JLP-49	10	9	1.00	1.00	1.00	07:01	17:18	617	100	2	<0.01	
21/07/2020	JLP-50	10	10	1.00	1.00	1.00	07:00	17:18	618	100	0	<0.01	
21/07/2020	JLP-51	10	11	1.00	1.00	1.00	07:03	17:13	610	100	1	<0.01	
21/07/2020	JLP-52	10	12	1.00	1.00	1.00	07:03	17:13	610	100	0.5	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
11 Southwest boundary of work area - adjacent to childcare centre
12 Northwest boundary of work area - adjacent to site offices

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
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Approved Fibre Counter: Gemma Sheridan

Approved Fibre Signatory: Gemma Sheridan

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http://www.slrconsulting.com

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T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-17
Date of Issue: Saturday, 25 July 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
22/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
22/07/2020	JLP-53	10	9	1.00	1.00	1.00	07:00	17:01	601	100	0	<0.01	
22/07/2020	JLP-54	10	10	1.00	1.00	1.00	06:59	17:01	602	100	0	<0.01	
22/07/2020	JLP-55	10	11	1.00	1.00	1.00	07:00	17:03	603	100	0	<0.01	
22/07/2020	JLP-56	10	12	1.00	1.00	1.00	06:58	17:10	612	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
11 Southwest boundary of work area - adjacent to childcare centre
12 Northwest boundary of work area - adjacent to site offices

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
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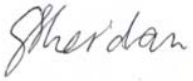
Approved Fibre Counter: Gemma Sheridan



Approved Fibre Signatory: Gemma Sheridan

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ABN: 29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-18
Date of Issue: Saturday, 25 July 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
23/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
23/07/2020	JLP-57	10	9	1.00	1.00	1.00	07:01	16:10	549	100	2	<0.01	
23/07/2020	JLP-58	10	10	1.00	1.05	1.03	07:00	16:06	546	100	1	<0.01	
23/07/2020	JLP-59	10	11	1.00	1.05	1.03	06:58	16:19	561	100	2	<0.01	
23/07/2020	JLP-60	10	12	1.00	1.10	1.05	06:58	16:21	563	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
11 Southwest boundary of work area - adjacent to childcare centre
12 Northwest boundary of work area - adjacent to site offices

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
This report cannot be reproduced except in full.

Approved Fibre Counter: Gemma Sheridan

Approved Fibre Signatory: Gemma Sheridan

SLR Consulting Australia Laboratory Services - Sydney Office
ABN: 29 001 584 612
http://www.slrconsulting.com

Tenancy 202, Submarine School, Sub Base Platypus, 120 High Street NSW 2060
T: 61 2 9427 8100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-19
Date of Issue: Tuesday, 28 July 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
27/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
27/07/2020	JLP-61	10	9	1.00	1.00	1.00	07:44	16:57	553	100	0	<0.01	
27/07/2020	JLP-62	10	10	1.00	1.10	1.05	07:48	16:53	545	100	2	<0.01	
27/07/2020	JLP-63	10	11	1.00	1.00	1.00	07:51	16:48	537	100	0	<0.01	
27/07/2020	JLP-64	10	12	1.00	1.00	1.00	07:50	17:03	553	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
11 Southwest boundary of work area - adjacent to childcare centre
12 Northwest boundary of work area - adjacent to site offices

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
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Approved Fibre Counter: Paul Turyn

Approved Fibre Signatory: Paul Turyn

SLR Consulting Australia Laboratory Services - Darwin Office
ABN: 29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-20
Date of Issue: Wednesday, 29 July 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
28/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
28/07/2020	JLP-65	10	9	1.00	1.10	1.05	07:17	17:01	584	100	0	<0.01	
28/07/2020	JLP-66	10	10	1.00	1.10	1.05	07:23	16:58	575	100	0	<0.01	
28/07/2020	JLP-67	10	11	1.00	1.00	1.00	07:32	16:55	563	100	1	<0.01	
28/07/2020	JLP-68	10	13	1.00	1.00	1.00	07:33	16:55	562	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
11 Southwest boundary of work area - adjacent to childcare centre
13 West of work area - middle of Lot B1

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Counter:

Approved Fibre Counter: Paul Turyn

Approved Signatory:

Approved Fibre Signatory: Paul Turyn

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http://www.slrconsulting.com

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-21
Date of Issue: Friday, 31 July 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
29/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
29/07/2020	JLP-69	10	9	1.00	1.00	1.00	08:38	14:42	364	100	0	<0.01	
29/07/2020	JLP-70	10	10	1.00	.90	.95	08:40	14:44	364	100	0	<0.01	
29/07/2020	JLP-71	10	14	1.00	1.10	1.05	08:42	14:46	364	100	0	<0.01	
29/07/2020	JLP-72	10	15	1.00	1.05	1.03	08:37	14:41	364	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
15 West of work area - fence to Lot A

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
This report cannot be reproduced except in full.

Approved Fibre Counter: Paul Turyn

Approved Fibre Signatory:

SLR Consulting Australia Laboratory Services - Darwin Office
ABN: 29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

This report replaces the previous report No: 680.10679.00100-JLP-22

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-22(R2)
Date of Issue: Friday, 31 July 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
30/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
30/07/2020	JLP-73	10	9	1.00	1.00	1.00	07:47	17:14	567	100	0	<0.01	
30/07/2020	JLP-74	10	10	1.00	1.00	1.00	07:55	17:12	557	100	0	<0.01	
30/07/2020	JLP-75	10	16	1.00	1.00	1.00	07:56	17:10	554	100	0	<0.01	
30/07/2020	JLP-76	10	15	1.00	1.05	1.03	07:46	17:17	571	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
15 West of work area - fence to Lot A
16 South of work area - southwest boundary of Lot B2

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
This report cannot be reproduced except in full.

Approved Fibre Counter: Paul Turyn

Approved Fibre Signatory: Paul Turyn

SLR Consulting Australia Laboratory Services - Darwin Office
ABN: 29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-23
Date of Issue: Wednesday, 5 August 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
31/07/2020	**Blank**		0				N/A	N/A		100	0	N/A	
31/07/2020	JLP-77	10	9	1.00	1.00	1.00	07:16	17:23	607	100	1	<0.01	
31/07/2020	JLP-78	10	10	1.00	1.00	1.00	07:17	17:21	604	100	1	<0.01	
31/07/2020	JLP-79	10	16	1.00	1.00	1.00	07:18	17:19	601	100	0	<0.01	
31/07/2020	JLP-80	10	17	1.00	1.05	1.03	07:11	17:25	614	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
16 South of work area - southwest boundary of Lot B2
17 West of work area - temp fence along Road Reserve

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
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Approved Fibre Counter: Paul Turyn

Approved Fibre Signatory: Paul Turyn

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http://www.slrconsulting.com

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T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-24
Date of Issue: Wednesday, 5 August 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
1/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
1/08/2020	JLP-81	10	16	1.00	1.00	1.00	07:15	16:15	540	100	0	<0.01	
1/08/2020	JLP-82	10	10	1.00	1.00	1.00	07:18	16:12	534	100	0	<0.01	
1/08/2020	JLP-83	10	9	1.00	.80	.90	07:18	16:09	531	100	0	<0.01	108882
1/08/2020	JLP-84	10	18	1.00	1.00	1.00	07:17	16:18	541	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
16 South of work area - southwest boundary of Lot B2
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

108882 Reject sample - pump failure

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
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Approved Fibre Counter: Paul Turyn

Approved Fibre Signatory: Paul Turyn

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http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-25
Date of Issue: Wednesday, 5 August 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
4/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
4/08/2020	JLP-85	10	9	1.00	.90	.95	07:31	16:59	568	100	0	<0.01	
4/08/2020	JLP-86	10	10	1.00	1.00	1.00	07:32	17:01	569	100	0	<0.01	
4/08/2020	JLP-87	10	14	1.00	1.00	1.00	07:34	17:06	572	100	0	<0.01	
4/08/2020	JLP-88	10	18	1.00	1.00	1.00	07:18	17:08	590	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Paul Turyn

Approved Fibre Signatory: Paul Turyn

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Unit 5 21 Parap Road NT 0820
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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-26
Date of Issue: Thursday, 6 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
5/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
5/08/2020	JLP-89	10	9	1.00	1.00	1.00	07:18	17:03	585	100	0	<0.01	
5/08/2020	JLP-90	10	10	1.00	1.00	1.00	07:20	17:01	581	100	0	<0.01	
5/08/2020	JLP-91	10	14	1.00	1.00	1.00	07:22	17:11	589	100	0	<0.01	
5/08/2020	JLP-92	10	18	1.00	1.00	1.00	07:08	17:07	599	100	0	<0.01	108891

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

108891 Sample rejected - Flow Fault

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-27
Date of Issue: Monday, 10 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
6/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
6/08/2020	JLP-93	10	9	1.00	1.00	1.00	07:26	17:02	576	100	0	<0.01	
6/08/2020	JLP-94	10	10	1.00	1.00	1.00	07:27	17:04	577	100	0	<0.01	108940
6/08/2020	JLP-95	10	14	1.00	1.00	1.00	07:15	17:15	600	100	0	<0.01	
6/08/2020	JLP-96	10	18	1.00	1.00	1.00	07:12	17:18	606	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

108940 Reject sample - pump relocated

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-28
Date of Issue: Monday, 10 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
7/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
7/08/2020	JLP-97	10	19	1.00	1.00	1.00	06:59	15:54	535	100	1	<0.01	
7/08/2020	JLP-98	10	14	1.00	1.00	1.00	07:00	15:54	534	100	0	<0.01	
7/08/2020	JLP-99	10	9	1.00	1.00	1.00	07:01	15:55	534	100	1	<0.01	
7/08/2020	JLP-100	10	10	1.00	1.00	1.00	07:01	15:55	534	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
19 West boundary of work area - entry gate

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Paul Turyn

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-29
Date of Issue: Tuesday, 11 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
10/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
10/08/2020	JLP-101	10	9	1.00	1.00	1.00	07:25	17:02	577	100	0	<0.01	
10/08/2020	JLP-102	10	10	1.00	1.05	1.03	07:26	17:03	577	100	1	<0.01	
10/08/2020	JLP-103	10	14	1.00	1.00	1.00	07:15	17:06	591	100	0	<0.01	
10/08/2020	JLP-104	10	18	1.00	1.05	1.03	07:14	17:07	593	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Paul Turyn

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-30
Date of Issue: Wednesday, 12 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
11/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
11/08/2020	JLP-105	10	9	1.00	1.05	1.03	07:36	16:57	561	100	0	<0.01	
11/08/2020	JLP-106	10	10	1.00	1.00	1.00	07:37	16:58	561	100	0	<0.01	
11/08/2020	JLP-107	10	14	1.00	1.00	1.00	07:11	17:06	595	100	0	<0.01	
11/08/2020	JLP-108	10	18	1.00	1.00	1.00	07:10	17:07	597	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-31
Date of Issue: Thursday, 13 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
12/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
12/08/2020	JLP-109	10	9	1.00	1.00	1.00	07:08	17:14	606	100	0	<0.01	
12/08/2020	JLP-110	10	10	1.00	1.00	1.00	07:07	17:16	609	100	1	<0.01	
12/08/2020	JLP-111	10	14	1.00	1.00	1.00	07:05	17:18	613	100	0	<0.01	
12/08/2020	JLP-112	10	18	1.00	1.00	1.00	07:00	17:20	620	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types: **Remarks:**

10 Control

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Paul Turyn

Approved Fibre Signatory: Paul Turyn

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-32
Date of Issue: Friday, 14 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
13/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
13/08/2020	JLP-113	10	9	1.00	1.00	1.00	07:04	16:34	570	100	0	<0.01	
13/08/2020	JLP-114	10	10	1.00	1.00	1.00	07:04	16:14	550	100	0	<0.01	
13/08/2020	JLP-115	10	14	1.00	1.00	1.00	07:06	16:16	550	100	0	<0.01	109049
13/08/2020	JLP-116	10	18	1.00	1.00	1.00	07:07	16:30	563	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

109049 Reject sample - filter damage

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Paul Turyn

Approved Fibre Signatory: Paul Turyn

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-33
Date of Issue: Monday, 17 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
14/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
14/08/2020	JLP-117	10	9	2.00	2.00	2.00	09:35	14:05	270	100	0	<0.01	
14/08/2020	JLP-118	10	10	2.00	2.00	2.00	09:38	14:10	272	100	0	<0.01	
14/08/2020	JLP-119	10	14	2.00	2.00	2.00	09:35	14:00	265	100	0	<0.01	
14/08/2020	JLP-120	10	18	2.00	2.00	2.00	09:38	14:02	264	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-34
Date of Issue: Monday, 17 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
15/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
15/08/2020	JLP-121	10	9	2.00	2.00	2.00	06:59	11:30	271	100	0	<0.01	
15/08/2020	JLP-122	10	14	2.00	2.00	2.00	07:00	11:30	270	100	0	<0.01	
15/08/2020	JLP-123	10	10	2.00	2.00	2.00	07:00	11:30	270	100	1	<0.01	
15/08/2020	JLP-124	10	18	2.00	2.00	2.00	07:01	11:31	270	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Signatory: Paul Turyn

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-35
Date of Issue: Friday, 21 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
17/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
17/08/2020	JLP-125	10	9	1.00	1.00	1.00	06:55	17:09	614	100	0	<0.01	
17/08/2020	JLP-126	10	10	1.00	1.00	1.00	06:56	17:05	609	100	0	<0.01	
17/08/2020	JLP-127	10	14	1.00	1.00	1.00	06:55	17:08	613	100	0	<0.01	
17/08/2020	JLP-128	10	18	1.00	1.00	1.00	06:59	17:05	606	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Gemma Sheridan

Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-36
Date of Issue: Friday, 21 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
18/08/2020	**Blank**		0				N/A	N/A		100	2	N/A	
18/08/2020	JLP-129	10	9	1.00	1.00	1.00	07:01	16:18	557	100	0	<0.01	
18/08/2020	JLP-130	10	10	1.00	1.00	1.00	06:59	16:22	563	100	0	<0.01	
18/08/2020	JLP-131	10	14	1.00	1.00	1.00	07:01	16:26	565	100	0	<0.01	
18/08/2020	JLP-132	10	18	1.00	1.10	1.05	06:59	16:28	569	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Gemma Sheridan

Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-37
Date of Issue: Friday, 21 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
19/08/2020	**Blank**		0				N/A	N/A		100	1	N/A	
19/08/2020	JLP-133	10	9	1.00	1.00	1.00	08:25	15:00	395	100	0	<0.01	
19/08/2020	JLP-134	10	10	1.00	1.00	1.00	08:32	15:05	393	100	0	<0.01	
19/08/2020	JLP-135	10	14	1.00	1.00	1.00	08:39	15:10	391	100	0	<0.01	
19/08/2020	JLP-136	10	18	1.00	1.00	1.00	08:44	15:16	392	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Gemma Sheridan

Approved Fibre Signatory: Gemma Sheridan

SLR Consulting Australia Laboratory Services - Sydney Office
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Tenancy 202, Submarine School, Sub Base Platypus, 120 High Street NSW 2060
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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-38
Date of Issue: Friday, 21 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
21/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
21/08/2020	JLP-137	10	18	1.00	1.00	1.00	07:25	16:52	567	100	0	<0.01	
21/08/2020	JLP-138	10	14	1.00	1.00	1.00	07:32	16:59	567	100	1	<0.01	
21/08/2020	JLP-139	10	9	1.00	1.00	1.00	07:36	16:45	549	100	0	<0.01	
21/08/2020	JLP-140	10	10	1.00	1.10	1.05	07:40	16:48	548	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

Approved Fibre Signatory: Liam Munro

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-39
Date of Issue: Saturday, 22 August 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
22/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
22/08/2020	JLP-141	10	14	2.00	2.00	2.00	07:17	13:05	348	100	1	<0.01	
22/08/2020	JLP-142	10	9	2.00	2.00	2.00	07:20	13:08	348	100	0.5	<0.01	
22/08/2020	JLP-143	10	10	2.00	2.00	2.00	07:35	13:13	338	100	0	<0.01	
22/08/2020	JLP-144	10	18	2.00	2.00	2.00	07:10	13:20	370	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Counter:

Approved Fibre Counter: Liam Munro

Approved Signatory:

Approved Fibre Signatory: Liam Munro

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-40
Date of Issue: Monday, 24 August 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
24/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
24/08/2020	JLP-145	10	8	1.00	1.10	1.05	07:26	17:10	584	100	1	<0.01	
24/08/2020	JLP-146	10	14	1.00	1.00	1.00	07:29	17:17	588	100	0	<0.01	
24/08/2020	JLP-147	10	10	1.00	1.00	1.00	07:35	17:13	578	100	0	<0.01	
24/08/2020	JLP-148	10	9	1.00	1.00	1.00	07:33	17:20	587	100	0	<0.01	

Monitoring Locations :

0 Blank
8 West boundary of work area
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

Sheridan

Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-41
Date of Issue: Tuesday, 25 August 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
25/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
25/08/2020	JLP-149	5	10	1.00	1.00	1.00	07:13	17:05	592	100	0	<0.01	
25/08/2020	JLP-150	5	14	1.00	1.00	1.00	07:22	17:14	592	100	0	<0.01	
25/08/2020	JLP-151	5	18	1.00	1.00	1.00	07:35	17:10	575	100	1	<0.01	
25/08/2020	JLP-152	5	9	1.00	1.00	1.00	07:11	17:20	609	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-42
Date of Issue: Wednesday, 26 August 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
26/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
26/08/2020	JLP-153	5	18	1.00	1.10	1.05	07:25	17:25	600	100	0	<0.01	
26/08/2020	JLP-154	5	14	1.00	1.00	1.00	07:27	17:22	595	100	2	<0.01	
26/08/2020	JLP-155	5	9	1.00	1.00	1.00	07:30	17:17	587	100	0.5	<0.01	
26/08/2020	JLP-156	5	10	1.00	1.10	1.05	07:34	17:20	586	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-43
Date of Issue: Friday, 28 August 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
27/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
27/08/2020	JLP-157	5	18	1.00	1.00	1.00	07:05	16:50	585	100	0	<0.01	
27/08/2020	JLP-158	5	14	1.00	1.00	1.00	07:29	16:53	564	100	2	<0.01	
27/08/2020	JLP-159	5	9	1.00	1.00	1.00	07:13	17:02	589	100	0	<0.01	
27/08/2020	JLP-160	5	10	1.00	1.10	1.05	07:10	16:56	586	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-44
Date of Issue: Monday, 31 August 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
28/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
28/08/2020	JLP-161	5	18	2.00	2.00	2.00	07:22	12:41	319	100	2	<0.01	
28/08/2020	JLP-162	5	14	2.00	2.00	2.00	07:25	12:37	312	100	1	<0.01	
28/08/2020	JLP-163	5	9	2.00	2.00	2.00	07:32	12:42	310	100	0	<0.01	
28/08/2020	JLP-164	5	10	2.00	2.00	2.00	07:29	12:35	306	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-45
Date of Issue: Tuesday, 1 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
31/08/2020	**Blank**		0				N/A	N/A		100	0	N/A	
31/08/2020	JLP-165	5	18	1.00	1.00	1.00	07:46	17:10	564	100	0	<0.01	
31/08/2020	JLP-166	5	14	1.00	1.00	1.00	07:49	17:07	558	100	0.5	<0.01	
31/08/2020	JLP-167	5	9	1.00	1.00	1.00	07:58	17:03	545	100	0	<0.01	
31/08/2020	JLP-168	5	10	1.00	1.10	1.05	07:53	17:01	548	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-46
Date of Issue: Wednesday, 2 September 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
1/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
1/09/2020	JLP-169	10	18	1.00	1.00	1.00	07:15	16:43	568	100	0	<0.01	
1/09/2020	JLP-170	10	14	1.00	1.00	1.00	07:18	16:40	562	100	0	<0.01	
1/09/2020	JLP-171	10	9	1.00	1.10	1.05	07:20	16:34	554	100	0	<0.01	
1/09/2020	JLP-172	10	10	1.00	1.00	1.00	07:25	16:37	552	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types: **Remarks:**

10 Control

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-47
Date of Issue: Wednesday, 2 September 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
2/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
2/09/2020	JLP-173	10	18	1.00	1.00	1.00	07:15	16:51	576	100	0	<0.01	
2/09/2020	JLP-174	10	14	1.00	1.00	1.00	07:18	16:42	564	100	0	<0.01	
2/09/2020	JLP-175	10	9	1.00	1.00	1.00	07:21	16:46	565	100	0	<0.01	
2/09/2020	JLP-176	10	10	1.00	1.00	1.00	07:23	16:48	565	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

Approved Fibre Signatory: Liam Munro

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-48
Date of Issue: Thursday, 3 September 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
3/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
3/09/2020	JLP-177	10	9	1.00	1.00	1.00	07:15	17:15	600	100	0	<0.01	
3/09/2020	JLP-178	10	10	1.00	1.00	1.00	07:18	17:12	594	100	0	<0.01	
3/09/2020	JLP-179	10	18	1.00	1.10	1.05	08:45	17:18	513	100	0	<0.01	109360
3/09/2020	JLP-180	10	14	1.00	1.10	1.05	08:47	17:10	503	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

109360 Reject sample - filter obscured by grit

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

Approved Fibre Signatory: Liam Munro

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-49
Date of Issue: Friday, 4 September 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
4/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
4/09/2020	JLP-181	10	18	1.00	1.00	1.00	07:07	16:07	540	100	1	<0.01	
4/09/2020	JLP-182	10	14	1.00	1.10	1.05	07:09	16:04	535	100	0	<0.01	
4/09/2020	JLP-183	10	9	1.00	1.00	1.00	07:11	16:02	531	100	0	<0.01	
4/09/2020	JLP-184	10	10	1.00	1.10	1.05	07:14	16:00	526	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Counter:

Approved Fibre Counter: Liam Munro

Approved Signatory:

Approved Fibre Signatory: Liam Munro

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ABN: 29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-50
Date of Issue: Monday, 7 September 2020
Removal Contractor: **Northern Trade Solutions Pty Ltd**
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address:N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
7/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
7/09/2020	JLP-185	10	18	1.00	1.00	1.00	07:06	17:06	600	100	0	<0.01	
7/09/2020	JLP-186	10	14	1.00	1.00	1.00	07:08	17:08	600	100	0	<0.01	
7/09/2020	JLP-187	10	9	1.00	1.10	1.05	07:10	17:11	601	100	0	<0.01	
7/09/2020	JLP-188	10	10	1.00	1.00	1.00	07:12	17:13	601	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

10 Control

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

Approved Fibre Signatory: Liam Munro

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-51
Date of Issue: Tuesday, 8 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
8/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
8/09/2020	JLP-189	5	18	1.00	1.00	1.00	07:18	17:26	608	100	0	<0.01	
8/09/2020	JLP-190	5	14	1.00	1.00	1.00	07:21	17:22	601	100	0	<0.01	
8/09/2020	JLP-191	5	9	1.00	1.00	1.00	07:23	17:18	595	100	3	<0.01	
8/09/2020	JLP-192	5	10	1.00	1.00	1.00	07:27	17:20	593	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Liam Munro

Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-52
Date of Issue: Wednesday, 9 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
9/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
9/09/2020	JLP-193	5	18	1.00	1.00	1.00	07:06	17:12	606	100	0	<0.01	
9/09/2020	JLP-194	5	14	1.00	1.10	1.05	07:09	17:14	605	100	0	<0.01	
9/09/2020	JLP-195	5	9	1.00	1.00	1.00	07:12	17:16	604	100	1	<0.01	
9/09/2020	JLP-196	5	10	1.00	1.00	1.00	07:15	17:10	595	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Counter: Gemma Sheridan

Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-53
Date of Issue: Thursday, 10 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
10/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
10/09/2020	JLP-197	5	18	1.00	1.00	1.00	07:02	17:05	603	100	0	<0.01	
10/09/2020	JLP-198	5	14	1.00	1.00	1.00	07:05	17:10	605	100	0	<0.01	
10/09/2020	JLP-199	5	9	1.00	1.00	1.00	07:10	17:03	593	100	0	<0.01	
10/09/2020	JLP-200	5	10	1.00	1.00	1.00	07:13	17:01	588	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-54
Date of Issue: Friday, 11 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
11/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
11/09/2020	JLP-201	5	18	1.00	1.00	1.00	07:10	17:21	611	100	1	<0.01	
11/09/2020	JLP-202	5	14	1.00	1.00	1.00	07:02	17:19	617	100	0	<0.01	
11/09/2020	JLP-203	5	9	1.00	1.00	1.00	07:04	17:17	613	100	1	<0.01	
11/09/2020	JLP-204	5	10	1.00	1.00	1.00	07:06	17:15	609	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-55
Date of Issue: Monday, 14 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
14/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
14/09/2020	JLP-205	5	18	1.00	1.00	1.00	07:20	18:53	693	100	1	<0.01	
14/09/2020	JLP-206	5	14	1.00	1.00	1.00	07:18	18:50	692	100	1.5	<0.01	
14/09/2020	JLP-207	5	9	1.00	1.00	1.00	07:15	18:48	693	100	3	<0.01	
14/09/2020	JLP-208	5	10	1.00	1.00	1.00	07:12	18:45	693	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-56
Date of Issue: Friday, 18 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
18/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
18/09/2020	JLP-209	5	18	1.00	1.00	1.00	07:22	16:59	577	100	0	<0.01	
18/09/2020	JLP-210	5	14	1.00	1.00	1.00	07:20	16:55	575	100	0	<0.01	
18/09/2020	JLP-211	5	9	1.00	1.00	1.00	07:15	16:50	575	100	0	<0.01	
18/09/2020	JLP-212	5	10	1.00	1.00	1.00	07:17	16:53	576	100	0	<0.01	109616

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

109616 Reject sample - pump fell on ground

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-57
Date of Issue: Saturday, 19 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
19/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
19/09/2020	JLP-213	5	18	2.00	2.00	2.00	07:18	12:45	327	100	0	<0.01	
19/09/2020	JLP-214	5	14	2.00	2.00	2.00	07:12	12:43	331	100	0	<0.01	
19/09/2020	JLP-215	5	9	2.00	2.00	2.00	07:10	12:40	330	100	1	<0.01	
19/09/2020	JLP-216	5	10	2.00	2.00	2.00	07:20	12:47	327	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-58
Date of Issue: Tuesday, 22 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
22/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
22/09/2020	JLP-217	5	18	1.00	1.00	1.00	07:15	16:53	578	100	1	<0.01	
22/09/2020	JLP-218	5	14	1.00	1.00	1.00	07:13	16:50	577	100	1	<0.01	
22/09/2020	JLP-219	5	9	1.00	1.00	1.00	07:08	16:45	577	100	1	<0.01	
22/09/2020	JLP-220	5	10	1.00	1.00	1.00	07:13	16:50	577	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

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Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-59
Date of Issue: Thursday, 24 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
24/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
24/09/2020	JLP-221	5	18	1.00	1.00	1.00	06:48	17:30	642	100	1	<0.01	
24/09/2020	JLP-222	5	14	1.00	1.00	1.00	06:53	17:28	635	100	0	<0.01	
24/09/2020	JLP-223	5	9	1.00	1.00	1.00	07:00	17:25	625	100	0	<0.01	
24/09/2020	JLP-224	5	10	1.00	1.00	1.00	06:51	17:06	615	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-60
Date of Issue: Saturday, 26 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
26/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
26/09/2020	JLP-225	5	18	2.00	2.00	2.00	07:25	13:36	371	100	0	<0.01	
26/09/2020	JLP-226	5	14	2.00	2.00	2.00	07:23	13:34	371	100	0	<0.01	
26/09/2020	JLP-227	5	9	2.00	2.00	2.00	07:20	13:32	372	100	0	<0.01	
26/09/2020	JLP-228	5	10	2.00	2.00	2.00	07:05	13:30	385	100	1	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00100-JLP-61
Date of Issue: Monday, 28 September 2020
Removal Contractor: N/A
Job Location: John Stokes Square 47 Progress Drive Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Unit 3, 29 Miles Road
Berrimah
NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min)			TIME			Count		CONC'N	REM
				ON	OFF	AVGE	ON	OFF	TOTAL(min)	Fields	Fibres	(fibres/mL)	
28/09/2020	**Blank**		0				N/A	N/A		100	0	N/A	
28/09/2020	JLP-229	5	18	1.00	1.00	1.00	07:28	16:27	539	100	0	<0.01	
28/09/2020	JLP-230	5	14	1.00	1.00	1.00	07:24	16:25	541	100	0	<0.01	
28/09/2020	JLP-231	5	9	1.00	1.00	1.00	07:20	16:20	540	100	0	<0.01	
28/09/2020	JLP-232	5	10	1.00	1.00	1.00	07:22	16:23	541	100	0	<0.01	

Monitoring Locations :

0 Blank
9 North boundary of work area - adjacent to 41 Progress Dr.
10 East boundary of work area - adjacent to 169 Dick Ward Dr
14 South of work area - adjacent childcare centre
18 West boundary of work area - adjacent to site carpark

Sample Types:

5 Background

Remarks:

Notes On Sampling:

The above results only relate to the samples tested. This report confirms preliminary report _N/A

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025 - Testing.
This report cannot be reproduced except in full.

Approved Fibre Counter: Gemma Sheridan

Approved Fibre Signatory: Gemma Sheridan

APPENDIX J

Shoal Bay Waste Management Facility Receipts

Carl
John stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113040-SB
Voucher No:

Time In: 1/10/2020 9:57:01 AM
Time Out: 1/10/2020 9:57:01 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 02-A1905
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.10t
TARE Weight:	11.78t
NET Weight:	12.32t
Chargeable Weight:	12.32t
Council Fee:	$4,670.40
EPA Levy:	$0.00
GST :	$467.04
Temporary Acc:	$0.00
Total Price:	$5,137.44
Payments:	
ACCOUNT	$5,137.44
Total Amount Tendered:	$5,137.44
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

§80127485>œ

John Stokes
Nathan

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113181-SB
Voucher No:

Time In: 1/10/2020 2:25:10 PM
Time Out: 1/10/2020 2:25:10 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.45t
TARE Weight:	11.78t
NET Weight:	10.67t
Chargeable Weight:	10.67t
Council Fee:	$4,044.90
EPA Levy:	$0.00
GST :	$404.49
Temporary Acc:	$0.00
Total Price:	$4,449.39
Payments:	
ACCOUNT	$4,449.39
Total Amount Tendered:	$4,449.39
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

§801276377œ

John Stokes
Nathan

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113146-SB
Voucher No:

Time In: 1/10/2020 1:31:43 PM
Time Out: 1/10/2020 1:31:43 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.25t
TARE Weight:	11.78t
NET Weight:	12.47t
Chargeable Weight:	12.47t
Council Fee:	$4,727.26
EPA Levy:	$0.00
GST :	$472.73
Temporary Acc:	$0.00
Total Price:	$5,199.99
Payments:	
ACCOUNT	$5,199.99
Total Amount Tendered:	$5,199.99
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

§80127601Yœ

John Stokes Nathan

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113123-SB
Voucher No:

Time In: 1/10/2020 12:36:51 PM
Time Out: 1/10/2020 12:36:51 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.45t
TARE Weight:	11.78t
NET Weight:	13.67t
Chargeable Weight:	13.67t
Council Fee:	$5,182.17
EPA Levy:	$0.00
GST :	$518.22
Temporary Acc:	$0.00
Total Price:	$5,700.39
Payments:	
ACCOUNT	$5,700.39
Total Amount Tendered:	$5,700.39
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

§80127578Uœ

Carl
John stoke ©

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113081-SB
Voucher No:

Time In: 1/10/2020 11:10:28 AM
Time Out: 1/10/2020 11:10:28 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 02-A1905
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.35t
TARE Weight:	11.78t
NET Weight:	14.57t
Chargeable Weight:	14.57t
Council Fee:	$5,523.35
EPA Levy:	$0.00
GST :	$552.34
Temporary Acc:	$0.00
Total Price:	$6,075.69
Payments:	
ACCOUNT	$6,075.69
Total Amount Tendered:	$6,075.69
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

§80127529:œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113403-SB
Voucher No:

Time In: 2/10/2020 12:31:07 PM
Time Out: 2/10/2020 12:31:07 PM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1946
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.05t
TARE Weight:	12.70t
NET Weight:	10.35t
Chargeable Weight:	10.35t
Council Fee:	$3,923.59
EPA Levy:	$0.00
GST :	$392.36
Temporary Acc:	$0.00
Total Price:	$4,315.95

Payments:	
ACCOUNT	$4,315.95
Total Amount Tendered:	$4,315.95
Change Given:	$0.00

Driver:

Operator: Dennis

š80127900cœ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113376-SB
Voucher No:

Time In: 2/10/2020 11:39:31 AM
Time Out: 2/10/2020 11:39:31 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.70t
TARE Weight:	12.36t
NET Weight:	13.34t
Chargeable Weight:	13.34t
Council Fee:	$5,057.07
EPA Levy:	$0.00
GST :	$505.71
Temporary Acc:	$0.00
Total Price:	$5,562.78

Payments:	
ACCOUNT	$5,562.78
Total Amount Tendered:	$5,562.78
Change Given:	$0.00

Driver:

Operator: Sam

š80127869hœ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113347-SB
Voucher No:

Time In: 2/10/2020 10:43:25 AM
Time Out: 2/10/2020 10:43:25 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.80t
TARE Weight:	12.36t
NET Weight:	13.44t
Chargeable Weight:	13.44t
Council Fee:	$5,094.98
EPA Levy:	$0.00
GST :	$509.50
Temporary Acc:	$0.00
Total Price:	$5,604.48

Payments:	
ACCOUNT	$5,604.48
Total Amount Tendered:	$5,604.48
Change Given:	$0.00

Driver:

Operator: Sam

š80127837cœ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113315-SB
Voucher No:

Time In: 2/10/2020 9:42:46 AM
Time Out: 2/10/2020 9:42:46 AM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.70t
TARE Weight:	12.70t
NET Weight:	11.00t
Chargeable Weight:	11.00t
Council Fee:	$4,170.00
EPA Levy:	$0.00
GST :	$417.00
Temporary Acc:	$0.00
Total Price:	$4,587.00

Payments:	
ACCOUNT	$4,587.00
Total Amount Tendered:	$4,587.00
Change Given:	$0.00

Driver:

Operator: Sam

š80127793Gœ

Carl
John Stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113296-SB
Voucher No:

Time In: 2/10/2020 9:08:52 AM
Time Out: 2/10/2020 9:08:52 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.35t
TARE Weight:	11.78t
NET Weight:	11.57t
Chargeable Weight:	11.57t
Council Fee:	$4,386.08
EPA Levy:	$0.00
GST :	$438.61
Temporary Acc:	$0.00
Total Price:	$4,824.69

Payments:	
ACCOUNT	$4,824.69
Total Amount Tendered:	$4,824.69
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

š80127770!œ

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80113320-SB
Voucher No:	
Time In:	2/10/2020 9:59:04 AM
Time Out:	2/10/2020 9:59:04 AM
Vehicle Rego:	CB06AH-12

Client: VEOLIA ENVIRONMENTAL SERVIC
Approval no. 20-A1900
Order Number:
Contract: VEOLIA ENVIRONMENTAL SERV

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.15t
TARE Weight:	15.50t
NET Weight:	10.65t
Chargeable Weight:	10.65t
Council Fee:	$4,037.32
EPA Levy:	$0.00
GST :	$403.73
Temporary Acc:	$0.00
Total Price:	$4,441.05

Payments:	
ACCOUNT	$4,441.05
Total Amount Tendered:	$4,441.05
Change Given:	$0.00

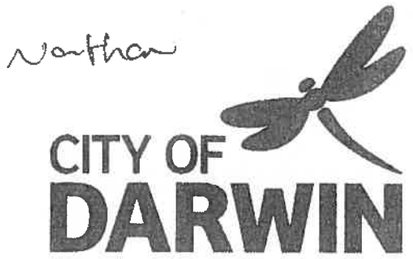
Driver:

Operator: Sam

$80127801e@

John Stokes

Nathan



Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80113489-SB
Voucher No:	
Time In:	2/10/2020 2:36:27 PM
Time Out:	2/10/2020 2:36:27 PM
Vehicle Rego:	CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

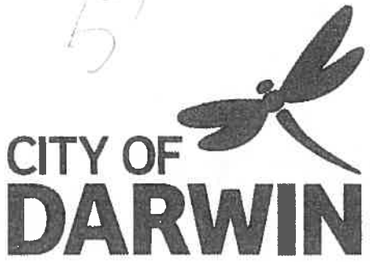
GROSS Weight:	25.25t
TARE Weight:	12.36t
NET Weight:	12.89t
Chargeable Weight:	12.89t
Council Fee:	$4,886.48
EPA Levy:	$0.00
GST :	$488.65
Temporary Acc:	$0.00
Total Price:	$5,375.13

Payments:	
ACCOUNT	$5,375.13
Total Amount Tendered:	$5,375.13
Change Given:	$0.00

Driver:

Operator: Dennis

$80127998{@



Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80113445-SB
Voucher No:	
Time In:	2/10/2020 1:42:19 PM
Time Out:	2/10/2020 1:42:19 PM
Vehicle Rego:	CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.10t
TARE Weight:	12.36t
NET Weight:	10.74t
Chargeable Weight:	10.74t
Council Fee:	$4,071.44
EPA Levy:	$0.00
GST :	$407.14
Temporary Acc:	$0.00
Total Price:	$4,478.58

Payments:	
ACCOUNT	$4,478.58
Total Amount Tendered:	$4,478.58
Change Given:	$0.00

Driver:

Operator: Dennis

$80127951'@

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100001693-SB
Voucher No:

Time In: 3/11/2020 8:24:59 AM
Time Out: 3/11/2020 8:24:59 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no.
Order Number: 31-A1932
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		25.62t
TARE Weight:		12.36t
NET Weight:		13.26t
Chargeable Weight:		13.26t
Council Fee:		$5,026.75
EPA Levy:		$0.00
GST :		$502.67
Temporary Acc:		$0.00
Total Price:		$5,529.42
Payments: ACCOUNT		
Total Amount Tendered:		$5,529.42
Change Given:		$0.00

Driver:

Operator: Michael

100001940

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100001745-SB.2
Voucher No:

Time In: 3/11/2020 9:52:21 AM
Time Out: 3/11/2020 9:52:21 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no.
Order Number: 31-A1932
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		26.18t
TARE Weight:		12.36t
NET Weight:		13.82t
Chargeable Weight:		13.82t
Council Fee:		$5,239.04
EPA Levy:		$0.00
GST :		$523.90
Temporary Acc:		$0.00
Total Price:		$5,762.94
Payments: ACCOUNT		
Total Amount Tendered:		$5,762.94
Change Given:		$0.00

Driver:

Operator: Michael

$100001999

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100001784-SB
Voucher No:

Time In: 3/11/2020 11:00:24 AM
Time Out: 3/11/2020 11:00:24 AM

Vehicle Rego: CD99YR-6

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no.
Order Number: 31-a1932
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		19.64t
TARE Weight:		11.80t
NET Weight:		7.84t
Chargeable Weight:		7.84t
Council Fee:		$2,972.07
EPA Levy:		$0.00
GST :		$297.21
Temporary Acc:		$0.00
Total Price:		$3,269.28
Payments: ACCOUNT		
Total Amount Tendered:		$3,269.28
Change Given:		$0.00

Driver:

Operator: Michael

$100002042

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100001807-SB
Voucher No:

Time In: 3/11/2020 11:39:06 AM
Time Out: 3/11/2020 11:39:06 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no.
Order Number: 31-A1932
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		20.34t
TARE Weight:		12.36t
NET Weight:		7.98t
Chargeable Weight:		7.98t
Council Fee:		$3,025.15
EPA Levy:		$0.00
GST :		$302.51
Temporary Acc:		$0.00
Total Price:		$3,327.66
Payments: ACCOUNT		
Total Amount Tendered:		$3,327.66
Change Given:		$0.00

Driver:

Operator: Michael

$100002066

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100001854-SB
Voucher No:

Time In: 3/11/2020 12:53:32 PM
Time Out: 3/11/2020 12:53:32 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no.
Order Number: 31-A1932
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		26.14t
TARE Weight:		12.36t
NET Weight:		13.78t
Chargeable Weight:		13.78t
Council Fee:		$5,223.87
EPA Levy:		$0.00
GST :		$522.39
Temporary Acc:		$0.00
Total Price:		$5,746.26
Payments: ACCOUNT		
Total Amount Tendered:		$5,746.26
Change Given:		$0.00

Driver:

Operator: Dennis

$100002125

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100001893-SB
Voucher No:

Time In: 3/11/2020 1:52:52 PM
Time Out: 3/11/2020 1:52:52 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.28t
TARE Weight:	12.36t
NET Weight:	13.92t
Chargeable Weight:	13.92t
Council Fee:	$5,276.95
EPA Levy:	$0.00
GST :	$527.69
Temporary Acc:	$0.00
Total Price:	$5,804.64

Payments:	
ACCOUNT	$5,804.64
Total Amount Tendered:	$5,804.64
Change Given:	$0.00

Driver:

Operator: Dennis

$100002164

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100001918-SB
Voucher No:

Time In: 3/11/2020 2:28:37 PM
Time Out: 3/11/2020 2:28:37 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.36t
TARE Weight:	12.36t
NET Weight:	12.00t
Chargeable Weight:	12.00t
Council Fee:	$4,549.09
EPA Levy:	$0.00
GST :	$454.91
Temporary Acc:	$0.00
Total Price:	$5,004.00

Payments:	
ACCOUNT	$5,004.00
Total Amount Tendered:	$5,004.00
Change Given:	$0.00

Driver:

Operator: Dennis

$100002190

PR 000609

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002155-SB.2
Voucher No:

Time In: 4/11/2020 12:01:21 PM
Time Out: 4/11/2020 12:01:21 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		22.68t
TARE Weight:		12.36t
NET Weight:		10.32t
Chargeable Weight:		10.32t
Council Fee:		$3,912.22
EPA Levy:		$0.00
GST :		$391.22
Temporary Acc:		$0.00
Total Price:		$4,303.44
Payments:		
ACCOUNT		$4,303.44
Total Amount Tendered:		$4,303.44
Change Given:		$0.00

Driver:

Operator: (4) Dennis

š10000246460

GSG John Stokes Card PR000609

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002092-SB
Voucher No:

Time In: 4/11/2020 10:36:27 AM
Time Out: 4/11/2020 10:36:27 AM

Vehicle Rego: CD99YR-6

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		20.28t
TARE Weight:		11.80t
NET Weight:		8.48t
Chargeable Weight:		8.48t
Council Fee:		$3,214.69
EPA Levy:		$0.00
GST :		$321.47
Temporary Acc:		$0.00
Total Price:		$3,536.16
Payments:		
ACCOUNT		$3,536.16
Total Amount Tendered:		$3,536.16
Change Given:		$0.00

Driver:

Operator: (5) Dennis

š10000238720

GSG, John Stokes Card PR000609

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002060-SB
Voucher No:

Time In: 4/11/2020 9:37:57 AM
Time Out: 4/11/2020 9:37:57 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		25.86t
TARE Weight:		12.36t
NET Weight:		13.50t
Chargeable Weight:		13.50t
Council Fee:		$5,117.73
EPA Levy:		$0.00
GST :		$511.77
Temporary Acc:		$0.00
Total Price:		$5,629.50
Payments:		
ACCOUNT		$5,629.50
Total Amount Tendered:		$5,629.50
Change Given:		$0.00

Driver:

Operator: (6) Dennis

š100002349L

GSG, John Stokes Card PR000609

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002027-SB
Voucher No:

Time In: 4/11/2020 8:24:16 AM
Time Out: 4/11/2020 8:24:16 AM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		24.58t
TARE Weight:		12.70t
NET Weight:		11.88t
Chargeable Weight:		11.88t
Council Fee:		$4,503.60
EPA Levy:		$0.00
GST :		$450.36
Temporary Acc:		$0.00
Total Price:		$4,953.96
Payments:		
ACCOUNT		$4,953.96
Total Amount Tendered:		$4,953.96
Change Given:		$0.00

Driver:

Operator: (7) Dennis

š100002306x

PR000609

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002280-SB
Voucher No:

Time In: 4/11/2020 2:48:50 PM
Time Out: 4/11/2020 2:48:50 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		27.08t
TARE Weight:		12.36t
NET Weight:		14.72t
Chargeable Weight:		14.72t
Council Fee:		$5,580.22
EPA Levy:		$0.00
GST :		$558.02
Temporary Acc:		$0.00
Total Price:		$6,138.24
Payments:		
ACCOUNT		$6,138.24
Total Amount Tendered:		$6,138.24
Change Given:		$0.00

Driver:

Operator: (8) Dave Yates

š100002584M

PR000609

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002226-SB
Voucher No:

Time In: 4/11/2020 1:42:21 PM
Time Out: 4/11/2020 1:42:21 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.78t
TARE Weight:	12.36t
NET Weight:	14.42t
Chargeable Weight:	14.42t
Council Fee:	$5,466.49
EPA Levy:	$0.00
GST :	$546.65
Temporary Acc:	$0.00
Total Price:	$6,013.14

Payments:	
ACCOUNT	$6,013.14
Total Amount Tendered:	$6,013.14
Change Given:	$0.00

Driver:

Operator: Dave Yates

(3)

.....
$100002528A¢

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113854-SB
Voucher No:

Time In: 5/10/2020 12:12:50 PM
Time Out: 5/10/2020 12:12:50 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.30t
TARE Weight:	12.36t
NET Weight:	12.94t
Chargeable Weight:	12.94t
Council Fee:	$4,905.44
EPA Levy:	$0.00
GST :	$490.54
Temporary Acc:	$0.00
Total Price:	$5,395.98

Payments:	
ACCOUNT	$5,395.98
Total Amount Tendered:	$5,395.98
Change Given:	$0.00

Driver:

Operator: Dennis

š80128390•œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113899-SB
Voucher No:

Time In: 5/10/2020 1:15:57 PM
Time Out: 5/10/2020 1:15:57 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.05t
TARE Weight:	12.36t
NET Weight:	12.69t
Chargeable Weight:	12.69t
Council Fee:	$4,810.66
EPA Levy:	$0.00
GST :	$481.07
Temporary Acc:	$0.00
Total Price:	$5,291.73

Payments:	
ACCOUNT	$5,291.73
Total Amount Tendered:	$5,291.73
Change Given:	$0.00

Driver:

Operator: Michael

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CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113970-SB
Voucher No:

Time In: 5/10/2020 2:40:13 PM
Time Out: 5/10/2020 2:40:13 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.85t
TARE Weight:	12.36t
NET Weight:	10.49t
Chargeable Weight:	10.49t
Council Fee:	$3,976.66
EPA Levy:	$0.00
GST :	$397.67
Temporary Acc:	$0.00
Total Price:	$4,374.33

Payments:	
ACCOUNT	$4,374.33
Total Amount Tendered:	$4,374.33
Change Given:	$0.00

Driver:

Operator: Michael

š801285180œ

Carl

John Stoka

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113948-SB
Voucher No:

Time In: 5/10/2020 2:15:39 PM
Time Out: 5/10/2020 2:15:39 PM

Vehicle Rego: CD36BZ-R10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	21.80t
TARE Weight:	12.08t
NET Weight:	9.72t
Chargeable Weight:	9.72t
Council Fee:	$3,684.76
EPA Levy:	$0.00
GST :	$368.48
Temporary Acc:	$0.00
Total Price:	$4,053.24

Payments:	
ACCOUNT	$4,053.24
Total Amount Tendered:	$4,053.24
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

š801284922œ

Carl

John Stokes

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113897-SB
Voucher No:

Time In: 5/10/2020 1:12:13 PM
Time Out: 5/10/2020 1:12:13 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379,09
Each Items	Qty	Price

GROSS Weight:	26.85t
TARE Weight:	11.78t
NET Weight:	15.07t
Chargeable Weight:	15.07t
Council Fee:	$5,712.90
EPA Levy:	$0.00
GST :	$571.29
Temporary Acc:	$0.00
Total Price:	$6,284.19

Payments:	
ACCOUNT	$6,284.19
Total Amount Tendered:	$6,284.19
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

š80128439@œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113747-SB
Voucher No:

Time In: 5/10/2020 8:53:41 AM
Time Out: 5/10/2020 8:53:41 AM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.20t
TARE Weight:	12.70t
NET Weight:	10.50t
Chargeable Weight:	10.50t
Council Fee:	$3,980.45
EPA Levy:	$0.00
GST :	$398.05
Temporary Acc:	$0.00
Total Price:	$4,378.50

Payments:	
ACCOUNT	$4,378.50
Total Amount Tendered:	$4,378.50
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113820-SB
Voucher No:

Time In: 5/10/2020 11:23:37 AM
Time Out: 5/10/2020 11:23:37 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.20t
TARE Weight:	12.36t
NET Weight:	11.84t
Chargeable Weight:	11.84t
Council Fee:	$4,488.44
EPA Levy:	$0.00
GST :	$448.84
Temporary Acc:	$0.00
Total Price:	$4,937.28

Payments:	
ACCOUNT	$4,937.28
Total Amount Tendered:	$4,937.28
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113798-SB
Voucher No:

Time In: 5/10/2020 10:36:10 AM
Time Out: 5/10/2020 10:36:10 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.90t
TARE Weight:	12.36t
NET Weight:	11.54t
Chargeable Weight:	11.54t
Council Fee:	$4,374.71
EPA Levy:	$0.00
GST :	$437.47
Temporary Acc:	$0.00
Total Price:	$4,812.18

Payments:	
ACCOUNT	$4,812.18
Total Amount Tendered:	$4,812.18
Change Given:	$0.00

Driver:

Operator: Dennis

š80128332i œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80113777-SB
Voucher No:

Time In: 5/10/2020 9:44:58 AM
Time Out: 5/10/2020 9:44:58 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.20t
TARE Weight:	12.36t
NET Weight:	11.84t
Chargeable Weight:	11.84t
Council Fee:	$4,488.44
EPA Levy:	$0.00
GST :	$448.84
Temporary Acc:	$0.00
Total Price:	$4,937.28

Payments:	
ACCOUNT	$4,937.28
Total Amount Tendered:	$4,937.28
Change Given:	$0.00

Driver:

Operator: Dennis

š80128311S œ

GSC, J. Stokes Car

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002435-SB
Voucher No:

Time In: 5/11/2020 9:40:27 AM
Time Out: 5/11/2020 9:40:27 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	28.08t
TARE Weight:	12.36t
NET W	15.72t
Chargeable Weight:	15.72t
Council Fee:	$5,959.31
EPA Levy:	$0.00
GST :	$595.93
Temporary Acc:	$0.00
Total Price:	$6,555.24

Payments:	
ACCOUNT	$6,555.24
Total Amount Tendered:	$6,555.24
Change Given:	$0.00

Driver:

Operator: (10) Dennis

$100002746

J&G J. Stokes Card

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002470-SB
Voucher No:

Time In: 5/11/2020 10:45:12 AM
Time Out: 5/11/2020 10:45:12 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.24t
TARE Weight:	12.36t
NET Weight:	14.88t
Chargeable Weight:	14.88t
Council Fee:	$5,640.87
EPA Levy:	$0.00
GST :	$564.09
Temporary Acc:	$0.00
Total Price:	$6,204.96

Payments:	
ACCOUNT	$6,204.96
Total Amount Tendered:	$6,204.96
Change Given:	$0.00

Driver:

Operator: (11) Dennis

$100002785

GSG J. Stokes Car

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002515-SB
Voucher No:

Time In: 5/11/2020 11:43:38 AM
Time Out: 5/11/2020 11:43:38 AM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.74t
TARE Weight:	12.70t
NET Weight:	11.04t
Chargeable Weight:	11.04t
Council Fee:	$4,185.16
EPA Levy:	$0.00
GST :	$418.52
Temporary Acc:	$0.00
Total Price:	$4,603.68

Payments:	
ACCOUNT	$4,603.68
Total Amount Tendered:	$4,603.68
Change Given:	$0.00

Driver:

Operator: (12) Dennis

$100002836

GSG, J/Stokes, Card

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002574-SB
Voucher No:

Time In: 5/11/2020 1:15:17 PM
Time Out: 5/11/2020 1:15:17 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.00t
TARE Weight:	12.36t
NET Weight:	14.64t
Chargeable Weight:	14.64t
Council Fee:	$5,549.89
EPA Levy:	$0.00
GST :	$554.99
Temporary Acc:	$0.00
Total Price:	$6,104.88

Payments:	
ACCOUNT	$6,104.88
Total Amount Tendered:	$6,104.88
Change Given:	$0.00

Driver:

Operator: (13) Michael

$100002897-

GSG J/Jon Stokes Card

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002622-SB
Voucher No:

Time In: 5/11/2020 2:21:11 PM
Time Out: 5/11/2020 2:21:11 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.88t
TARE Weight:	12.36t
NET Weight:	15.52t
Chargeable Weight:	15.52t
Council Fee:	$5,883.49
EPA Levy:	$0.00
GST :	$588.35
Temporary Acc:	$0.00
Total Price:	$6,471.84

Payments:	
ACCOUNT	$6,471.84
Total Amount Tendered:	$6,471.84
Change Given:	$0.00

Driver:

Operator: (14) Michael

$100002951

886 J/Stokes Cart

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002386-SB
Voucher No:

Time In: 5/11/2020 8:27:12 AM
Time Out: 5/11/2020 8:27:12 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.04t
TARE Weight:	12.36t
NET Weight:	13.68t
Chargeable Weight:	13.68t
Council Fee:	$5,185.96
EPA Levy:	$0.00
GST :	$518.60
Temporary Acc:	$0.00
Total Price:	$5,704.56

Payments:

ACCOUNT	$5,704.56
Total Amount Tendered:	$5,704.56
Change Given:	$0.00

Driver: 9

Operator: Dennis

$100002694\a

JOHN STOKES SQUARE
ASBESTOS
G.S.G.
STEWART

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114300-SB
Voucher No:

Time In: 6/10/2020 2:35:50 PM
Time Out: 6/10/2020 2:35:50 PM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.00t
TARE Weight:	12.70t
NET Weight:	10.30t
Chargeable Weight:	10.30t
Council Fee:	$3,904.64
EPA Levy:	$0.00
GST :	$390.46
Temporary Acc:	$0.00
Total Price:	$4,295.10

Payments:	
ACCOUNT	$4,295.10
Total Amount Tendered:	$4,295.10
Change Given:	$0.00

Driver:

Operator: Michael

š80128889{œ

JOHN STOKES SQUARE
ASBESTOS
G.S.G.
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114243-SB
Voucher No:

Time In: 6/10/2020 1:17:28 PM
Time Out: 6/10/2020 1:17:28 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.60t
TARE Weight:	12.36t
NET Weight:	14.24t
Chargeable Weight:	14.24t
Council Fee:	$5,398.25
EPA Levy:	$0.00
GST :	$539.83
Temporary Acc:	$0.00
Total Price:	$5,938.08

Payments:	
ACCOUNT	$5,938.08
Total Amount Tendered:	$5,938.08
Change Given:	$0.00

Driver:

Operator: Michael

š80128827Aœ

JOHN STOKES SQUARE
ASBESTOS
G.S.G.
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114164-SB
Voucher No:

Time In: 6/10/2020 11:23:49 AM
Time Out: 6/10/2020 11:23:49 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.90t
TARE Weight:	12.36t
NET Weight:	13.54t
Chargeable Weight:	13.54t
Council Fee:	$5,132.89
EPA Levy:	$0.00
GST :	$513.29
Temporary Acc:	$0.00
Total Price:	$5,646.18

Payments:	
ACCOUNT	$5,646.18
Total Amount Tendered:	$5,646.18
Change Given:	$0.00

Driver:

Operator: Dennis

š801287459œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114110-SB
Voucher No:

Time In: 6/10/2020 9:45:43 AM
Time Out: 6/10/2020 9:45:43 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no.
Order Number:
Contract:

DestinationLF: Cell Stage 5 (Putres

Weighed Waste		Price
COMMERCIAL WASTE		$89.09/
Each Items	Qty	Price

GROSS Weight:	17.85t
TARE Weight:	12.36t
NET Weight:	5.49t
Chargeable Weight:	5.49t
Council Fee:	$489.11
EPA Levy:	$0.00
GST :	$48.91
Temporary Acc:	$0.00
Total Price:	$538.02

Payments:	
ACCOUNT	$538.02
Total Amount Tendered:	$538.02
Change Given:	$0.00

Driver:

Operator: Dennis

š80128680'œ

GSG Carl John·s

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114291-SB
Voucher No:

Time In: 6/10/2020 2:21:56 PM
Time Out: 6/10/2020 2:21:56 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.05t
TARE Weight:	11.78t
NET Weight:	11.27t
Chargeable Weight:	11.27t
Council Fee:	$4,272.35
EPA Levy:	$0.00
GST :	$427.24
Temporary Acc:	$0.00
Total Price:	$4,699.59
Payments:	
ACCOUNT	$4,699.59
Total Amount Tendered:	$4,699.59
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

š80128879tœ

GSG Carl John·s

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114205-SB
Voucher No:

Time In: 6/10/2020 12:16:25 PM
Time Out: 6/10/2020 12:16:25 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.05t
TARE Weight:	11.78t
NET Weight:	14.27t
Chargeable Weight:	14.27t
Council Fee:	$5,409.63
EPA Levy:	$0.00
GST :	$540.96
Temporary Acc:	$0.00
Total Price:	$5,950.59
Payments:	
ACCOUNT	$5,950.59
Total Amount Tendered:	$5,950.59
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

^128788mœ

GSG Carl John·s

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114155-SB.2
Voucher No:

Time In: 6/10/2020 10:56:58 AM
Time Out: 6/10/2020 10:56:58 AM

Vehicle Rego: CD36BZ-R10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.00t
TARE Weight:	12.08t
NET Weight:	9.92t
Chargeable Weight:	9.92t
Council Fee:	$3,760.58
EPA Levy:	$0.00
GST :	$376.06
Temporary Acc:	$0.00
Total Price:	$4,136.64
Payments:	
ACCOUNT	$4,136.64
Total Amount Tendered:	$4,136.64
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80128734*œ

GSG Carl John·s

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114124-SB
Voucher No:

Time In: 6/10/2020 9:58:35 AM
Time Out: 6/10/2020 9:58:35 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	21.75t
TARE Weight:	11.78t
NET Weight:	9.97t
Chargeable Weight:	9.97t
Council Fee:	$3,779.54
EPA Levy:	$0.00
GST :	$377.95
Temporary Acc:	$0.00
Total Price:	$4,157.49
Payments:	
ACCOUNT	$4,157.49
Total Amount Tendered:	$4,157.49
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80128694Nœ

GSG Carl John·s

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114076-SB
Voucher No:

Time In: 6/10/2020 8:54:43 AM
Time Out: 6/10/2020 8:54:43 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.40t
TARE Weight:	11.78t
NET Weight:	12.62t
Chargeable Weight:	12.62t
Council Fee:	$4,784.13
EPA Levy:	$0.00
GST :	$478.41
Temporary Acc:	$0.00
Total Price:	$5,262.54
Payments:	
ACCOUNT	$5,262.54
Total Amount Tendered:	$5,262.54
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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NTS 12 Carl
Asbestos C10
John Stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002807-SB
Voucher No:

Time In: 6/11/2020 10:32:04 AM
Time Out: 6/11/2020 10:32:04 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	28.78t
TARE Weight:	12.36t
NET Weight:	16.42t
Chargeable Weight:	16.42t
Council Fee:	$6,224.67
EPA Levy:	$0.00
GST :	$622.47
Temporary Acc:	$0.00
Total Price:	$6,847.14

Payments:	
ACCOUNT	$6,847.14
Total Amount Tendered:	$6,847.14
Change Given:	$0.00

Driver:

Operator: (18) Dennis

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NTS 12 Carl
Asbestos
John Stokes

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002897-SB
Voucher No:

Time In: 6/11/2020 12:58:59 PM
Time Out: 6/11/2020 12:58:59 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.36t
TARE Weight:	12.36t
NET Weight:	15.00t
Chargeable Weight:	15.00t
Council Fee:	$5,686.36
EPA Levy:	$0.00
GST :	$568.64
Temporary Acc:	$0.00
Total Price:	$6,255.00

Payments:	
ACCOUNT	$6,255.00
Total Amount Tendered:	$6,255.00
Change Given:	$0.00

Driver:

Operator: (17) Michael

š100003248œ

GSG John Stokes
Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002856-SB
Voucher No:

Time In: 6/11/2020 11:52:04 AM
Time Out: 6/11/2020 11:52:04 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	28.84t
TARE Weight:	12.36t
NET Weight:	16.48t
Chargeable Weight:	16.48t
Council Fee:	$6,247.42
EPA Levy:	$0.00
GST :	$624.74
Temporary Acc:	$0.00
Total Price:	$6,872.16

Payments:	
ACCOUNT	$6,872.16
Total Amount Tendered:	$6,872.16
Change Given:	$0.00

Driver:

Operator: (16) Dennis

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NTS 12 Carl
Asbestos
John Stokes

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100002928-SB
Voucher No:

Time In: 6/11/2020 1:52:18 PM
Time Out: 6/11/2020 1:52:18 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	19.32t
TARE Weight:	12.36t
NET Weight:	6.96t
Chargeable Weight:	6.96t
Council Fee:	$2,638.47
EPA Levy:	$0.00
GST :	$263.85
Temporary Acc:	$0.00
Total Price:	$2,902.32

Payments:	
ACCOUNT	$2,902.32
Total Amount Tendered:	$2,902.32
Change Given:	$0.00

Driver:

Operator: (15) Michael

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GSG Johnstokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114444-SB
Voucher No:

Time In: 7/10/2020 10:07:42 AM
Time Out: 7/10/2020 10:07:42 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.45t
TARE Weight:	11.78t
NET Weight:	12.67t
Chargeable Weight:	12.67t
Council Fee:	$4,803.08
EPA Levy:	$0.00
GST :	$480.31
Temporary Acc:	$0.00
Total Price:	$5,283.39

Payments:	
ACCOUNT	$5,283.39
Total Amount Tendered:	$5,283.39
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

§80129047$œ

GSG John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114488-SB
Voucher No:

Time In: 7/10/2020 11:26:52 AM
Time Out: 7/10/2020 11:26:52 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.05t
TARE Weight:	11.78t
NET Weight:	13.27t
Chargeable Weight:	13.27t
Council Fee:	$5,030.54
EPA Levy:	$0.00
GST :	$503.05
Temporary Acc:	$0.00
Total Price:	$5,533.59

Payments:	
ACCOUNT	$5,533.59
Total Amount Tendered:	$5,533.59
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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GSG John Stokes, Carl

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114572-SB
Voucher No:

Time In: 7/10/2020 1:36:44 PM
Time Out: 7/10/2020 1:36:44 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.50t
TARE Weight:	11.78t
NET Weight:	11.72t
Chargeable Weight:	11.72t
Council Fee:	$4,442.95
EPA Levy:	$0.00
GST :	$444.29
Temporary Acc:	$0.00
Total Price:	$4,887.24

Payments:	
ACCOUNT	$4,887.24
Total Amount Tendered:	$4,887.24
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

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GSG John Stokes, Carl

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114521-SB
Voucher No:

Time In: 7/10/2020 12:35:24 PM
Time Out: 7/10/2020 12:35:24 PM

Vehicle Rego: CD36BZ-R10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	21.65t
TARE Weight:	12.08t
NET Weight:	9.57t
Chargeable Weight:	9.57t
Council Fee:	$3,627.90
EPA Levy:	$0.00
GST :	$362.79
Temporary Acc:	$0.00
Total Price:	$3,990.69

Payments:	
ACCOUNT	$3,990.69
Total Amount Tendered:	$3,990.69
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

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GSG, Johnstokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114416-SB
Voucher No:

Time In: 7/10/2020 8:58:36 AM
Time Out: 7/10/2020 8:58:36 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.95t
TARE Weight:	11.78t
NET Weight:	12.17t
Chargeable Weight:	12.17t
Council Fee:	$4,613.54
EPA Levy:	$0.00
GST :	$461.35
Temporary Acc:	$0.00
Total Price:	$5,074.89

Payments:	
ACCOUNT	$5,074.89
Total Amount Tendered:	$5,074.89
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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8

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114616-SB
Voucher No:

Time In: 7/10/2020 2:42:20 PM
Time Out: 7/10/2020 2:42:20 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1931
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Qty	Price
ASBESTOS		$379.09
Each Items		Price

GROSS Weight:	26.25t
TARE Weight:	12.36t
NET Weight:	13.89t
Chargeable Weight:	13.89t
Council Fee:	$5,265.57
EPA Levy:	$0.00
GST :	$526.56
Temporary Acc:	$0.00
Total Price:	$5,792.13
Payments:	
ACCOUNT	$5,792.13
Total Amount Tendered:	$5,792.13
Change Given:	$0.00

Driver:

Operator: Michael

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656, John Stokes, Carl

8 6

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114618-SB
Voucher No:

Time In: 7/10/2020 2:45:47 PM
Time Out: 7/10/2020 2:45:47 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Qty	Price
ASBESTOS		$379.09
Each Items		Price

GROSS Weight:	25.30t
TARE Weight:	11.78t
NET Weight:	13.52t
Chargeable Weight:	13.52t
Council Fee:	$5,125.31
EPA Levy:	$0.00
GST :	$512.53
Temporary Acc:	$0.00
Total Price:	$5,637.84
Payments:	
ACCOUNT	$5,637.84
Total Amount Tendered:	$5,637.84
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114411-SB
Voucher No:

Time In: 7/10/2020 8:52:05 AM
Time Out: 7/10/2020 8:52:05 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Qty	Price
ASBESTOS		$379.09
Each Items		Price

GROSS Weight:	21.35t
TARE Weight:	12.36t
NET Weight:	8.99t
Chargeable Weight:	8.99t
Council Fee:	$3,408.03
EPA Levy:	$0.00
GST :	$340.80
Temporary Acc:	$0.00
Total Price:	$3,748.83
Payments:	
ACCOUNT	$3,748.83
Total Amount Tendered:	$3,748.83
Change Given:	$0.00

Driver:

Operator: Dennis

§80129009'œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114448-SB
Voucher No:

Time In: 7/10/2020 10:12:00 AM
Time Out: 7/10/2020 10:12:00 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Qty	Price
ASBESTOS		$379.09
Each Items		Price

GROSS Weight:	24.20t
TARE Weight:	12.36t
NET Weight:	11.84t
Chargeable Weight:	11.84t
Council Fee:	$4,488.44
EPA Levy:	$0.00
GST :	$448.84
Temporary Acc:	$0.00
Total Price:	$4,937.28
Payments:	
ACCOUNT	$4,937.28
Total Amount Tendered:	$4,937.28
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114518-SB
Voucher No:

Time In: 7/10/2020 12:25:54 PM
Time Out: 7/10/2020 12:25:54 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Qty	Price
ASBESTOS		$379.09
Each Items		Price

GROSS Weight:	22.90t
TARE Weight:	12.36t
NET Weight:	10.54t
Chargeable Weight:	10.54t
Council Fee:	$3,995.62
EPA Levy:	$0.00
GST :	$399.56
Temporary Acc:	$0.00
Total Price:	$4,395.18
Payments:	
ACCOUNT	$4,395.18
Total Amount Tendered:	$4,395.18
Change Given:	$0.00

Driver:

Operator: Michael

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114571-SB
Voucher No:

Time In: 7/10/2020 1:35:59 PM
Time Out: 7/10/2020 1:35:59 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.70t
TARE Weight:	12.36t
NET Weight:	13.34t
Chargeable Weight:	13.34t
Council Fee:	$5,057.07
EPA Levy:	$0.00
GST :	$505.71
Temporary Acc:	$0.00
Total Price:	$5,562.78

Payments:	
ACCOUNT	$5,562.78
Total Amount Tendered:	$5,562.78
Change Given:	$0.00

Driver:

Operator: Michael

§80129187F¤

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114491-SB
Voucher No:

Time In: 7/10/2020 11:30:31 AM
Time Out: 7/10/2020 11:30:31 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.20t
TARE Weight:	12.36t
NET Weight:	12.84t
Chargeable Weight:	12.84t
Council Fee:	$4,867.53
EPA Levy:	$0.00
GST :	$486.75
Temporary Acc:	$0.00
Total Price:	$5,354.28

Payments:	
ACCOUNT	$5,354.28
Total Amount Tendered:	$5,354.28
Change Given:	$0.00

Driver:

Operator: Dennis

§80129099W¤

JOHN STOKES SQUARE
G.S.G.
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114771-SB
Voucher No:

Time In: 8/10/2020 11:48:40 AM
Time Out: 8/10/2020 11:48:40 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.25t
TARE Weight:	11.78t
NET Weight:	13.47t
Chargeable Weight:	13.47t
Council Fee:	$5,106.35
EPA Levy:	$0.00
GST :	$510.64
Temporary Acc:	$0.00
Total Price:	$5,616.99

Payments:

ACCOUNT	$5,616.99
Total Amount Tendered:	$5,616.99
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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JOHN STOKES SQUARE
G.S.G.
STEWART

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114790-SB
Voucher No:

Time In: 8/10/2020 12:33:55 PM
Time Out: 8/10/2020 12:33:55 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.60t
TARE Weight:	11.78t
NET Weight:	13.82t
Chargeable Weight:	13.82t
Council Fee:	$5,239.04
EPA Levy:	$0.00
GST :	$523.90
Temporary Acc:	$0.00
Total Price:	$5,762.94

Payments:

ACCOUNT	$5,762.94
Total Amount Tendered:	$5,762.94
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

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GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115064-SB
Voucher No:

Time In: 9/10/2020 12:05:09 PM
Time Out: 9/10/2020 12:05:09 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.80t
TARE Weight:	11.78t
NET Weight:	13.02t
Chargeable Weight:	13.02t
Council Fee:	$4,935.76
EPA Levy:	$0.00
GST :	$493.58
Temporary Acc:	$0.00
Total Price:	$5,429.34

Payments:		
ACCOUNT		$5,429.34
Total Amount Tendered:		$5,429.34
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Michael

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GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80114986-SB
Voucher No:

Time In: 9/10/2020 9:41:42 AM
Time Out: 9/10/2020 9:41:42 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.15t
TARE Weight:	11.78t
NET Weight:	12.37t
Chargeable Weight:	12.37t
Council Fee:	$4,689.35
EPA Levy:	$0.00
GST :	$468.94
Temporary Acc:	$0.00
Total Price:	$5,158.29

Payments:		
ACCOUNT		$5,158.29
Total Amount Tendered:		$5,158.29
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80129655?œ

GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115026-SB
Voucher No:

Time In: 9/10/2020 10:52:16 AM
Time Out: 9/10/2020 10:52:16 AM

Vehicle Rego: CD36BZ-R10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	21.55t
TARE Weight:	12.08t
NET Weight:	9.47t
Chargeable Weight:	9.47t
Council Fee:	$3,589.99
EPA Levy:	$0.00
GST :	$359.00
Temporary Acc:	$0.00
Total Price:	$3,948.99

Payments:		
ACCOUNT		$3,948.99
Total Amount Tendered:		$3,948.99
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115114-SB
Voucher No:

Time In: 9/10/2020 1:27:46 PM
Time Out: 9/10/2020 1:27:46 PM

Vehicle Rego: CD36BZ-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract: NORTHERN TRADE SOLUTIONS

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.45t
TARE Weight:	11.50t
NET Weight:	10.95t
Chargeable Weight:	10.95t
Council Fee:	$4,151.05
EPA Levy:	$0.00
GST :	$415.10
Temporary Acc:	$0.00
Total Price:	$4,566.15

Payments:		
ACCOUNT		$4,566.15
Total Amount Tendered:		$4,566.15
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Michael

š80129799"œ

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115134-SB
Voucher No:

Time In: 9/10/2020 1:57:30 PM
Time Out: 9/10/2020 1:57:30 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.45t
TARE Weight:	12.36t
NET Weight:	11.09t
Chargeable Weight:	11.09t
Council Fee:	$4,204.12
EPA Levy:	$0.00
GST :	$420.41
Temporary Acc:	$0.00
Total Price:	$4,624.53

Payments:		
ACCOUNT		$4,624.53
Total Amount Tendered:		$4,624.53
Change Given:		$0.00

Driver:

Operator: Michael

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GSG John, Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115176-SB
Voucher No:

Time In: 9/10/2020 2:45:03 PM
Time Out: 9/10/2020 2:45:03 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.35t
TARE Weight:	11.78t
NET Weight:	13.57t
Chargeable Weight:	13.57t
Council Fee:	$5,144.26
EPA Levy:	$0.00
GST :	$514.43
Temporary Acc:	$0.00
Total Price:	$5,658.69

Payments:	
ACCOUNT	$5,658.69
Total Amount Tendered:	$5,658.69
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

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NTS. R10 Tony
Asbestos
John
Stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100003293-SB
Voucher No:

Time In: 9/11/2020 9:46:22 AM
Time Out: 9/11/2020 9:46:22 AM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.00t
TARE Weight:	12.70t
NET Weight:	13.30t
Chargeable Weight:	13.30t
Council Fee:	$5,041.91
EPA Levy:	$0.00
GST :	$504.19
Temporary Acc:	$0.00
Total Price:	$5,546.10

Payments:	
ACCOUNT	$5,546.10
Total Amount Tendered:	$5,546.10
Change Given:	$0.00

Driver:

Operator: 22 Michael

$100003694b

NTS. 12 Tony
Asbestos
John
Stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100003390-SB
Voucher No:

Time In: 9/11/2020 12:07:11 PM
Time Out: 9/11/2020 12:07:11 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.38t
TARE Weight:	12.36t
NET Weight:	14.02t
Chargeable Weight:	14.02t
Council Fee:	$5,314.85
EPA Levy:	$0.00
GST :	$531.49
Temporary Acc:	$0.00
Total Price:	$5,846.34

Payments:	
ACCOUNT	$5,846.34
Total Amount Tendered:	$5,846.34
Change Given:	$0.00

Driver:

Operator: 23 Michael

$100003803

NTS. 12 Tony
Asbestos
PIU
John Stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100003344-SB
Voucher No:

Time In: 9/11/2020 10:57:58 AM
Time Out: 9/11/2020 10:57:58 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.04t
TARE Weight:	12.36t
NET Weight:	14.68t
Chargeable Weight:	14.68t
Council Fee:	$5,565.05
EPA Levy:	$0.00
GST :	$556.51
Temporary Acc:	$0.00
Total Price:	$6,121.56

Payments:	
ACCOUNT	$6,121.56
Total Amount Tendered:	$6,121.56
Change Given:	$0.00

Driver:

Operator: 24 Michael

$100003750

Carl, OSG, John Stokes

PR000609

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100004015-SB
Voucher No:

Time In: 11/11/2020 11:49:12 AM
Time Out: 11/11/2020 11:49:12 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.26t
TARE Weight:	12.36t
NET Weight:	13.90t
Chargeable Weight:	13.90t
Council Fee:	$5,269.36
EPA Levy:	$0.00
GST :	$526.94
Temporary Acc:	$0.00
Total Price:	$5,796.30

Payments:	
ACCOUNT	$5,796.30
Total Amount Tendered:	$5,796.30
Change Given:	$0.00

Driver:

Operator: 29 Sam

$10000446480

OSG, John Stokes, Carl

PR000609

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: ✓ 100003951-SB
Voucher No:

Time In: 11/11/2020 10:05:36 AM
Time Out: 11/11/2020 10:05:36 AM

Vehicle Rego: ✓ CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no.
Order Number: 31-A1932
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	✓
TARE Weight:	27.74t
NET Weight:	12.36t
	15.38t
Chargeable Weight:	15.38t
Council Fee:	$5,830.42
EPA Levy:	$0.00
GST :	$583.04
Temporary Acc:	$0.00
Total Price:	$6,413.46

Payments:	
ACCOUNT	$6,413.46
Total Amount Tendered:	$6,413.46
Change Given:	$0.00

Driver:

Operator: 28 Sam

$10000439600

OSG, John Stokes, Carl

PR000609

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: ✓ 100004118-SB
Voucher No:

Time In: 11/11/2020 2:08:36 PM
Time Out: 11/11/2020 2:08:36 PM

Vehicle Rego: ✓ CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no.
Order Number: 31-A1932
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	19.16t
TARE Weight:	✓ 12.36t
NET Weight:	6.80t
Chargeable Weight:	6.80t
Council Fee:	$2,577.82
EPA Levy:	$0.00
GST :	$257.78
Temporary Acc:	$0.00
Total Price:	✓ $2,835.60

Payments:	
ACCOUNT	$2,835.60
Total Amount Tendered:	$2,835.60
Change Given:	$0.00

Driver:

Operator: 27 Michael

$10000458200

OSG, John Stokes, Carl

PR000609

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: ✓ 11503313301

Ticket No: ✓ 100004069-SB
Voucher No:

Time In: 11/11/2020 1:08:15 PM
Time Out: 11/11/2020 1:08:15 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no.
Order Number: 31-A1932
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS	✓	$379.09
Each Items	Qty	Price

GROSS Weight:	19.94t
TARE Weight:	12.36t
NET Weight:	✓ 7.58t
Chargeable Weight:	7.58t
Council Fee:	$2,873.51
EPA Levy:	$0.00
GST :	$287.35
Temporary Acc:	$0.00
Total Price:	✓ $3,160.86

Payments:	
ACCOUNT	$3,160.86
Total Amount Tendered:	$3,160.86
Change Given:	$0.00

Driver:

Operator: 26 Michael

$10000452900

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115541-SB
Voucher No:

Time In: 12/10/2020 11:19:41 AM
Time Out: 12/10/2020 11:19:41 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-a1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	20.45t
TARE Weight:	12.36t
NET Weight:	8.09t
Chargeable Weight:	8.09t
Council Fee:	$3,066.85
EPA Levy:	$0.00
GST :	$306.68
Temporary Acc:	$0.00
Total Price:	$3,373.53

Payments:	
ACCOUNT	$3,373.53
Total Amount Tendered:	$3,373.53
Change Given:	$0.00

Driver:

Operator: Michael

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GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115702-SB
Voucher No:

Time In: 12/10/2020 2:54:43 PM
Time Out: 12/10/2020 2:54:43 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.30t
TARE Weight:	11.78t
NET Weight:	14.52t
Chargeable Weight:	14.52t
Council Fee:	$5,504.40
EPA Levy:	$0.00
GST :	$550.44
Temporary Acc:	$0.00
Total Price:	$6,054.84

Payments:	
ACCOUNT	$6,054.84
Total Amount Tendered:	$6,054.84
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

š80130481fœ

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115445-SB
Voucher No:

Time In: 12/10/2020 8:59:45 AM
Time Out: 12/10/2020 8:59:45 AM

Vehicle Rego: CB43EK-12 DIPL

Client: DEPT INFRASTRUCTURE PLANNIN
Approval no. 14-A1941
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	28.10t
TARE Weight:	16.01t
NET Weight:	12.09t
Chargeable Weight:	12.09t
Council Fee:	$4,583.21
EPA Levy:	$0.00
GST :	$458.32
Temporary Acc:	$0.00
Total Price:	$5,041.53

Payments:	
ACCOUNT	$5,041.53
Total Amount Tendered:	$5,041.53
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115491-SB
Voucher No:

Time In: 12/10/2020 10:03:10 AM
Time Out: 12/10/2020 10:03:10 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.55t
TARE Weight:	12.36t
NET Weight:	13.19t
Chargeable Weight:	13.19t
Council Fee:	$5,000.21
EPA Levy:	$0.00
GST :	$500.02
Temporary Acc:	$0.00
Total Price:	$5,500.23

Payments:	
ACCOUNT	$5,500.23
Total Amount Tendered:	$5,500.23
Change Given:	$0.00

Driver:

Operator: Michael

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115533-SB
Voucher No:

Time In: 12/10/2020 11:06:09 AM
Time Out: 12/10/2020 11:06:09 AM

Vehicle Rego: CD36BZ-R10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-a1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	21.95t
TARE Weight:	12.08t
NET Weight:	9.87t
Chargeable Weight:	9.87t
Council Fee:	$3,741.63
EPA Levy:	$0.00
GST :	$374.16
Temporary Acc:	$0.00
Total Price:	$4,115.79

Payments:	
ACCOUNT	$4,115.79
Total Amount Tendered:	$4,115.79
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

š80130296"œ

GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket
REPRINT

hoal Bay

hone: 8930 0471

BN: 11503313301

icket No: 80115441-SB.2
oucher No:

ime In: 12/10/2020 8:47:13 AM
ime Out: 12/10/2020 8:47:13 AM

ehicle Rego: CD36BZ-10

lient: NORTHERN TRADE SOLUTIONS PT
pproval no. 31-A1932
rder Number:
ntract: NORTHERN TRADE SOLUTIONS

stinationLF: Cell Stage 2 (Inert)

ighed Waste BESTOS ch Items	Qty	Price $379.09 Price
OSS Weight:		22.10t
RE Weight:		11.50t
r Weight:		10.60t
argeable Weight:		10.60t
uncil Fee:		$4,018.36
Levy:		$0.00
:		$401.84
porary Acc:		$0.00
al Price:		$4,420.20

ments:
OUNT $4,420.20
al Amount Tendered: $4,420.20
nge Given: $0.00

ver:
UAL TICKET
rator: Michael

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GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115533-SB
Voucher No:

Time In: 12/10/2020 11:06:09 AM
Time Out: 12/10/2020 11:06:09 AM

Vehicle Rego: CD36BZ-R10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-a1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		21.95t
TARE Weight:		12.08t
NET Weight:		9.87t
Chargeable Weight:		9.87t
Council Fee:		$3,741.63
EPA Levy:		$0.00
GST :		$374.16
Temporary Acc:		$0.00
Total Price:		$4,115.79

Payments:
ACCOUNT $4,115.79
Total Amount Tendered: $4,115.79
Change Given: $0.00

Driver:
MANUAL TICKET
Operator: Michael

$80130296"@

GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115590-SB
Voucher No:

Time In: 12/10/2020 12:20:08 PM
Time Out: 12/10/2020 12:20:08 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		24.50t
TARE Weight:		11.78t
NET Weight:		12.72t
Chargeable Weight:		12.72t
Council Fee:		$4,822.04
EPA Levy:		$0.00
GST :		$482.20
Temporary Acc:		$0.00
Total Price:		$5,304.24

Payments:
ACCOUNT $5,304.24
Total Amount Tendered: $5,304.24
Change Given: $0.00

Driver:
MANUAL TICKET
Operator: Sam

$80130358•@

GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115632-SB
Voucher No:

Time In: 12/10/2020 1:29:38 PM
Time Out: 12/10/2020 1:29:38 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		25.00t
TARE Weight:		11.78t
NET Weight:		13.22t
Chargeable Weight:		13.22t
Council Fee:		$5,011.58
EPA Levy:		$0.00
GST :		$501.16
Temporary Acc:		$0.00
Total Price:		$5,512.74

Payments:
ACCOUNT $5,512.74
Total Amount Tendered: $5,512.74
Change Given: $0.00

Driver:
MANUAL TICKET
Operator: Sam

$80130407^@

GSG, John Stokes, Carl

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115490-SB
Voucher No:

Time In: 12/10/2020 10:01:47 AM
Time Out: 12/10/2020 10:01:47 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		24.20t
TARE Weight:		11.78t
NET Weight:		12.42t
Chargeable Weight:		12.42t
Council Fee:		$4,708.31
EPA Levy:		$0.00
GST :		$470.83
Temporary Acc:		$0.00
Total Price:		$5,179.14

Payments:
ACCOUNT $5,179.14
Total Amount Tendered: $5,179.14
Change Given: $0.00

Driver:
MANUAL TICKET
Operator: Michael

$80130249~@

(2)

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115443-SB.2
Voucher No:

Time In: 12/10/2020 8:53:30 AM
Time Out: 12/10/2020 8:53:30 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.20t
TARE Weight:	12.36t
NET Weight:	13.84t
Chargeable Weight:	13.84t
Council Fee:	$5,246.62
EPA Levy:	$0.00
GST :	$524.66
Temporary Acc:	$0.00
Total Price:	$5,771.28

Payments:

ACCOUNT	$5,771.28
Total Amount Tendered:	$5,771.28
Change Given:	$0.00

Driver:

Operator: Michael

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116066-SB
Voucher No:

Time In: 13/10/2020 2:46:33 PM
Time Out: 13/10/2020 2:46:33 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.50t
TARE Weight:	11.78t
NET Weight:	13.72t
Chargeable Weight:	13.72t
Council Fee:	$5,201.13
EPA Levy:	$0.00
GST :	$520.11
Temporary Acc:	$0.00
Total Price:	$5,721.24

Payments:	
ACCOUNT	$5,721.24
Total Amount Tendered:	$5,721.24
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80130912[œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116014-SB
Voucher No:

Time In: 13/10/2020 1:53:04 PM
Time Out: 13/10/2020 1:53:04 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.55t
TARE Weight:	11.78t
NET Weight:	14.77t
Chargeable Weight:	14.77t
Council Fee:	$5,599.17
EPA Levy:	$0.00
GST :	$559.92
Temporary Acc:	$0.00
Total Price:	$6,159.09

Payments:	
ACCOUNT	$6,159.09
Total Amount Tendered:	$6,159.09
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80130855"œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115967-SB
Voucher No:

Time In: 13/10/2020 12:46:26 PM
Time Out: 13/10/2020 12:46:26 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.05t
TARE Weight:	11.78t
NET Weight:	13.27t
Chargeable Weight:	13.27t
Council Fee:	$5,030.54
EPA Levy:	$0.00
GST :	$503.05
Temporary Acc:	$0.00
Total Price:	$5,533.59

Payments:	
ACCOUNT	$5,533.59
Total Amount Tendered:	$5,533.59
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80130803Vœ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115917-SB
Voucher No:

Time In: 13/10/2020 11:30:10 AM
Time Out: 13/10/2020 11:30:10 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.75t
TARE Weight:	11.78t
NET Weight:	13.97t
Chargeable Weight:	13.97t
Council Fee:	$5,295.90
EPA Levy:	$0.00
GST :	$529.59
Temporary Acc:	$0.00
Total Price:	$5,825.49

Payments:	
ACCOUNT	$5,825.49
Total Amount Tendered:	$5,825.49
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

š80130732]œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80115890-SB
Voucher No:

Time In: 13/10/2020 10:34:50 AM
Time Out: 13/10/2020 10:34:50 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.50t
TARE Weight:	11.78t
NET Weight:	14.72t
Chargeable Weight:	14.72t
Council Fee:	$5,580.22
EPA Levy:	$0.00
GST :	$558.02
Temporary Acc:	$0.00
Total Price:	$6,138.24

Payments:	
ACCOUNT	$6,138.24
Total Amount Tendered:	$6,138.24
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

š80130702Hœ

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80115801-SB
Voucher No:	
Time In:	13/10/2020 8:22:48 AM
Time Out:	13/10/2020 8:22:48 AM
Vehicle Rego:	CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.35t
TARE Weight:	11.78t
NET Weight:	15.57t
Chargeable Weight:	15.57t
Council Fee:	$5,902.45
EPA Levy:	$0.00
GST :	$590.24
Temporary Acc:	$0.00
Total Price:	$6,492.69

Payments:	
ACCOUNT	$6,492.69
Total Amount Tendered:	$6,492.69
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

s801305964e

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80115851-SB
Voucher No:	
Time In:	13/10/2020 9:34:17 AM
Time Out:	13/10/2020 9:34:17 AM
Vehicle Rego:	CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.35t
TARE Weight:	11.78t
NET Weight:	13.57t
Chargeable Weight:	13.57t
Council Fee:	$5,144.26
EPA Levy:	$0.00
GST :	$514.43
Temporary Acc:	$0.00
Total Price:	$5,658.69

Payments:	
ACCOUNT	$5,658.69
Total Amount Tendered:	$5,658.69
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

s801306596e

JOAN STOKES
G S G
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116355-SB
Voucher No:

Time In: 14/10/2020 2:28:17 PM
Time Out: 14/10/2020 2:28:17 PM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	21.55t
TARE Weight:	12.70t
NET Weight:	8.85t
Chargeable Weight:	8.85t
Council Fee:	$3,354.95
EPA Levy:	$0.00
GST :	$335.50
Temporary Acc:	$0.00
Total Price:	$3,690.45

Payments:	
ACCOUNT	$3,690.45
Total Amount Tendered:	$3,690.45
Change Given:	$0.00

Driver:

Operator: Dennis

§80131242K¤

JOAN STOKES
G S G
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116293-SB
Voucher No:

Time In: 14/10/2020 1:12:03 PM
Time Out: 14/10/2020 1:12:03 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.75t
TARE Weight:	12.36t
NET Weight:	13.39t
Chargeable Weight:	13.39t
Council Fee:	$5,076.03
EPA Levy:	$0.00
GST :	$507.60
Temporary Acc:	$0.00
Total Price:	$5,583.63

Payments:	
ACCOUNT	$5,583.63
Total Amount Tendered:	$5,583.63
Change Given:	$0.00

Driver:

Operator: Dennis

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JOAN STOKES
G S G
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116262-SB
Voucher No:

Time In: 14/10/2020 12:17:53 PM
Time Out: 14/10/2020 12:17:53 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.45t
TARE Weight:	12.36t
NET Weight:	13.09t
Chargeable Weight:	13.09t
Council Fee:	$4,962.30
EPA Levy:	$0.00
GST :	$496.23
Temporary Acc:	$0.00
Total Price:	$5,458.53

Payments:	
ACCOUNT	$5,458.53
Total Amount Tendered:	$5,458.53
Change Given:	$0.00

Driver:

Operator: Dennis

§80131144U¤

JOAN STOKES
G S G
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116228-SB.2
Voucher No:

Time In: 14/10/2020 11:16:57 AM
Time Out: 14/10/2020 11:16:57 AM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.10t
TARE Weight:	12.70t
NET Weight:	11.40t
Chargeable Weight:	11.40t
Council Fee:	$4,321.64
EPA Levy:	$0.00
GST :	$432.16
Temporary Acc:	$0.00
Total Price:	$4,753.80

Payments:	
ACCOUNT	$4,753.80
Total Amount Tendered:	$4,753.80
Change Given:	$0.00

Driver:

Operator: Michael

§80131105A¤

JOAN STOKES
G S G
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116196-SB
Voucher No:

Time In: 14/10/2020 10:16:17 AM
Time Out: 14/10/2020 10:16:17 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.45t
TARE Weight:	12.36t
NET Weight:	13.09t
Chargeable Weight:	13.09t
Council Fee:	$4,962.30
EPA Levy:	$0.00
GST :	$496.23
Temporary Acc:	$0.00
Total Price:	$5,458.53

Payments:	
ACCOUNT	$5,458.53
Total Amount Tendered:	$5,458.53
Change Given:	$0.00

Driver:

Operator: Michael

§80131070D¤

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116190-SB
Voucher No:

Time In: 14/10/2020 10:03:01 AM
Time Out: 14/10/2020 10:03:01 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.40t
TARE Weight:	11.78t
NET Weight:	15.62t
Chargeable Weight:	15.62t
Council Fee:	$5,921.40
EPA Levy:	$0.00
GST :	$592.14
Temporary Acc:	$0.00
Total Price:	$6,513.54

Payments:	
ACCOUNT	$6,513.54
Total Amount Tendered:	$6,513.54
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

š80131064]œ

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116224-SB
Voucher No:

Time In: 14/10/2020 11:05:23 AM
Time Out: 14/10/2020 11:05:23 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.90t
TARE Weight:	11.78t
NET Weight:	13.12t
Chargeable Weight:	13.12t
Council Fee:	$4,973.67
EPA Levy:	$0.00
GST :	$497.37
Temporary Acc:	$0.00
Total Price:	$5,471.04

Payments:	
ACCOUNT	$5,471.04
Total Amount Tendered:	$5,471.04
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

š80131100'œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116268-SB
Voucher No:

Time In: 14/10/2020 12:25:42 PM
Time Out: 14/10/2020 12:25:42 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.70t
TARE Weight:	11.78t
NET Weight:	14.92t
Chargeable Weight:	14.92t
Council Fee:	$5,656.04
EPA Levy:	$0.00
GST :	$565.60
Temporary Acc:	$0.00
Total Price:	$6,221.64

Payments:	
ACCOUNT	$6,221.64
Total Amount Tendered:	$6,221.64
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116312-SB
Voucher No:

Time In: 14/10/2020 1:38:45 PM
Time Out: 14/10/2020 1:38:45 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.70t
TARE Weight:	11.78t
NET Weight:	13.92t
Chargeable Weight:	13.92t
Council Fee:	$5,276.95
EPA Levy:	$0.00
GST :	$527.69
Temporary Acc:	$0.00
Total Price:	$5,804.64

Payments:	
ACCOUNT	$5,804.64
Total Amount Tendered:	$5,804.64
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116376-SB
Voucher No:

Time In: 14/10/2020 2:46:36 PM
Time Out: 14/10/2020 2:46:36 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.15t
TARE Weight:	11.78t
NET Weight:	14.37t
Chargeable Weight:	14.37t
Council Fee:	$5,447.54
EPA Levy:	$0.00
GST :	$544.75
Temporary Acc:	$0.00
Total Price:	$5,992.29

Payments:	
ACCOUNT	$5,992.29
Total Amount Tendered:	$5,992.29
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80131264iœ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116160-SB
Voucher No:

Time In: 14/10/2020 9:00:39 AM
Time Out: 14/10/2020 9:00:39 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.35t
TARE Weight:	11.78t
NET Weight:	14.57t
Chargeable Weight:	14.57t
Council Fee:	$5,523.35
EPA Levy:	$0.00
GST :	$552.34
Temporary Acc:	$0.00
Total Price:	$6,075.69

Payments:

ACCOUNT	$6,075.69
Total Amount Tendered:	$6,075.69
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Michael

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116649-SB
Voucher No:

Time In: 15/10/2020 2:11:04 PM
Time Out: 15/10/2020 2:11:04 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		26.05t
TARE Weight:		11.78t
NET Weight:		14.27t
Chargeable Weight:		14.27t
Council Fee:		$5,409.63
EPA Levy:		$0.00
GST :		$540.96
Temporary Acc:		$0.00
Total Price:		$5,950.59
Payments:		
ACCOUNT		$5,950.59
Total Amount Tendered:		$5,950.59
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Sam

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116544-SB
Voucher No:

Time In: 15/10/2020 11:24:50 AM
Time Out: 15/10/2020 11:24:50 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		25.50t
TARE Weight:		11.78t
NET Weight:		13.72t
Chargeable Weight:		13.72t
Council Fee:		$5,201.13
EPA Levy:		$0.00
GST :		$520.11
Temporary Acc:		$0.00
Total Price:		$5,721.24
Payments:		
ACCOUNT		$5,721.24
Total Amount Tendered:		$5,721.24
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116586-SB
Voucher No:

Time In: 15/10/2020 12:32:35 PM
Time Out: 15/10/2020 12:32:35 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		25.45t
TARE Weight:		11.78t
NET Weight:		13.67t
Chargeable Weight:		13.67t
Council Fee:		$5,182.17
EPA Levy:		$0.00
GST :		$518.22
Temporary Acc:		$0.00
Total Price:		$5,700.39
Payments:		
ACCOUNT		$5,700.39
Total Amount Tendered:		$5,700.39
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Sam

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116618-SB
Voucher No:

Time In: 15/10/2020 1:23:27 PM
Time Out: 15/10/2020 1:23:27 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		26.15t
TARE Weight:		11.78t
NET Weight:		14.37t
Chargeable Weight:		14.37t
Council Fee:		$5,447.54
EPA Levy:		$0.00
GST :		$544.75
Temporary Acc:		$0.00
Total Price:		$5,992.29
Payments:		
ACCOUNT		$5,992.29
Total Amount Tendered:		$5,992.29
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Sam

šŠ0131528'œ

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116489-SB.2
Voucher No:

Time In: 15/10/2020 9:52:01 AM
Time Out: 15/10/2020 9:52:01 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste ASBESTOS Each Items	Qty	Price $379.09 Price
GROSS Weight:		26.90t
TARE Weight:		12.36t
NET Weight:		14.54t
Chargeable Weight:		14.54t
Council Fee:		$5,511.98
EPA Levy:		$0.00
GST :		$551.20
Temporary Acc:		$0.00
Total Price:		$6,063.18
Payments:		
ACCOUNT		$6,063.18
Total Amount Tendered:		$6,063.18
Change Given:		$0.00

Driver:
Operator: Dennis

šŠ8013139750œ

John STOKES Tony
C/O
Green Space
Asbestos

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80116793-SB
Voucher No:	
Time In:	16/10/2020 9:22:52 AM
Time Out:	16/10/2020 9:22:52 AM
Vehicle Rego:	CD36BZ-12
Client: NORTHERN TRADE SOLUTIONS PT	
Approval no.	31-A1932
Order Number:	
Contract:	

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Price
ASBESTOS	$379.09

Each Items	Qty	Price

GROSS Weight:	25.75t
TARE Weight:	11.78t
NET Weight:	13.97t
Chargeable Weight:	13.97t
Council Fee:	$5,295.90
EPA Levy:	$0.00
GST :	$529.59
Temporary Acc:	$0.00
Total Price:	$5,825.49

Payments:	
ACCOUNT	$5,825.49
Total Amount Tendered:	$5,825.49
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

š80131714dœ

John STOKES Tony
C/O
Green Space
Asbestos

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80116758-SB
Voucher No:	
Time In:	16/10/2020 8:24:01 AM
Time Out:	16/10/2020 8:24:01 AM
Vehicle Rego:	CD36BZ-10
Client: NORTHERN TRADE SOLUTIONS PT	
Approval no.	31-A1932
Order Number:	
Contract: NORTHERN TRADE SOLUTIONS	

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Price
ASBESTOS	$379.09

Each Items	Qty	Price

GROSS Weight:	20.00t
TARE Weight:	11.50t
NET Weight:	8.50t
Chargeable Weight:	8.50t
Council Fee:	$3,222.27
EPA Levy:	$0.00
GST :	$322.23
Temporary Acc:	$0.00
Total Price:	$3,544.50

Payments:	
ACCOUNT	$3,544.50
Total Amount Tendered:	$3,544.50
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

š801316779œ

John STOKES Tony
C/O
Green Space
Asbestos

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80116936-SB
Voucher No:	
Time In:	16/10/2020 1:11:22 PM
Time Out:	16/10/2020 1:11:22 PM
Vehicle Rego:	CD36BZ-12
Client: NORTHERN TRADE SOLUTIONS PT	
Approval no.	31-A1932
Order Number:	
Contract:	

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Price
ASBESTOS	$379.09

Each Items	Qty	Price

GROSS Weight:	22.75t
TARE Weight:	11.78t
NET Weight:	10.97t
Chargeable Weight:	10.97t
Council Fee:	$4,158.63
EPA Levy:	$0.00
GST :	$415.86
Temporary Acc:	$0.00
Total Price:	$4,574.49

Payments:	
ACCOUNT	$4,574.49
Total Amount Tendered:	$4,574.49
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80131864&œ

John STOKES Tony
C/O
Green Space
Asbestos

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80116894-SB
Voucher No:	
Time In:	16/10/2020 12:02:34 PM
Time Out:	16/10/2020 12:02:34 PM
Vehicle Rego:	CD36BZ-R10
Client: NORTHERN TRADE SOLUTIONS PT	
Approval no.	31-A1932
Order Number:	
Contract:	

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Price
ASBESTOS	$379.09

Each Items	Qty	Price

GROSS Weight:	23.25t
TARE Weight:	12.08t
NET Weight:	11.17t
Chargeable Weight:	11.17t
Council Fee:	$4,234.45
EPA Levy:	$0.00
GST :	$423.44
Temporary Acc:	$0.00
Total Price:	$4,657.89

Payments:	
ACCOUNT	$4,657.89
Total Amount Tendered:	$4,657.89
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

š80131818#œ

Tony
Green Space
Asbestos
John
STOKES C/O

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN:	11503313301
Ticket No:	80116824-SB
Voucher No:	
Time In:	16/10/2020 10:12:32 AM
Time Out:	16/10/2020 10:12:32 AM
Vehicle Rego:	CD36BZ-12
Client: NORTHERN TRADE SOLUTIONS PT	
Approval no.	31-A1932
Order Number:	
Contract:	

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Price
ASBESTOS	$379.09

Each Items	Qty	Price

GROSS Weight:	26.10t
TARE Weight:	11.78t
NET Weight:	14.32t
Chargeable Weight:	14.32t
Council Fee:	$5,428.58
EPA Levy:	$0.00
GST :	$542.86
Temporary Acc:	$0.00
Total Price:	$5,971.44

Payments:	
ACCOUNT	$5,971.44
Total Amount Tendered:	$5,971.44
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

š80131746"œ

Green Space
John Stokes
C/O
Asbestos

Tony

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116858-SB
Voucher No:

Time In: 16/10/2020 11:06:07 AM
Time Out: 16/10/2020 11:06:07 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.70t
TARE Weight:	11.78t
NET Weight:	14.92t
Chargeable Weight:	14.92t
Council Fee:	$5,656.04
EPA Levy:	$0.00
GST :	$565.60
Temporary Acc:	$0.00
Total Price:	$6,221.64

Payments:	
ACCOUNT	$6,221.64
Total Amount Tendered:	$6,221.64
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Sam

s80131781}¤

John Stokes
C/O
Green Space
Asbestos

Tony

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80116966-SB
Voucher No:

Time In: 16/10/2020 2:08:15 PM
Time Out: 16/10/2020 2:08:15 PM

Vehicle Rego: CD36BZ-6

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 5 (Putres

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	12.10t
TARE Weight:	11.34t
NET Weight:	0.76t
Chargeable Weight:	0.76t
Council Fee:	$288.11
EPA Levy:	$0.00
GST :	$28.81
Temporary Acc:	$0.00
Total Price:	$316.92

Payments:	
ACCOUNT	$316.92
Total Amount Tendered:	$316.92
Change Given:	$0.00

Driver:
MANUAL TICKET
Operator: Dennis

s80131896K¤

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80117377-SB
Voucher No:

Time In: 19/10/2020 11:45:03 AM
Time Out: 19/10/2020 11:45:03 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.20t
TARE Weight:	12.36t
NET Weight:	13.84t
Chargeable Weight:	13.84t
Council Fee:	$5,246.62
EPA Levy:	$0.00
GST :	$524.66
Temporary Acc:	$0.00
Total Price:	$5,771.28

Payments:	
ACCOUNT	$5,771.28
Total Amount Tendered:	$5,771.28
Change Given:	$0.00

Driver:

Operator: Michael

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GSG, Carl, John stokes

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80117327-SB
Voucher No:

Time In: 19/10/2020 10:22:56 AM
Time Out: 19/10/2020 10:22:56 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.85t
TARE Weight:	12.36t
NET Weight:	15.49t
Chargeable Weight:	15.49t
Council Fee:	$5,872.12
EPA Levy:	$0.00
GST :	$587.21
Temporary Acc:	$0.00
Total Price:	$6,459.33

Payments:	
ACCOUNT	$6,459.33
Total Amount Tendered:	$6,459.33
Change Given:	$0.00

Driver:

Operator: Michael

§80132314Qœ

GSG, John stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80117283-SB
Voucher No:

Time In: 19/10/2020 9:14:03 AM
Time Out: 19/10/2020 9:14:03 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.30t
TARE Weight:	12.36t
NET Weight:	10.94t
Chargeable Weight:	10.94t
Council Fee:	$4,147.25
EPA Levy:	$0.00
GST :	$414.73
Temporary Acc:	$0.00
Total Price:	$4,561.98

Payments:	
ACCOUNT	$4,561.98
Total Amount Tendered:	$4,561.98
Change Given:	$0.00

Driver:

Operator: Michael

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GSG, John stokes, Carl

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80117441-SB
Voucher No:

Time In: 19/10/2020 1:17:07 PM
Time Out: 19/10/2020 1:17:07 PM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-a1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.15t
TARE Weight:	12.70t
NET Weight:	9.45t
Chargeable Weight:	9.45t
Council Fee:	$3,582.41
EPA Levy:	$0.00
GST :	$358.24
Temporary Acc:	$0.00
Total Price:	$3,940.65

Payments:	
ACCOUNT	$3,940.65
Total Amount Tendered:	$3,940.65
Change Given:	$0.00

Driver:

Operator: Sam

§80132434eœ

GSG John stokes, Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 80117484-SB
Voucher No:

Time In: 19/10/2020 2:24:06 PM
Time Out: 19/10/2020 2:24:06 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.50t
TARE Weight:	12.36t
NET Weight:	13.14t
Chargeable Weight:	13.14t
Council Fee:	$4,981.25
EPA Levy:	$0.00
GST :	$498.13
Temporary Acc:	$0.00
Total Price:	$5,479.38

Payments:	
ACCOUNT	$5,479.38
Total Amount Tendered:	$5,479.38
Change Given:	$0.00

Driver:

Operator: Sam

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GSG, John stokes Carl

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 90000045-SB.2
Voucher No:

Time In: 20/10/2020 8:38:53 AM
Time Out: 20/10/2020 8:38:53 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.80t
TARE Weight:	12.36t
NET Weight:	11.44t
Chargeable Weight:	11.44t
Council Fee:	$4,336.80
EPA Levy:	$0.00
GST :	$433.68
Temporary Acc:	$0.00
Total Price:	$4,770.48

Payments:	
ACCOUNT	$4,770.48
Total Amount Tendered:	$4,770.48
Change Given:	$0.00

Driver:

Operator: Michael

$90000069?

GSG, John stokes Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 90000201-SB
Voucher No:

Time In: 20/10/2020 12:46:41 PM
Time Out: 20/10/2020 12:46:41 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.16t
TARE Weight:	12.36t
NET Weight:	12.80t
Chargeable Weight:	12.80t
Council Fee:	$4,852.36
EPA Levy:	$0.00
GST :	$485.24
Temporary Acc:	$0.00
Total Price:	$5,337.60

Payments:	
ACCOUNT	$5,337.60
Total Amount Tendered:	$5,337.60
Change Given:	$0.00

Driver:

Operator: Sam

$90000252?

GSG, Shen stokes Carl

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 90000247-SB
Voucher No:

Time In: 20/10/2020 1:48:29 PM
Time Out: 20/10/2020 1:48:29 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.96t
TARE Weight:	12.36t
NET Weight:	11.60t
Chargeable Weight:	11.60t
Council Fee:	$4,397.45
EPA Levy:	$0.00
GST :	$439.75
Temporary Acc:	$0.00
Total Price:	$4,837.20

Payments:	
ACCOUNT	$4,837.20
Total Amount Tendered:	$4,837.20
Change Given:	$0.00

Driver:

Operator: Sam

$90000303?

GSG, John stokes Carl

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 90000110-SB
Voucher No:

Time In: 20/10/2020 10:26:31 AM
Time Out: 20/10/2020 10:26:31 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.70t
TARE Weight:	12.36t
NET Weight:	11.34t
Chargeable Weight:	11.34t
Council Fee:	$4,298.89
EPA Levy:	$0.00
GST :	$429.89
Temporary Acc:	$0.00
Total Price:	$4,728.78

Payments:	
ACCOUNT	$4,728.78
Total Amount Tendered:	$4,728.78
Change Given:	$0.00

Driver:

Operator: Michael

90000145

GSG, John stokes Carl

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 90000156-SB
Voucher No:

Time In: 20/10/2020 11:35:01 AM
Time Out: 20/10/2020 11:35:01 AM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	20.78t
TARE Weight:	12.70t
NET Weight:	8.08t
Chargeable Weight:	8.08t
Council Fee:	$3,063.05
EPA Levy:	$0.00
GST :	$306.31
Temporary Acc:	$0.00
Total Price:	$3,369.36

Payments:	
ACCOUNT	$3,369.36
Total Amount Tendered:	$3,369.36
Change Given:	$0.00

Driver:

Operator: Michael

$90000200s

JOHN STOKES SQUARE
GSG ASBESTOS
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 90000452-SB
Voucher No:

Time In: 21/10/2020 10:21:34 AM
Time Out: 21/10/2020 10:21:34 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.22t
TARE Weight:	12.36t
NET Weight:	11.86t
Chargeable Weight:	11.86t
Council Fee:	$4,496.02
EPA Levy:	$0.00
GST :	$449.60
Temporary Acc:	$0.00
Total Price:	$4,945.62

Payments:	
ACCOUNT	$4,945.62
Total Amount Tendered:	$4,945.62
Change Given:	$0.00

Driver:

Operator: Dennis

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$90000528

JOHN STOKES SQUARE
GSG ASBESTOS
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 90000489-SB
Voucher No:

Time In: 21/10/2020 11:22:55 AM
Time Out: 21/10/2020 11:22:55 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.76t
TARE Weight:	12.36t
NET Weight:	13.40t
Chargeable Weight:	13.40t
Council Fee:	$5,079.82
EPA Levy:	$0.00
GST :	$507.98
Temporary Acc:	$0.00
Total Price:	$5,587.80

Payments:	
ACCOUNT	$5,587.80
Total Amount Tendered:	$5,587.80
Change Given:	$0.00

Driver:

Operator: Dennis

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$90000565

JOHN STOKES SQUARE
GSG ASBESTOS
STEWART

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 90000521-SB
Voucher No:

Time In: 21/10/2020 12:15:38 PM
Time Out: 21/10/2020 12:15:38 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 31-A1932
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.44t
TARE Weight:	12.36t
NET Weight:	12.08t
Chargeable Weight:	12.08t
Council Fee:	$4,579.42
EPA Levy:	$0.00
GST :	$457.94
Temporary Acc:	$0.00
Total Price:	$5,037.36

Payments:	
ACCOUNT	$5,037.36
Total Amount Tendered:	$5,037.36
Change Given:	$0.00

Driver:

Operator: Sam

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$90000597.

CITY OF DARWIN

Delivery Docket
REPRINT

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100000430-SB
Voucher No:

Time In: 28/10/2020 12:33:12 PM
Time Out: 28/10/2020 12:33:12 PM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		13.58t
TARE Weight:		11.78t
NET Weight:		1.80t
Chargeable Weight:		1.80t
Council Fee:		$682.36
EPA Levy:		$0.00
GST :		$68.24
Temporary Acc:		$0.00
Total Price:		$750.60
Payments:		
ACCOUNT		$750.60
Total Amount Tendered:		$750.60
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Michael

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§100000531e@

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100000477-SB
Voucher No:

Time In: 28/10/2020 1:45:33 PM
Time Out: 28/10/2020 1:45:33 PM

Vehicle Rego: CD36BZ-10

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract: NORTHERN TRADE SOLUTIONS

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		24.12t
TARE Weight:		11.50t
NET Weight:		12.62t
Chargeable Weight:		12.62t
Council Fee:		$4,784.13
EPA Levy:		$0.00
GST :		$478.41
Temporary Acc:		$0.00
Total Price:		$5,262.54
Payments:		
ACCOUNT		$5,262.54
Total Amount Tendered:		$5,262.54
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Michael

.....
§100000587\@

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100000309-SB
Voucher No:

Time In: 28/10/2020 8:24:24 AM
Time Out: 28/10/2020 8:24:24 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		23.14t
TARE Weight:		11.78t
NET Weight:		11.36t
Chargeable Weight:		11.36t
Council Fee:		$4,306.47
EPA Levy:		$0.00
GST :		$430.65
Temporary Acc:		$0.00
Total Price:		$4,737.12
Payments:		
ACCOUNT		$4,737.12
Total Amount Tendered:		$4,737.12
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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§1000003932@

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0471

ABN: 11503313301

Ticket No: 100000342-SB
Voucher No:

Time In: 28/10/2020 9:37:29 AM
Time Out: 28/10/2020 9:37:29 AM

Vehicle Rego: CD36BZ-12

Client: NORTHERN TRADE SOLUTIONS PTY LTD
Approval no. 31-A1932
Order Number:
Contract:

Destination LF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		26.20t
TARE Weight:		11.78t
NET Weight:		14.42t
Chargeable Weight:		14.42t
Council Fee:		$5,466.49
EPA Levy:		$0.00
GST :		$546.65
Temporary Acc:		$0.00
Total Price:		$6,013.14
Payments:		
ACCOUNT		$6,013.14
Total Amount Tendered:		$6,013.14
Change Given:		$0.00

Driver:
MANUAL TICKET
Operator: Dennis

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§1000004297@

ASIA PACIFIC OFFICES

BRISBANE
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Spring Hill QLD 4000
Australia
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CANBERRA
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Australia
T: +61 2 6287 0800
F: +61 2 9427 8200

DARWIN
Unit 5, 21 Parap Road
Parap NT 0820
Australia
T: +61 8 8998 0100
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SEWER EASEMENT REMEDIATION AND VALIDATION REPORT

John Stokes Square Redevelopment
Residential Allotments - Lots B1, B2 and B3

Prepared for:

HK Solutions (on behalf of Department of Infrastructure, Planning and Logistics)
Building 2, Level 1, 631 Stuart Highway
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(Report to be in conjunction with the report titled: "Validation Report, John Stokes Square Redevelopment, Proposed Residential Lots B1, B2 and B3", SLR Consulting (Australia) Pty Ltd, December 2021 (reference: 680.10679.00100_R05))

SLR Ref: 680.10679.00200-R13
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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with HK Solutions (on behalf of Department of Infrastructure, Planning and Logistics) (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
680.10679.00200-R13-v1.0	14 January 2022	Julie McDowell	Julie McDowell	Paul Turyn

EXECUTIVE SUMMARY

The Department of Infrastructure, Planning and Logistics (DIPL), through Project Management Consultants HK Solutions Pty Ltd, have engaged SLR Consulting Australia Pty Ltd (SLR) to provide environmental consultancy services relating to the redevelopment of John Stokes Square, located at 47 Progress Drive, Nightcliff, Darwin, Northern Territory (NT) (herein referred to as the "Project Area").

The Project Area is planned to be subdivided as part of the redevelopment project, with varying land use classifications including high density residential, public open space, community and commercial. Works were undertaken across the Project Area to characterise, remediate and validate the newly defined land parcels to ensure suitability for the proposed land uses.

This addendum report outlines the remediation and validation works that were undertaken for the sewer easement located along the eastern and southern boundaries of the proposed residential allotments defined as Lot B2 (3,453 m^2) and Lot B3 (3,455m^2) (herein referred to as the "Site").

This addendum report has been prepared for endorsement by the appointed Auditor (as defined in Part 9 of the *Waste Management Pollution Control Act, 1998*) for the Site – Jean-Paul Pearce (Australian Environmental Auditor, "the Auditor") and in accordance with the *"Northern Territory Contaminated Land Guideline"*, NT Environmental Protection Authority (EPA), June 2017, Version 1.0. The main role of the Auditor is to evaluate the environmental conditions of the Site at the date of signing the certificate of statement and to form an opinion, on which others can rely upon, regarding the suitability of the Site for future land uses. In doing so, the Auditor is required to review the environmental site assessments and validation works undertaken by environmental consultants in relation to site contamination to confirm the remediation objectives have been met prior to redevelopment of the Site.

The remediation works undertaken within the larger portion of the Site were conducted in accordance with the strategy outlined in the Auditor endorsed memorandum titled "*Remediation Strategy - John Stokes Square - Residential Lots (Lots B1, B2 and B3)"*(ref: 680.10679.00000-M04-v2.0). Remediation works conducted involved the following key activities.

- Stripping and excavating uncontrolled fill material to apparent natural soil conditions (either weathered rock or rock) across the Site. Spoil material and resultant excavation were inspected for evidence of any asbestos containing material (ACM) or other contaminants of potential concern (COPC). Based on visual observations, potentially impacted spoil was progressively segregated and stockpiled separately from non-impacted spoil.
- Removal of abandoned underground services including stormwater pipes, sewer pipes, electrical cables and pipes, communication cables, water supply network including irrigation and fire hydrant pipes, and visually inspecting the services, spoil, and resultant excavations for evidence of ACM or other COPC. Based on visual observations, potentially impacted spoil and services constructed out of ACM were progressively segregated and stockpiled separately from non-impacted spoil.
- Visually inspecting the surfaces of, and collecting validation samples from, the remediated areas of the Site (i.e. resultant excavations/trenches). Collated details of the areas remediated including the extent and depth of excavation, validation sample locations, sample identification numbers, date sampled and photographic logs. Submitting validation samples to be analysed by a NATA accredited laboratory.

- Inspected excavated spoil throughout the screening process for visual evidence of ACM contamination. The earthworks contractor screened geotechnically unsuitable anthropogenic waste materials such as construction and demolition rubble from the stockpiled spoil. The screened spoil was placed into smaller stockpiles and sampled by SLR's environmental consultant for characterisation purposes to inform either beneficial reuse onsite or offsite disposal. In the majority of cases stockpile material was not mixed with other stockpiled material until laboratory result were received, the material classified, and advice provided on appropriate reuse or disposal options.
- Asbestos impacted stockpiles were removed from the Site by a licenced asbestos removal contractor for appropriate offsite disposal. SLR's environmental consultant visually inspected and collected validation samples of the surface areas where asbestos material was stored for the purpose of confirming that all ACM had been adequately removed.
- Excavated areas on Lots B1, B2 and B3 were reinstated using spoil material that had been characterised as being suitable for reuse onsite. Spoil was reinstated in approximately 200 mm thick lifts. SLR's environmental consultant visually inspected each lift for the purpose of providing ACM clearance certificates.

Remediation and validation work conducted within the wider portion of the Site are detailed in the report titled *"Validation Report, John Stokes Square Redevelopment, Proposed Residential Lots B1, B2 and B3*" (SLR reference: 680.10679.00100-R05, "SLR VAL 2021") and is to be read in conjunction with this addendum report.

A "live" sewer main is located along the eastern boundaries of both Lots B2 and B3, and along the southern boundary of Lot B2. Remediation works within 3m of these boundaries were limited due to the presence of this underground service and potential destabilisation of neighbouring fences, retaining walls and structures (e.g., sheds). Remediation works conducted in this area included some topsoil stripping (to a maximum depth of 0.3 m below ground surface) and targeted removal of soil where asbestos impact was visually determined (e.g., around the sewer riser).

Contractors conducting works associated with the removal/upgrade of these "live" services were advised to employ precautionary measures such as having safe work method statements and/or work-specific management plans addressing exposure to potentially asbestos impacted soils, unexpected finds protocol and associated training, to ensure workers understood the controls required to be implemented in the unlikely event unexpected asbestos was encountered.

This report outlines the results of the remediation and validation works that were overseen by SLR that were associated with the removal of shallow fill material and services made from ACM, during the upgrade of the sewer main along the eastern and southern boundaries of the Site. The remediation works were completed in two phases, details of which are provided below.

- The first phase of the works involved the removal of the shallow fill material within the sewer easement located along the eastern and southern boundaries of the Site. This fill material and any associated ACM debris were placed directly into skip bins and removed under asbestos conditions for appropriate offsite disposal by a Class A licenced asbestos removal contractor. The final extent of the area excavated was guided by visual assessments undertaken by a suitably qualified Environmental Consultant and supported by analytical results received for validation samples collected from the base and walls of the excavation.

- The second phase of the works involved overseeing the removal of the deeper reworked natural soil material and bedding sands used to backfill the sewer during its original installation, and the removal of sewer related infrastructure (i.e. pipes, risers) constructed with ACM. Following the completion of the excavation and removal of the sewer, the resultant excavation's surfaces (bases and walls) were visually inspected by a suitably qualified Environmental Consultant for the presence of asbestos debris. Validation samples were not collected from the base and walls of the resultant excavation associated with the second phase of the remediation works as:
  - the resultant trench extended into the Site's red natural soils;
  - ACM pipe and debris fragments encountered were bonded; and
  - the method of removal minimised the "breaking" of the ACM services
- Spoil removed during the second phase of the works were inspected for the presence of asbestos contamination during its removal and reinspected when stockpiled adjacent to the trench. If visual observations found ACM debris, then the debris and surrounding spoil were transported to the lined skip bins for appropriate offsite disposal by a licenced asbestos removal contractor.
- Imported soil material was used to backfill the resultant excavation within the sewer easement. SLR were engaged to characterise the imported soil material to ensure its quality from a contaminated land perspective to ensure that the imported soils met the remediation objectives for the Site.

Based on the field observations and analytical results obtained for the remediation and validation activities conducted at the Site by SLR, SLR considers that the proposed residential allotments Lots B1, B2 and B3 have been suitably remediated and validated for the proposed high density residential land use, subject to the considerations outlined in this addendum report and the main validation report (SLR, VAL 2021).

CONTENTS

1 INTRODUCTION 8
1.1 Objectives 9
1.2 Scope of Work 9
1.3 Legislative Framework 10
2 BACKGROUND INFORMATION 10
2.1 Site Identification 10
2.2 Surrounding Environment 11
2.3 Previous Environmental Investigations 11
2.4 Source of Asbestos Impact – Site including the Sewer Easement 13
3 REMEDIATION AND VALIDATION METHODOLOGY 13
3.1 Remediation Strategy 13
3.1.1 Removal of Uncontrolled Fill Material 14
3.1.2 Removal of Sewer Services 15
3.2 Soil Sampling Methodology 16
3.3 Decontamination of Equipment 16
3.4 Analytical Assessment 16
3.5 Screening Criteria 17
3.6 Air monitoring 17
4 RESULTS 18
4.1 Field Observations 19
4.2 Summary of Analytical Results 21
4.3 Clearance Inspections 23
4.4 Soil Movement and Disposal of Underground Services 23
4.5 Air Monitoring 23
5 CONCEPTUAL SITE MODEL 24
6 CONCLUSION 27
7 LIMITATIONS 27
8 REFERENCES 27

DOCUMENT REFERENCES

TABLES

Table 1 Site Information Details 11
Table 2 Soil Sampling Methodologies 16
Table 3 Air Monitoring Action Levels 17
Table 4 Summary of Validation Samples 21
Table 5 Conceptual Site Model 25

APPENDICES

Appendix A Figures
Appendix B Phase 1 Clearance Certificates
Appendix C Imported Fill Soil Characterisation Report
Appendix D Phase 2 Air Quality Monitoring Reports

1 Introduction

The Department of Infrastructure, Planning and Logistics (DIPL), through Project Management Consultants HK Solutions Pty Ltd and Principal Contractor Halikos Pty Ltd (Halikos), have engaged SLR Consulting Australia Pty Ltd (SLR) to provide environmental consultancy services relating to the redevelopment of John Stokes Square, located at 47 Progress Drive, Nightcliff, Darwin, Northern Territory (NT) (herein referred to as the "Project Area"). The location of the Project Area is shown in **Figure 1 (Appendix A)**.

The Project Area is planned to be subdivided as part of the redevelopment project, with varying land use classifications as shown in **Figure 2 (Appendix A)**. Works were undertaken to characterise, remediate and validate the newly defined land parcels to ensure suitability for the intended proposed land use.

This addendum report outlines the remediation and validation works that were undertaken for the sewer easement located along the eastern and southern boundaries of the proposed residential allotments defined as Lots B2 and B3 (herein referred to as the "Site"). The aforementioned land parcels are being redeveloped for high density residential land use.

This addendum report has been prepared for endorsement by the appointed Auditor (as defined in Part 9 of the *Waste Management Pollution Control Act, 1998*) for the Site – Jean-Paul Pearce (Australian Environmental Auditor, "the Auditor") and in accordance with the *"Northern Territory Contaminated Land Guideline"*, NT Environmental Protection Authority (EPA), June 2017, Version 1.0. The main role of the Auditor is to evaluate the environmental conditions of the Site at the date of signing the certificate of statement and to form an opinion, on which others can rely upon, regarding the suitability of the Site for future land uses. In doing so, the Auditor is required to review the outcome of environmental site assessments and validation works undertaken by environmental consultants in relation to site contamination to confirm the remediation objectives have been met prior to redevelopment of the Site.

The remediation and validation work undertaken within the larger portion of the proposed residential allotments were conducted in general accordance with the strategy presented in the Auditor endorsed memorandum: *Remediation Strategy - John Stokes Square - Residential Lots (Lots B1, B2 and B3), ref:680.10679.00000-M04-v2.0*. The results of the remediation and validation works conducted within the wider portion of the Site is detailed in the report titled *"Validation Report, John Stokes Square Redevelopment, Proposed Residential Lots B1, B2 and B3*" (SLR reference: 680.10679.00100-R05, "SLR VAL 2021") and is to be read in conjunction with this report.

Results of the remediation and validation works undertaken within other areas of the Project Area are included under separate cover in the reports titled *"Validation Assessment, John Stokes Square Redevelopment, Lot A"* (SLR ref: 680.10679.00100-R02), and *"Validation Report, John Stokes Square Redevelopment, Road Reserve and Lot C"* (SLR ref: 680.10679.00100-R06).

1.1 Objectives

The purpose of this report is to document the remediation and validation works undertaken within the sewer easement located along the eastern and southern boundaries of the Site.

Even though all known asbestos impact had been removed from the Site (SLR VAL 2021), remediation works undertaken within the larger portion of the Site did not extend into the deeper fill material surrounding the "live" sewer mains that were present at the time of the initial remediation works. Contractors conducting works associated with the removal/upgrade of these "live" services were advised to employ precautionary measures such as having safe work method statements and/or work-specific management plans addressing exposure to potentially asbestos impacted soils, unexpected finds protocol and associated training, to ensure workers understood the controls required to be implemented in the unlikely event unexpected asbestos was encountered.

This report outlines the results of the remediation and validation works, that were overseen by SLR, associated with the removal of shallow fill material and services made from asbestos containing material (ACM) during the upgrade/replacement of the sewer main along the eastern and southern boundaries of the Site. Remediation works were undertaken to ensure the Site was suitable for its intended land use – high density residential.

1.2 Scope of Work

The following scope of work was undertaken by a suitably qualified and experienced SLR environmental consultant to meet the objectives of the remediation strategy developed for the Site -

- Oversaw the removal of uncontrolled fill material within the sewer easement located along the eastern and southern boundaries of the Site.
- Oversaw the removal of sewer pipes, risers, vents and manholes, and visually inspected the services, spoil, and resultant excavations for evidence of ACM.
- Visually inspected and collected validation samples of the remediated areas of the Site (i.e., resultant excavation/trench). Collated details of the areas remediated including the extent and depth of excavation, validation sample locations, sample identification labels, date sampled and photographic logs.
- Oversaw the removal of ACM and soil impacted with asbestos from the Site by licenced asbestos waste removal contractors for appropriate offsite disposal.
- Samples were collected and analysed for asbestos (presence/absence and/or asbestos fines (AF)/fibrous asbestos (FA)) at a National Association of Testing Authorities (NATA) accredited laboratory.
- Comparison of analytical results with relevant investigation levels (ILs) as prescribed in the remediation strategy.
- Air quality monitoring for the presence of air borne asbestos fibres was conducted during all remediation works undertaken at the Site.
- Collection of soil samples to determine the contamination status of fill material proposed to be brought onto the Site to backfill the resultant excavation within the sewer easement.

- Collation of all field notes, photographic logs, certified laboratory reports, location of underground services, asbestos clearance certificates, waste disposal documentation and air quality monitoring results.
- Preparation of this addendum validation report documenting all remediation and validation works undertaken at the Site.

1.3 Legislative Framework

The soil remediation and validation works were undertaken in accordance with the following regulatory requirements.

- ASC NEPM 2013, "National Environmental Protection (Assessment of Site Contamination) Measures 1999", (as amended on 16 May 2013).
- Western Australian (WA) Department of Health (DOH) 2009, "Guideline for the Assessment, Remediation and Management of Asbestos - Contaminated Sites in Western Australia".
- Standards Australia AS 4482.1-2005, "Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil. Part 1 Non-volatile and semi volatile compounds".
- New South Wales (NSW) Environmental Protection Authority (EPA) 2014, "Resource Recovery Order under Part 9, Clause 93 of the protection of the Environment Operations (Waste) Regulation 2014- the excavated natural material order 2014".
- NSW EPA 2014b, "Waste Classification Guidelines, Part 1: Classifying Waste".
- NT EPA 2017, "Northern Territory Contaminated Land Guidelines".
- NT EPA 2016, "Waste Management and Pollution Control Act".
- Safe Work Australia 2020, "How to manage and control asbestos in the workplace Code of Practice".

2 Background Information

2.1 Site Identification

A summary of the Site identification information is detailed in **Table 1**. Refer to **Figure 1 (Appendix A)** for a plan of the locality surrounding the Project Area and **Figure 2 (Appendix A)** for the extent and boundary definition of the Site (i.e., Lots B1, B2 and B3 areas).

The planned redevelopment of the Project Area will comprise of high-density residential buildings within Lots B1, B2 and B3, a police station within Lot A, and roadways and public open space within the Road Reserve and Lot C. Construction of new and upgraded land servicing infrastructure will be delivered as part of the redevelopment project.

Table 1 Site Information Details

Site information	Details
Site Owner	Northern Territory Government, Department of Local Government Housing and Community Development
Site Address	47 Progress Drive Nightcliff, Darwin, NT
Parcel Reference	Prior to subdivision, Lot 9077 Town of Nightcliff
Project Area Extent (approximate)	18,900 m^2
Lot B1 Area	2077 m^2
Lot B2 Area	3453 m^2
Lot B3 Area	3455 m^2
Current Occupier	DIPL
Current Land Use	Currently unoccupied, under redevelopment
Future Land Use	Police Station (Lot A), High Density Residential (Lots B1, B2 and B3), Road Reserve, Parking and Public Open Space (Lot C)
Current Zoning	Rezoned from Medium Density Residential to Specific Use Zone to facilitate the redevelopment of the broader Project Area for a mix of commercial, community, residential and public open space purposes.
Central GPS Coordinates (latitude and longitude)	-12.388 828°, 130.851 451°

2.2 Surrounding Environment

Additional information regarding surrounding land uses and activities, regional geology, regional topography, registered ground water bore information and acid sulphate soils have been outlined in the in the SLR report titled *"Validation Report, John Stokes Square Redevelopment, Proposed Residential Lots B1, B2 and B3*" (SLR VAL 2021).

2.3 Previous Environmental Investigations

SLR understands that DIPL commenced demolition of former public housing buildings in mid-2019, which were distributed across the wider Project Area. Majority of demolition wastes from the Site were removed and a portion of crushed concrete rubble was screened and spread across the Site as general fill. The EPA raised concerns that pesticides may have been historically used under the building's foundations, and that ACM contaminated fill material may have been historically imported to the Site. As such, the first limited site investigation was undertaken by Greencap Pty Ltd (Greencap) in June 2019 to assess the presence of contamination associated with termite control chemicals at the building block located in the northwest corner of the Project Area, and potential ACM, AF/FA contamination at the footprints of demolished building blocks. Furthermore, a DSI was undertaken by Greencap in September 2019 to assess the nature and broader extent of contamination associated with pesticides residue and ACM identified in fill material across the Site.

To further facilitate the environmental audit report for the Site, in February 2020 Agon Environmental Pty Ltd (Agon) conducted additional investigations and remediation works within the Project Area to address previously identified asbestos and pesticide-related contamination.

Between 20 July and 28 September 2020, remediation and validation works were undertaken at the Site in accordance with the approved remediation strategy. Remediation works conducted involved the following key activities.

- Stripping and excavating uncontrolled fill material to apparent natural soil conditions (either weathered rock or rock) across the Site. Spoil material and resultant excavation were inspected for evidence of any asbestos containing material (ACM) or other contaminants of potential concern (COPC). Based on visual observations, potentially impacted spoil was progressively segregated and stockpiled separately from non-impacted spoil.
- Removal of abandoned underground services including stormwater pipes, sewer pipes, electrical cables and pipes, communication cables, water supply network including irrigation and fire hydrant pipes, and visually inspecting the services, spoil, and resultant excavations for evidence of ACM or other COPC. Based on visual observations, potentially impacted spoil and services constructed out of ACM were progressively segregated and stockpiled separately from non-impacted spoil.
- Visually inspecting the surfaces of, and collecting validation samples from, the remediated areas of the Site (i.e. resultant excavations/trenches). Collated details of the areas remediated including the extent and depth of excavation, validation sample locations, sample identification numbers, date sampled and photographic logs. Submitting validation samples to be analysed by a NATA accredited laboratory.
- Inspected excavated spoil throughout the screening process for visual evidence of ACM contamination. The earthworks contractor screened geotechnically unsuitable anthropogenic waste materials such as construction and demolition rubble from the stockpiled spoil. The screened spoil was placed into smaller stockpiles and sampled by SLR's environmental consultant for characterisation purposes to inform either beneficial reuse onsite or offsite disposal. In the majority of cases stockpile material was not mixed with other stockpiled material until laboratory result were received, the material classified, and advice provided on appropriate reuse or disposal options.
- Asbestos impacted stockpiles were removed from the Site by a licenced asbestos removal contractor for appropriate offsite disposal. SLR's environmental consultant visually inspected and collected validation samples of the surface areas where asbestos material was stored for the purpose of confirming that all ACM had been adequately removed.
- Excavated areas on Lots B1, B2 and B3 were reinstated using spoil material that had been characterised as being suitable for reuse onsite. Spoil was reinstated in approximately 200 mm thick lifts. SLR's environmental consultant visually inspected each lift for the purpose of providing ACM clearance certificates.

A "live" sewer main is located along the eastern boundaries of both Lots B2 and B3, and along the southern boundary of Lot B2. Remediation works within 3 m of these boundaries were limited due to the presence of this underground service and potential destabilisation of neighbouring fences, retaining walls and structures (e.g., sheds). Remediation works conducted in this area included some topsoil stripping (to a maximum depth of 0.3 m below ground surface) and targeted removal of soil where asbestos impact was visually determined (e.g., around the sewer riser).

Contractors conducting works associated with the removal/upgrade of these "live" services were advised to employ precautionary measures such as having safe work method statements and/or work-specific management plans addressing exposure to potentially asbestos impacted soils, unexpected finds protocol and associated training, to ensure workers understood the controls required to be implemented in the unlikely event unexpected asbestos was encountered.

Remediation and validation work conducted within the wider portion of the Site are detailed in the report titled *"Validation Report, John Stokes Square Redevelopment, Proposed Residential Lots B1, B2 and B3*" (SLR VAL 2021) and is to be read in conjunction with this addendum report. A detailed review of previous investigations undertaken at the Site is also presented in the aforementioned report (SLR VAL 2021).

2.4 Source of Asbestos Impact – Site including the Sewer Easement

In summary, based on the results from previous investigations and observations noted during remediation works conducted across the Site including the sewer easement along the eastern and southern boundaries, identified asbestos impact appears to have resulted from a number of sources as described below.

- Asbestos impact identified within the uncontrolled fill material present across the Project Area (including the Site), appears to be residential building debris (mainly fragments of ACM sheeting). The presence of asbestos debris within surface soils is a common feature in Darwin due to the widespread damage caused by Cyclone Tracy in December 1974. The 1975 aerial imagery covering the Project Area, clearly shows the presence of scattered debris post Cyclone Tracy.
- Sheeting made from ACM appeared to be used as forming during the installation/construction of some of the concrete stormwater risers encountered along the boundaries between the Road Reserve, and Residential Lot B2 and Lot B3. ACM debris was also identified in the rework material around these stormwater risers.
- Asbestos impacted fill material was also identified between layers of asphalt found in the Road Reserve, which suggests that fill material impacted with asbestos debris had been used to construct (or upgrade) the road system within the Project Area.
- Pipes made from ACM products were used for the Project Area's water distribution system and in some instances used as a conduit for communications cables, and as such, are considered additional primary source of asbestos impact. Asbestos pipes were found in the middle (Road Reserve) to the southern portion of the Project Area (Residential Lot B2).
- Sewer pipes made from ACM were located within the sewer trench located within the easements located along the southern and eastern boundaries of the Project Area.

3 Remediation and Validation Methodology

3.1 Remediation Strategy

Remediation and validation activities conducted at the Site were completed in general accordance with the Auditor endorsed memorandum titled: *Remediation Strategy - John Stokes Square - Residential Lots (Lots B1, B2 and B3), ref:680.10679.00000-M04-v2.0*.

The remediation strategy was developed in general accordance with the following guidelines and standards.

- ASC NEPM 2013.
- Australian Standard AS 4482.1-2005, "Guide to the Sampling and Investigation of Potentially Contaminated Soil. Part 1: Non-volatile and semi-volatile compounds".
- WA DOH 2019, "Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, Consultation Draft" November 2019.

- NT EPA 2017, "Northern Territory Contaminated Land Guidelines".

In addition, SLR's Standard Operating Procedures (SOPs) were followed to ensure integrity was maintained and sampling procedures were completed in general accordance with the relevant guidelines and standards.

The remediation and validation activities that were carried out within the sewer easement located along the eastern and southern boundaries of the Site were conducted in two phases, which are detailed in the following sections.

3.1.1 Removal of Uncontrolled Fill Material

The first phase of the remediation works was managed by the Principal Contractor Greenspace Pty Ltd and involved the following activities.

- The removal of the shallower fill material within the sewer easement located along the eastern and southern boundaries of the Site were removed in accordance with the *Code of Practice How to Safely Remove Asbestos 2011*.
- This fill material and any associated ACM debris encountered were placed directly into lined skip bins and removed under asbestos conditions for appropriate offsite disposal by a Class A licenced asbestos removal contractor.
- The lateral and vertical extent of the excavated area was guided by visual assessments undertaken by a suitably qualified SLR Environmental Consultant.
- The walls and base of the resultant excavation were visually inspected, and validation samples were collected, at a minimum sampling density of 1:25 m^2.
- The depth of the resultant excavation extended down into natural soils or reworked natural soils used to backfill the sewer line during its original installation.
- Details of the area remediated at the Site were collected and included the extent and depth of excavation, validation sample locations, sample identification labels, date sampled and photographic logs. Validation samples were collected and analysed by a NATA accredited laboratory in accordance with the methodology outlined in **Section 3.2.**
- Water for dust suppression was made available throughout the remediation activities undertaken at the Site.
- Air quality monitoring was undertaken during all remediation activities conducted at the Site to determine the presence of air borne asbestos fibres.
- Asbestos removal, including excavation and transport of asbestos impacted soils, was undertaken by a Class A licenced asbestos removal contractor under an approved asbestos removal control plan.
- Analytical results obtained for soil samples collected at the Site were compared to relevant ILs. If validation samples returned results above the ILs, further excavation and validation sampling would have been undertaken to ensure the Site's remediation objectives were achieved.
- All field notes, photographic logs, certified laboratory reports, asbestos clearance certificates, waste disposal documentation and air quality monitoring results were collated.
- Clearance certificates and this addendum validation report were prepared, documenting all remediation and validation works undertaken within the sewer easement located along the southern boundary of the Site.

3.1.2 Removal of Sewer Services

Once a clearance certificate for the first phase of works was received, the second phase of remediation works within the sewer easement along the southern boundary of the Site was managed by the Headworks Project's Principal Contractor (Halikos Pty Ltd). The sewer replacement/upgrade scope of works was conducted by Power and Water Corporation's contractor (Mousellis and Sons Pty Ltd). The second phase included the following activities.

- SLR oversaw the removal of spoil from the sewer trench, and the removal of the disused sewer lines. Spoil material removed was largely reworked natural soils and bedding sands that were used to backfill the sewer pipe during its original installation.
- Spoil removed from the trench was placed adjacent to the trench and visually inspected for the presence of asbestos contamination. If visual observations found ACM debris, then the ACM debris and surrounding spoil were transported to the lined skip bins for appropriate offsite disposal by a licenced asbestos removal contractor.
- As part of these asbestos clearance works, the spoil material was inspected by a suitably qualified Environmental Consultant when it was being removed from the trench, inspected when it was stockpiled adjacent to the trench and reinspected while backfilling the visually cleared trench, for evidence of asbestos contamination.
- Underground services constructed out of ACM products were removed by excavating down to the sandy bedding material surrounding these services. The sandy bedding material was then removed by a shovel (where safe to do so), to minimise damage to the asbestos pipes. The pipes were then carefully removed by the licenced asbestos removal contractor.
- The depth of the trench extended down into natural soils. After the abandoned underground services were removed, a suitably qualified environmental consultant inspected the walls and base of the resultant trench for visual signs of asbestos contamination.
- Plastic sheeting was cut and placed next to the excavation to catch any debris when removing the targeted asbestos pipe from the trench. The high-density polyethylene (HDPE) plastic was then used to wrap the ACM pipe prior to being removed from the Site for appropriate offsite disposal by a licenced asbestos removal contractor.
- Details of the area remediated at the Site were collected and included the extent and depth of excavation, date inspected and photographic logs.
- Water for dust suppression was made available throughout the remediation activities undertaken at the Site.
- Air quality monitoring was undertaken during all remediation activities conducted at the Site to determine the presence of air borne asbestos fibres.
- Asbestos removal, including excavation and transport of ACM pipes, ACM debris and potentially asbestos impacted soils, was undertaken by a licenced asbestos removal contractor under an approved asbestos removal control plan.
- All field notes, photographic logs, asbestos clearance certificates, waste disposal documentation and air quality monitoring results were collated.
- Clearance certificates and this addendum validation report were prepared, documenting all remediation and validation works undertaken within the sewer easement located along the southern boundary of the Site.

3.2 Soil Sampling Methodology

Soil validation sampling was undertaken in accordance with the RAP, the details of which are provided in **Table 2**.

Table 2 Soil Sampling Methodologies

Activity	Comment / Details
Soil sampling frequencies	• Base and walls of excavation/trench in red natural soils –visual validation only. Clearance certificates supplied by a suitably qualified Environmental Consultant. • Walls of excavation including fill material without asbestos contamination – Validation samples collected at a rate of 1:25 m^2, with a minimum of one sample per excavation wall and base (base only where excavation depth did not extend into natural soils). • Coordinates of sample locations recorded with a handheld GPS or similar device.
Sample analysis	• Validation samples analysed for percentage weight/weight asbestos content in accordance with the WA DoH guidelines.
Sample collection	• Sample collection undertaken in general accordance with WA DoH guidelines and SLR SOPs. Dedicated disposable nitrile gloves and laboratory supplied sample containers were used for sample collection.
Sample submission	• Chain of custody (COC) documentation completed at the time of sample collection and accompanied the samples to the nominated laboratory. • All samples submitted to a National Association of Testing Authorities (NATA) accredited laboratory for analysis (where possible).

3.3 Decontamination of Equipment

A 20-ton excavator was used to remove contaminated asbestos soil and abandoned underground services in the sewer easement located along the southern boundary of the Site. The excavator was solely used for the earthworks at the Site and decontamination procedures were followed. The excavator bucket was washed within asbestos stockpile footprints area and the ground surface was visually inspected and validation samples were collected to assess the contamination from the excavator.

3.4 Analytical Assessment

Validation samples were submitted to a NATA accredited laboratory (ALS Pty Ltd [ALS}) for the analyses performed.

Scheduled samples were analysed for asbestos in soils - presence/absence and/or FA/AF. The remediation and validation works previously undertaken by SLR (SLR VAL 2021) confirmed that asbestos impact, when identified, appeared to be confined to the fill material overlaying the natural deeper red silty clay soil material.

Samples collected from the wall and base of the excavation associated with Phase 1 of the remediation works were collected and analysed for presence/absence and/or FA/AF to verify whether asbestos impact was adequately removed.

3.5 Screening Criteria

The following criteria were used to assess the potential risk posed to current and future users of the Site and sites at which spoil materials could be reused.

The nominated screening criteria were selected from the following guidelines:

WA DOH:

- Soil Asbestos Screening Criteria for AF/FA, all site uses
- Soil Asbestos Screening Criteria for ACM -residential sites
- For clarity, screening criteria for asbestos will be high density residential (Residential B) as per Table 7 of the NEPM (ASC) 2013 Schedule B1 - Guideline on Investigation Levels for Soil and Groundwater.

3.6 Air monitoring

Air monitoring was conducted for the duration of the remediation activities conducted at the Site as a precautionary measure. The airborne asbestos monitoring was conducted at the boundaries of the Site (north, south, east and west) and were static locations.

Monitors were set up at the commencement of the shift (approximately 0700) and collected at the completion of Site works (ranges from 1600 – 1700 on weekday and from 12 noon -1300 on Saturday).

Each monitor was calibrated as per SLR's internal NATA accredited procedure and set at a flow rate of 1 L/minute Monday to Friday and 2 L/min on Saturday (as the work shift is shorter, 0700 – 1300, so the flow rate is increased to ensure an appropriate sampling volume is achieved over the shorter shift).

SLR is NATA accredited in our Darwin laboratory to conduct all sampling and analysis of filters. SLR's accreditation number is 3130**.** Air monitoring was conducted in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust, 2nd Edition [NOHSC: 3003 (2005)].

All air monitoring results were compared to the public health exposure standard of 0.01 fibres/mL.

Consideration was given to the asbestos air-quality limit of 0.01 fibres/mL, for protecting the public around contaminated sites as endorsed by the enHealth Council in Management of asbestos in the non-occupational environment 2005 document (enHealth 2005).

In the event results of the airborne asbestos monitoring showed respirable asbestos fibre levels in excess of the levels outlined in **Table 3**, action was taken immediately.

Table 3 Air Monitoring Action Levels

Action Level	Control	Action
Less than 0.01 fibres/ml	No new control measures are necessary	• Continue with current control measures.
	1. Review	• Review control measures.
	2. Investigate	• Investigate the cause.

Action Level	Control	Action
At 0.01 fibres/ml or more than 0.01 fibres/ml but less than or equal to 0.02 fibres/ml	3. Implement	• Implement additional or alternative controls to eliminate or minimise exposure and prevent further releases. • Communicate any additional controls during daily pre-start meeting.
More than 0.02 fibres/ml	4. Stop removal work	• Cease excavation / transport of material.
	5. Notify Regulator	• Notify the Head Contractor, followed by the regulator (NT WorkSafe) both verbally and in written communication.
	6. Investigate the cause	• Conduct a thorough assessment across the Site to determine the cause. • Consult with all personnel involved in the works. • Determine ongoing mitigation measures. • Continue to carry out air-monitoring to ensure further controls have mitigated the problem.

Table adopted from the Code of Practice under Section 274 of *the Work Health and Safety (National Uniform Legislation) Act 2011 (the WHS Act): How to safely remove Asbestos*

4 Results

The remediation and validation activities undertaken at the Site were completed in two phases. Phase 1 was conducted between 1 and 14 September 2021, whilst the second phase was conducted between 20 September and 1 October 2021.

Civil works associated with Phase 1 were completed in general accordance with the Principal contractor's (Greenspace Pty Ltd) Construction Environmental Management Plan (CEMP) T20-1056_V2.0.

THE Mining Pty Ltd was engaged by the Principal Contractor to undertake earthworks across the Site. Earthworks were required to remove uncontrolled fill material identified within the sewer easement along the southern boundary of of the Site. Northern Trade Solutions Pty Ltd (NTS) were engaged to appropriately remove and dispose of ACM debris and asbestos impacted soils during the Phase 1 works. NTS holds a Class A Licence in asbestos removal and demolition.

Phase 2 civil works were completed in general accordance with the Headworks Project's Principal contractor's (Halikos Pty Ltd) CEMP. Sewer replacement/upgrade works were completed by Mousellis and Sons Pty Ltd who were engaged by Power and Water Corporation. Mousellis and Sons Pty Ltd were also engaged to appropriately remove bonded ACM products and ACM debris during the Phase 2 works. Mousellis and Sons Pty Ltd holds a Class B Licence in asbestos removal.

Field observations and summaries of the analytical results obtained for the remediation and validation activities undertaken within the sewer easement at the Site are provided below.

4.1 Field Observations

Key field observations noted during the remediation works at the Site are summarised as follows.

Phase 1:

- Depth of the resultant excavation ranged from 0.1 m to 1.6 m below ground surface.
- The extent of the final area excavated during Phase 1 along the eastern boundary was approximately 3.0 m wide and approximately 95 m long.
- Along the southern boundary of Lot B2, from west to east, the extent of the Phase 1 excavation was approximately 3.0 m wide for approximately 43.4 m in length and then reduced to approximately 2.0 m wide for the next 17 m (approximately), before expanding back out to 3.0 m for the remaining section to the eastern boundary.
- Near surface soils across the sewer easement consisted typically of fill material comprising of reddish -yellowish brown to light grey, fine sandy and gravelly sandy silts. The uncontrolled fill was excavated down to the red natural soil material or in the instance of the existing sewer trench, excavated down to backfill material typically consisting of reworked natural soils.
- On the eastern boundary of the Site, ACM debris were found during a visual inspection of the area near sample location E-03. This area was further excavated and reinspected before collecting a soil sample E03_0.1. An asbestos cement pipe was encountered at sample location E02. This area was further excavated including the removal of the AC pipe and reinspected before collecting soil samples B03_0.8.
- Along the southern boundary of the Site, ACM debris was found at various depths ranging from 0.1 to 0.3 m in the uncontrolled fill material. The ACM debris found in the uncontrolled fill was in poor to moderate condition and were primarily fragments of asbestos sheeting. ACM debris (broken asbestos pipe) was also found in the backfill material at depths ranging from 0.4 m to 0.8 m. The ACM debris found within the backfilled natural soil was primarily fragments of an asbestos cement pipe and appeared to be buried during the existing sewer pipe installation. This debris appeared to be in relatively bonded condition (i.e. good condition).
- ACM debris was also noted in the uncontrolled fill material on the eastern boundary between the Site and adjacent residential properties. ACM debris was removed as far as practicable, but its presence was noted to extend into the adjacent residential property.
- Asbestos debris encountered and surrounding fill material were loaded directly into lined skip bins and removed by a licensed Class A asbestos removal contractor (NTS) for appropriate offsite disposal to the Shoal Bay Waste Management Facility (SBWMF).
- For the purpose of minimising dust generation, the area to be excavated was wetted down prior to commencing excavation works. This included ripping the ground surface to facilitate water penetration into the deeper soil profile. During the excavation and skip bin loading, the spoil was sprayed continuously with water to further control dust generation and to stop potential release of asbestos fibres.
- Following the completion of the excavations works, the resultant excavation's surfaces (walls and bases) were visually inspected by a suitably qualified environmental consultant on for the presence of asbestos debris by systematically walking over the area.

- Validation soil samples were collected from the walls and base of the resultant excavations. Validation samples were then submitted to a NATA accredited laboratory for asbestos analyses. Wall samples (along the property boundary) targeting the uncontrolled fill material were submitted for presence/absence analyses. Samples collected from the base of the excavation in natural soil material were submitted for presence/absence analyses. Base samples above the existing sewer trench were analysed for both presence/absence and AF/FA.
- Locations and extent of resultant excavations are shown in the final clearance certificates issued for Eastern and Southern Sewer Easements in **Appendix B**.
- No stained or odorous soils were identified during the remediation works and removal of underground services works.

Phase 2:

- The extent of the final area trenched during Phase 2 of the remediation works was approximately 1.0 to 1.5 wide and approximately 43.4 m long along the southern boundary and approximately 95 m long along the eastern boundary. The maximum depth of the final trench was 2.0 m below ground surface.
- Spoil material removed from the trench was largely reworked natural soils and bedding sands used to backfill the sewer pipe during its original installation. As part of the asbestos clearance works, the spoil material was inspected when it was being removed from the excavation, inspected when it was stockpiled adjacent to the trench and reinspected while backfilling the cleared excavation.
- Only one fragment of bonded ACM was noted at a depth of approximately 1 m below ground surface when removing spoil from the easement along the southern boundary of Lot B2. The ACM fragment was in good condition and considered to be part of a broken asbestos pipe (different to the one that was being removed). The fragment and surrounding soil material were removed and placed into a lined skip bin for appropriate offsite disposal.
- To minimising dust generation, the area to be excavated was wetted down prior to commencing excavation works. During the trenching works and skip bin loading, spoil was sprayed with water to control dust generation and to stop potential release of asbestos fibres.
- Plastic sheeting was cut and placed next to the trench to catch any debris when removing the targeted asbestos pipe from the trench. HDPE plastic was then used to wrap the ACM pipe prior to being removed from the site for appropriate offsite disposal by a licenced asbestos removalist (Mousellis and Sons Pty Ltd).
- Following the completion of the trenching works and removal of the sewer infrastructure, the resultant trench's surfaces (bases and walls) were visually inspected where safe to do so by a suitably qualified environmental consultant for the presence of asbestos debris.
- Validation samples were not collected from the base and walls of the resultant trench, as they (i.e. walls and base) extended into the red natural soils. The bonded nature of the ACM fragments encountered, and careful methodology adopted when removing the ACM pipe, also supported the strategy of only providing a visual clearance of the resultant trench's surfaces.
- Visual inspection of the final trench and spoil material confirmed no further fragments were present.
- No stained or odorous soils were identified during the remediation works and removal of underground services works.

4.2 Summary of Analytical Results

A summary of the validation samples collected during Phase 1 of the remediation works conducted within the sewer easement located along the eastern and southern boundaries of the Site is provided in **Table 4.**

As stated in **Section 4.1**, validation samples were not collected from the base and walls of the resultant trench associated with Phase 2 of the remediation works as they (walls and base) extended into the red natural soils. The bonded nature of the single ACM fragment encountered, and careful methodology adopted when removing the ACM pipe, also supported the strategy of only providing a visual clearance of the resultant trench's surfaces.

Table 4 Summary of Validation Samples

Sample Type	Sample Identification	Analysis
Eastern sewer easement: Base samples – western bench (red natural soils)	W-01-0.1, W-02-0.1, W03-0.1, W-04, W-05, W06-0.1, W-07-0.1	*Presence/absence of asbestos in soils
Eastern sewer easement: Base samples – backfill sewer trench area	B-01-0.7, B-02-0.7, B-03-0.8, B-04-1.4, B-05-1.0, B-06-1.2, B-07-1.2, B-08-0.7	*Presence/absence of asbestos in soils *FA/AF
Eastern sewer easement: Wall samples – eastern property boundary	E-01-0.1, E-02-0.1, E-03-0.1, E-04, E-05, E-06, E-07-0.1, E-08-0.1	*Presence/absence of asbestos in soils
Southern sewer easement: Base samples – northern bench (red natural soils)	N01_0.1, N02_0.1, N03_0.1, N04_0.1, N05_0.3	*Presence/absence of asbestos in soils
Southern sewer easement: Base samples – backfill sewer trench area	B01_0.8, B02_0.8, B03_1.0, B04_0.8, B05_0.7	*Presence/absence of asbestos in soils *FA/AF
Southern sewer easement: Base samples – southern bench (red natural soils)	S01_0.2, S02_0.2, S03_0.1, S04_0.2, S05_0.2	*Presence/absence of asbestos in soils
Southern sewer easement: Wall samples – eastern property boundary	E01_0.4, E02_0.6, E03_0.3	*Presence/absence of asbestos in soils

A summary of analytical results is as follows.

Eastern Sewer Easement:

- A total of 23 soil samples were collected from the excavation area associated with the removal of uncontrolled fill material found within the sewer easement located along the eastern boundary of Lots B2 and B3.

- Validation samples from the external wall (eastern property boundary) are represented by the samples with prefix: "E". A total of eight samples were collected along the Project Area's eastern boundary. Even though samples collected from fill material would normally be analysed for FA/AF, the action of collecting 10 L sample from the eastern boundary wall was causing the fill material from the adjacent property to fall onto the Site. As such, only soil samples for presence/absence of asbestos in soils were collected from the fill layer present in the eastern property boundary of the Site.
- A total of 15 validation samples collected from the base of the excavation are represented by samples with the following prefix:
  - "W" which were collected from the surface of the western bench (natural soil material) – seven samples; and
  - "B" which were collected from the backfill natural material within the sewer trench – eight samples.
- ACM debris were found during visual inspection of the area near sample location E-03. This area was further excavated and reinspected before collecting a soil sample E03_0.1.
- Asbestos cement pipe was encountered at sample location E02. This area was further excavated including the removal of the AC pipe and inspected before collecting soil samples B03_0.8.
- Asbestos was not detected in any of the soil samples collected and submitted for laboratory analysis (presence/absence, AF/FA).
- Validation sample locations and analytical reports can be found in the final clearance certificate issued for Eastern Sewer Easement (SLR Reference 680.10679.00200-R09-v1.0-CLR-20210923) in **Appendix B**.

Southern Sewer Easement:

- A total of 19 soil samples were collected from the excavation area associated with the removal of uncontrolled fill material present within the sewer easement located along the southern boundary of Lot B2.
- A total of 15 validation samples collected from the base/benches of the excavation are represented by samples with the following prefix:
  - "N" which were collected from the surface of the northern bench (natural soil material) – five samples;
  - "B" which were collected from the backfill material within the sewer trench – five samples; and
  - "S" which were collected from the southern bench (natural soil material) – five samples.
- Four soil samples were collected from the site's eastern property boundary. These samples targeted the uncontrolled fill material that extends onto the adjacent residential property. Even though samples collected from fill material would normally be analysed for FA/AF, the action of collecting 10 L sample from the eastern boundary wall was causing the fill material from the adjacent property to fall onto the Site. As such, only soil samples for presence/absence of asbestos in soils were collected from the fill layer present in the eastern property boundary of the Site.
- Asbestos was only detected in the sample collected from the wall along the site's eastern property boundary E01-0.4. Geofabric has been placed over the eastern wall of the excavation to prevent asbestos fibres/ACM debris from falling onto the site (refer to photolog). The clearance certificate associated with these remediation works was issued subject to the continued presence of the geofabric on the eastern property boundary.

- Asbestos was not detected in any of the soil samples collected from the excavation's base/benches that were submitted for laboratory analysis (presence/absence, AF/FA).
- Validation sample locations and analytical reports can be found in the final clearance certificate issued for Southern Sewer Easement (SLR Reference 680.10679.00200-R10-v1.0-CLR-20210918) in **Appendix B**.

4.3 Clearance Inspections

Visual inspections were conducted for all excavations and trenches created at the Site as a result of the remediation activities outlined herein. No ACM debris were found during any of the clearance inspections. **Appendix B** includes the Clearance Certificates provided for visually validated areas at the Site.

SLR note that no final visual clearance certificates were issued for the Phase 2 excavations. This report serves as confirmation that all ACM that was encountered during the Phase 2 excavations was removed to a satisfactory standard.

4.4 Soil Movement and Disposal of Underground Services

Spoil removed during Phase 1 of the remediation works within the sewer easement located along the eastern and southern boundaries of the Site were placed directly into lined skip bins for appropriate disposal to the SBWMF by a licenced asbestos removal contractor (NTS). Approximately 513 tonnes (or 285 m^3 based on an assumed soil density of 1.8 for silty clayey soils) of ACM and ACM contaminated soil was disposed of to the SBWMF.

During Phase 2 of the remediation works, approximately 4.18 tonnes (or 2.32 m^3 based on an assumed soil density of 1.8 for silty clayey soils) of ACM pipe and potentially impacted spoil material were removed from the Site for appropriate disposal to the SBWMF by a licenced asbestos removal contractor (Mousellis and Sons Pty Ltd).

The SBWMF disposal receipts have been included in the final clearance certificates provided in **Appendix B**.

Spoil from the trench created when removing the abandoned sewer line (i.e. Phase 2 remediation works) were visually inspected by the Environmental Consultant for the presence of ACM. As per the Auditor endorsed remediation strategy, spoil that was visually cleared as not being impacted with ACM debris, was used to backfill the service trenches created as part of the remediation activities conducted at the Site.

Additional fill material was also brought onto the Site to backfill the resultant excavation/sewer created as part of the remediation works conducted within the sewer easement. This material was characterised from a soil contamination perspective. Details of the characterisation works (SLR Reference 680.30093.00000-M01-v1.0-20211012) has been included in **Appendix C**.

4.5 Air Monitoring

Air monitoring for airborne fibres was conducted for each day intrusive works were carried out as part of the remediation works (1 - 3, 6 - 10, 13, 14,16, 17, 20 - 24, 27 - 30 September and 1 October 2021).

Monitoring results did not report airborne fibres above the detection limit of the method used, which is 0.01 fibres/ml. Air monitoring reports for the Phase 1 remediation works have been included in the final clearance certificates provided in **Appendix B**. Air monitoring reports for the Phase 2 removal works are provided in **Appendix D**.

5 Conceptual Site Model

The Site's Conceptual Site Model (CSM) has been updated taking into account the remediation and validation works conducted at the Site (and presented in this addendum report), as well as the results from remediation works and environmental investigations undertaken at the Site.

The CSM prepared for the Site and surrounds is presented below in **Table 5** in tabulated form.

In developing the CSM, the following points were considered.

- All known asbestos impact at the Site has been remediated and resultant excavations have been validated through either soil and/or visual clearance inspections, as detailed in this addendum report and the report titled *"Validation Report, John Stokes Square Redevelopment, Lots B1, B2 and B3*" (SLR VAL 2021), which is to be read in conjunction with this report.
- Pesticide soil impact previously identified at the Site (Greencap September and October 2019) was reported to be relocated to the commercial allotment (i.e. Lot A, proposed police station) (Agon DSI 2020). Soil samples collected during the Site's remediation and validation works conducted by SLR (and presented in this report), did not report any pesticide impact above the nominated ILs specified for residential land use. As such, pesticides are no longer considered a COPC for the Site.
- Heavy metals such as arsenic, copper, lead, nickel, zinc and total chromium were detected in validation samples collected located across the Site (resulted presented in this report). None of the concentrations detected exceeded the health-based and/or ecological ILs specified for residential land use. Elevated arsenic and total chromium concentrations were reported across the Site, however further analyses confirmed that concentrations detected are indicative of natural soil conditions (SLR DSI 2020). Heavy metal impact (nickel, exceeded the EIL specified for urban residential and public open space land uses) was only detected in one sample collected from the Site during previous investigations (Agon DSI 2020). This area has been subsequently remediated and validated as part of the works conducted by SLR. Given that the concentration detected was below the human health IL for residential land uses and the level of remediation works conducted, heavy metals are not considered COPC for soil conditions at the Site.
- Groundwater beneath the wider Project Area was intersected at depths between 2.69 and 3.79 mbgl and inferred to flow in a westerly direction towards coastal mangrove community and outer estuary of Darwin Harbor (located approximately 160 m from the Project Area) (Agon DSI 2020). According to the Agon DSI report (2020), groundwater samples reported dissolved heavy metal concentrations above the nominated ILs adopted for assessing potential impacts to groundwater users and marine aquatic ecosystems.
- Future users of the Site will not extract and use groundwater from beneath the Site and as such groundwater impact in the form of dissolved heavy metals, is not considered to pose an exposure risk to future users of Lots B1, B2 and B3.

Table 5 Conceptual Site Model

Sources		Exposure	Receptors			Complete Source-Pathway-Receptor Linkage
Primary Source	Secondary Sources	Transport Mechanism Possible and Routes of Exposure	Person or Ecological Receptor Potentially Exposed	Receptor Present		
				On-site	Off-site	
None – all known primary sources of impact (i.e. uncontrolled fill, building material and services made out of ACM) have been removed from the Site.	Soil contamination: • None. All known soil impacts (i.e. asbestos) have been removed from the Site and resultant excavations validated. Note: Asbestos detected in fill material on neighbouring properties to the east of the Site.	Dispersion • Uptake via plants • Dermal contact • Incidental ingestion • Leaching via percolation Wind Erosion: • Inhalation of dusts Volatilisation • Inhalation	Residents	×	✓	× *does not exist as all known sources have been removed
			Commercial workers	×	✓	× *does not exist as all known sources have been removed
			Intrusive workers	✓	✓	× *does not exist as all known sources have been removed
			People in open spaces	✓	✓	× *does not exist as all known sources have been removed
			Ecological receptors (terrestrial biota)	✓	✓	× *does not exist as all known sources have been removed
	Groundwater Contamination: • Heavy metals	Migration of groundwater and its extraction • Dermal contact • Incidental ingestion • Inhalation	Residents	×	✓	× *although bores exist within the locality, the SPR linkage is not considered viable as groundwater within the locality is not expected to be used for domestic purposes especially given the availability of a reticulated, treated (mains) water supply and low groundwater yield..

Sources		Exposure	Receptors			Complete Source-Pathway-Receptor Linkage
Primary Source	Secondary Sources	Transport Mechanism Possible and Routes of Exposure	Person or Ecological Receptor Potentially Exposed	Receptor Present		
				On-site	Off-site	
		• Terrestrial/ aquatic Groundwater impact is not volatile and therefore exposure pathway associated with the "migration of groundwater – volatilisation – inhalation" is not considered to exist.	Commercial workers	✗	✓	✗ *although bores exist within the locality, the SPR linkage is not considered viable as groundwater within the locality is not expected to be used for commercial purposes especially given the availability of a reticulated, treated (mains) water supply and low groundwater yield. There is no design to establish a bore onsite for future users of the Site.
			Intrusive workers	✓	✓	✗ *does not exist as groundwater is located at depths greater than 2.69 mbgl and as such is unlikely to enter typical excavations/underground service pits located either on site or within the surrounding locality.
			People in open spaces	✓	✓	✗ *does not exist as groundwater is not expected to be used by users of public open spaces.
			Ecological receptors (terrestrial and aquatic biota)	✗ (terrestrial only)	✓	**Potentially Complete** *possible that ground impact (dissolved heavy metals) could migrate offsite to the coastal mangrove communities located approximately 160 m west of the Project Area.

6 Conclusion

Based on the field observations and analytical results obtained for the remediation and validation activities conducted at the Site by SLR, SLR considers that the proposed residential allotments Lot B1, Lot B2 and Lot B3 have been suitably remediated and validated for the proposed land use (high density residential), subject to the considerations outlined in this addendum report and the main validation report (SLR, VAL 2021).

7 Limitations

The following information will assist in understanding the uncertainties relating to the interpretation of the data obtained during this investigation and the recommendations presented in the report and help with assessment and interpretation of the report.

SLR assumes no responsibility for the quality or accuracy of data obtained from external sources, or for occurrences outside the scope of works defined in this report.

All work conducted, and reports produced by SLR are prepared for a particular Client's objective and are based on a specific scope, conditions and limitations, as agreed upon between SLR and the Client. Information and/or report(s) prepared by SLR may therefore not be suitable for any use other than the intended objective.

Before passing on to a third party any information and/or report(s) prepared by SLR, the Client is to inform fully the third party of the objective and scope, and all limitations and conditions, including any other relevant information which applies to the information and/or report(s) prepared by SLR.

It is the responsibility of third parties to investigate fully to their satisfaction if any information and/or report(s) prepared by SLR, is suitable for a specific objective.

Services were conducted in a conscientious and professional manner. The nature of the task, however, and the likely disproportion between any damage or loss which might arise from the work and any report prepared as a result and the cost of our services is such that SLR cannot guarantee that all issues of concern/contamination have been identified.

The report(s) and/or information produced by SLR should not be reproduced and/or presented/reviewed except in full.

8 References

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APPENDIX A

Figures

0 50 100 m

Proposed Residential Allotments

Project Area

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:3,000 at A4
Project Number:	680.10679
Date:	28-Jan-2021
Drawn by:	JG

SLR

JOHN STOKES SQUARE

Location of Project Area

FIGURE 1

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680010679 F01 Location of Project Area.mxd

0 10 20 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:1,000 at A4
Project Number:	680.10679
Date:	01-Dec-2020
Drawn by:	JG

Future Land Use

- Commercial/Industrial
- Public Space
- Residential

SLR

JOHN STOKES SQUARE

Location of the Site

FIGURE 2

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 Location of the Site.mxd

APPENDIX B

Phase 1 Clearance Certificates

ASBESTOS CLEARANCE CERTIFICATE

Job Number:	680.10679.00200	Document Ref:	680.10679.00200-R09-v1.0-CLR-20210923.docx
Date of Issue:	23 September 2021	Signatures:	
Clearance Inspection Undertaken By and Competency:	Robin Birua Environmental Scientist		

1	CLIENT DETAILS	
1.1	Client Name:	HK Solutions Pty Ltd on behalf of Department of Infrastructure, Planning and Logistics.
1.2	Client Contact Name:	Tony Hopkinson
1.3	Client Address:	Building 2, Level 1 631 Stuart Highway Berrimah NT 0828
1.4	Client Telephone Number:	0410 824 575

2	ASBESTOS REMOVAL DETAILS			
2.1	Date of Clearance Inspections:	8 September 2021	Time of Clearance Inspection:	1500 (8 September 2021)
2.2	Site Address:	47 Progress Drive, Nightcliff, Darwin, Northern Territory (the Project Area)		
2.3	Asbestos Removal Location:	• Uncontrolled fill material that has historically contained debris of asbestos containing material (ACM) was present in the sewer easement located on the southern and eastern boundaries of the Project Area. • SLR were engaged to oversee the removal of this uncontrolled fill material within the sewer easement, down to either natural soils or in the area where the existing sewer trench is located - backfill material (i.e. mostly reworked natural soils). • The removal of uncontrolled fill material within the sewer easement has been undertaken in three phases. This clearance report has been prepared with respect to the second phase of the proposed work, which includes the removal of uncontrolled fill from the sewer easement located at the eastern boundary within the new allotments referred to Lot B2 and Lot B3. • The extent of the excavation that this Clearance Certificate applies to is shown in Appendix A. • The removal of the uncontrolled fill material containing ACM debris was undertaken by a Class A licensed asbestos removalist, Northern Trade Solutions (NTS) under asbestos conditions. Removal works commenced on 1 September and were completed on 8 September 2021 for the second phase of the proposed works. • The material excavated was placed directly into skip bins for appropriate offsite disposal to a licensed waste management facility (Shoal Bay Waste Management Facility) (SBWMF)). Disposal dockets have been included in Appendix E.		

2	ASBESTOS REMOVAL DETAILS	
		• On 8 September 2021, once the uncontrolled fill material and some of the reworked backfilled material that appeared to contain ACM debris had been removed, SLR visually inspected the surfaces of the excavation for evidence of ACM debris and collected validation soil samples from the walls and base. • Appendix A shows the locations of the validation samples collected. • Samples were submitted to a NATA accredited laboratory for analysis (ALS Pty Ltd).
2.4	Asbestos Removal Contractor Company & Licence Number:	Northern Trade Solutions (NTS) EPL 225
2.5	Asbestos Removal Contractor Supervisor & Licence Number:	Tony Karambetis CPCCDE3015A
2.6	Details of Asbestos Removal Activities and Areas Inspected:	Uncontrolled Fill Material Oversight (1 – 8 September 2021): • The removal of uncontrolled fill material, including asbestos debris, was conducted on between 1 and 8 September 2021 and were excavated in accordance with the NT WorkSafe "Code of Practice How to Safely Remove Asbestos 2011". • Depth of the resultant excavation ranged from 0.1 m to 1.6 m below ground surface. The deeper excavation depths were within the existing sewer trench. • The uncontrolled fill was characterised by dark grey coloured sandy silt and included some organic matter and vegetation. The uncontrolled fill was excavated down to the red natural soil material or in the instances of the existing sewer trench, excavated down to backfill material typically consisting of reworked natural soils. • ACM debris was found in various depths ranging from 0.3 m to 1.3 m below ground surface. The ACM debris was primarily fragments of asbestos sheeting and broken pieces of asbestos cement pipe. The condition of the ACM debris ranged from poor (ACM sheeting) to moderate (asbestos cement pipe). • Relatively more ACM debris was found in the eastern boundary wall within Lot B2 (next to the adjacent property's recreational spa) and the debris was in poor to moderate condition. • One asbestos cement pipe, approximately 1.0 m long, was found at a depth of 0.5 m below ground surface within the sewer easement and was subsequently removed (refer to Appendix A for the approximate location). • The extent of the final area excavated was approximately 3.0 m wide and approximately 95 m long. • To minimise dust generation, the area to be excavated was wetted down prior to commencing excavation works. This included ripping the ground surface to facilitate water penetration into the deeper soil profile. • Asbestos debris encountered and surrounding fill material were loaded directly into lined skip bins and removed by a licensed "Class A" asbestos removalist (NTS) for appropriate offsite disposal to the SBWMF. • During the excavation and skip bin loading, the spoil was sprayed continuously with water to control dust generation and to stop potential release of asbestos fibres.

2	ASBESTOS REMOVAL DETAILS	
		• As part of these works, approximately 145 m^3 of asbestos impacted uncontrolled fill material including asbestos debris and asbestos cement pipe were removed from the site for appropriate offsite disposal. • One excavator was used solely for the excavation of ACM debris and potentially asbestos impacted soil between 1 and 8 September 2021. This excavator was then decontaminated after the completion of excavation and removal of uncontrolled fill including asbestos impacted soil within the southern easement of Lot B2 (i.e. after Phase 3 was completed). • Following the completion of the excavations works, the resultant excavation's surfaces (walls and bases) were visually inspected by a suitably qualified environmental consultant for the presence of asbestos debris by systematically walking over the area. • Validation soil samples were collected from walls and base of the resultant excavation on 7 and 8 September 2021. Validation samples were then submitted to a National Association of Testing Authorities (NATA) accredited laboratory for asbestos analyses. Wall samples (along the property boundary) targeting the uncontrolled fill material were submitted for presence/absence analyses. Validation soil samples from the shallower benches were collected and submitted for presence/absence asbestos analyses. Samples collected from the backfill material within the existing sewer trench were also analysed for asbestos fines/fibrous asbestos (AF/FA) analyses.

3	CLEARANCE INSPECTIONS – VISUAL	
3.1	Method:	• Visual inspections of the excavated areas created due to the removal of asbestos debris and impacted soils at the site were undertaken by a suitably qualified environmental consultant from SLR. • The base and walls of the excavation were visually inspected for ACM debris and representative soil samples were also collected from the excavation's surfaces (i.e. walls and base). • Asbestos material encountered during the removal of fill material were removed in accordance with the Code of Practice How to Safely Remove Asbestos 2011. Refer to Appendix A for details of the area where visual clearance for asbestos related impact have been undertaken at the site.
3.2	Visual Summary:	It is the opinion of Robin Birua of SLR that the excavated area associated with the removal of ACM and potentially asbestos impacted soil as detailed in Section 2.6 of this Clearance Certificate, have been visually inspected, as far as reasonably practicable and are free from visible ACM in the fill layer and natural soil surface, unless specified otherwise in Section 2.6. Representative photographs of the area inspected, following removal of asbestos impacted soil and asbestos, are provided at Appendix B.

3	CLEARANCE INSPECTIONS – VISUAL	
3.3	Limitations:	It should however be noted that: • The Visual Clearance Inspection and Clearance Certificate are limited to accessible visible surfaces as detailed in Section 2.6 only. • Inspections are conducted in a conscientious and professional manner. The nature of the task and the likely disproportion between any damage or loss which might arise from the work or Clearance Certificate prepared and the cost of our services, is such that SLR cannot guarantee that all asbestos materials/issues of concern have been identified and/or addressed. • Unless specified in this Clearance Certificate, this Clearance Certificate does not guarantee that the dust present in or around those areas mentioned in Section 2.3 and Section 2.6 of this Clearance Certificate are free of asbestos contamination. The inspection is for visible ACM as detailed in Section 2.6 only. • It is possible that ACM are present in areas that were inaccessible/visually obscured during the inspection. If any ACM or assumed ACM fragments are encountered on site, access to the materials should be appropriately restricted and advice sought from a suitably qualified and experienced consultant. • The inspections were carried out at the times of the completion of the remediation works and were dependent upon site conditions at that time. • SLR accepts no responsibility or liability for the completeness of the removal by the appointed licensed asbestos removal contractor. The appointed licensed asbestos removal contractor is responsible for ensuring all work is conducted in a safe and competent manner by suitably trained staff, the necessary approvals are obtained from regulatory authorities prior to starting any asbestos removal or maintenance activities (if applicable) and that work methods and procedures comply with the relevant legislation, codes of practice and industry standards, as required.

4	CLEARANCE INSPECTION - ASBESTOS AIRBORNE FIBRE MONITORING	
4.1	Background Monitoring:	Air monitoring for airborne fibres was conducted for each day of intrusive works were carried out as part of the asbestos removal works. Four monitoring stations were setup at the boundary of the excavation area, positioned in line with adjacent sensitive receptors (residents). Only control (as required) airborne fibre monitoring was conducted, in general accordance with Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust, 2nd Edition [NOHSC: 3003 (2005)] and SLR's in-house technical procedures.
4.2	Clearance Monitoring:	Clearance airborne fibre monitoring was not requested and does not form a part of this Clearance Certificate.
4.3	Results:	The analysis of all asbestos airborne fibre monitoring was undertaken by SLR at our NATA accredited laboratory. All airborne asbestos monitoring results showed less than the minimum detection limit of the method used which is 0.01 fibres/mL (refer to the SLR Airborne Asbestos Monitoring Reports ref: 680.10679.00200-AADZ-7 through to 680.10679.00200-AADZ-12 that are included in Appendix C.

5	VALIDATION SAMPLE RESULTS	
5.1	Method:	• Validation samples were collected from the base/benched surfaces and external wall (eastern property boundary) of the excavation at a minimum rate of one sample per 25m^2 and one sample per five linear metres. • Samples were collected in general accordance with AS4482.1-2005 and SLR's standard operating procedures (SOPs). Dedicated disposable nitrile gloves, a decontaminated trowel and laboratory supplied sample containers were used for sample collection. • Validation soil samples were collected from the base and external wall (eastern property boundary) of the resultant excavation, as detailed in Section 2.3, Section 2.6 and locations are shown in Appendix A. The purpose of these samples was to confirm that ACM impacted soil material had been removed from the area to a satisfactory standard. • All samples were submitted to a NATA accredited laboratory (ALS Pty Ltd) for analysis. • The base samples were collected form the benches' surface (natural soil material) and from the backfill material within the sewer trench. The wall samples were collected along the property boundary, targeting the uncontrolled fill material layer that extends offsite. • For each sample that targeted the backfill material in the existing sewer trench, a 10 L sample was collected in a bucket and passed through a 7mm grid sieve. The material that did not pass through the sieve was inspected for the presence of any potential ACM debris and if found, samples of the fragments were collected and submitted to a NATA accredited laboratory for identification purposes. • Following a visual inspection of the less than 7 mm fraction of sieved soil, a sub-sample (at least 500 mL) was collected and submitted for laboratory analyses. Asbestos analysis for the samples included presence/absence and AF/FA in general accordance with the Western Australia Department of Health's Guidelines for the Assessment, Remediation and Management of Asbestos-Contamination Sites in Western Australia (WA DoH 2021).

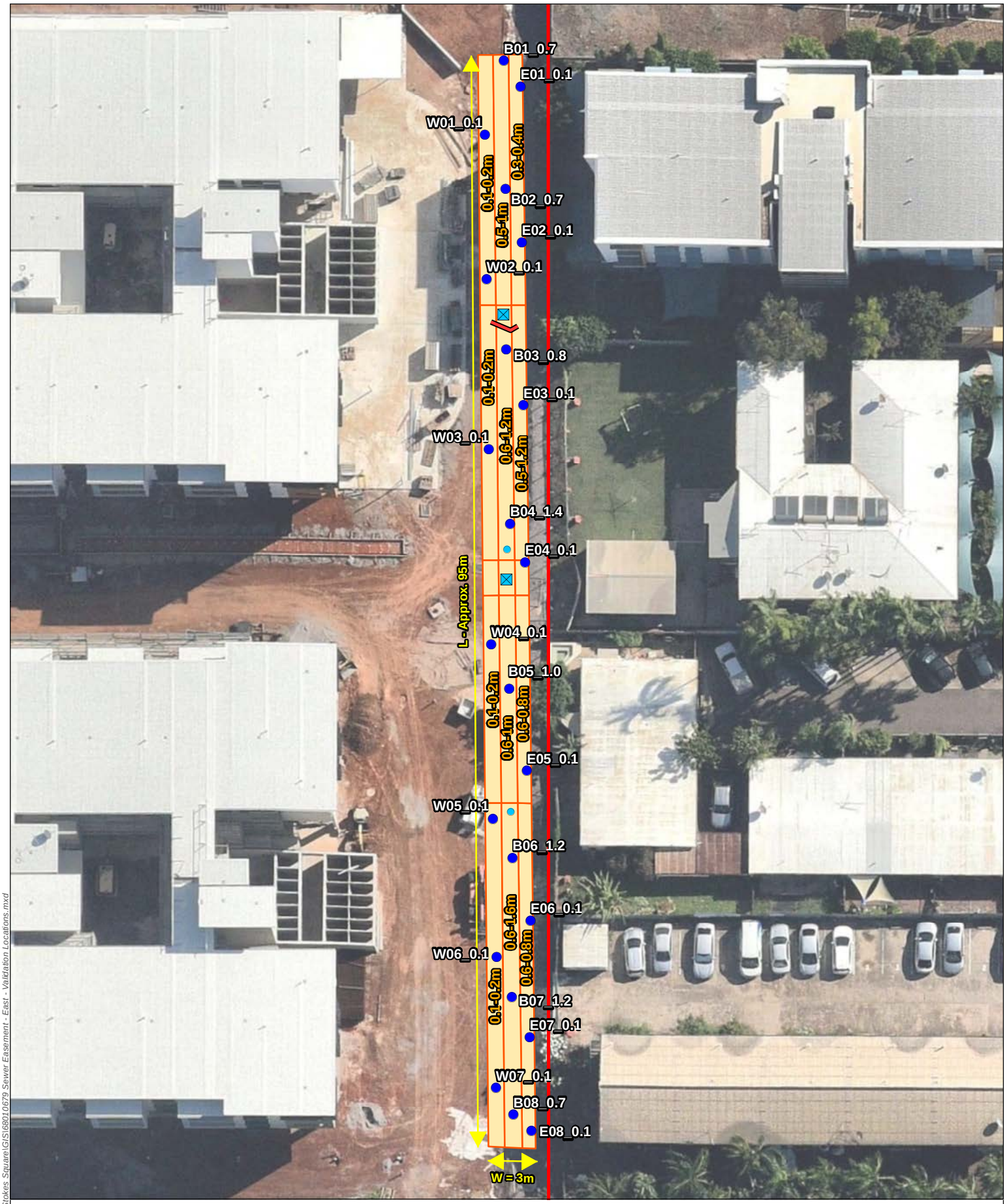
5.2	Results:	• The certified laboratory report received for the soil samples collected during this clearance is included in Appendix D.
		• A total of 23 soil samples were collected from the excavation area associated with the removal of uncontrolled fill material found within the sewer easement on Lots B2 and B3.
		• Validation samples from the external wall (eastern property boundary) and eastern bench are represented by the samples with prefix: "E". A total of 8 samples were collected along the Project Area's eastern boundary.
		• A total of 15 validation samples collected from the base of the excavation are represented by samples with the following prefix:
		  ◦ "W" which were collected from the surface of the western bench (natural soil material) – 7 samples; and
		  ◦ "B" which were collected from the backfill natural material within the sewer trench – 8 samples.
		• ACM debris were found during visual inspection of the area near sample location E-03. This area was further excavated and reinspected before collecting a soil sample E03_0.1.
		• Asbestos cement pipe was encountered at sample location E02. This area was further excavated including the removal of the AC pipe and inspected before collecting soil samples B03_0.8.

		• Asbestos was not detected in any of the soil samples collected and submitted for laboratory analysis (presence/absence, AF/FA).

6	RE-OCCUPATION
6.1	It is the opinion of SLR that the areas detailed in Section 2.3 and outlined in Appendix A of this Clearance Certificate are fit for re-occupation and for normal excavation works to proceed. The asbestos removal work area and the surrounding area have been inspected, as far as reasonably practicable, and are considered to be free of visible assumed or suspected asbestos debris, unless specified otherwise in Section 2.6. Within the scope of works executed, all asbestos impacted soil materials have been stripped from the area of excavation as per Section 2.6 of this Clearance Certificate (please note the limitations in Section 3.3). While SLR carries out the work to the best of our ability, we totally exclude any loss or damages which may arise from services provided to the Client and/or associated parties. This Clearance Certificate and/or information produced by SLR should not be reproduced and/or presented/reviewed except in full.

APPENDIX A

Approximate extent of removal work area and area visually inspected



0 5 10 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:440 at A4
Project Number:	680.10679
Date:	18-May-2022
Drawn by:	JG

- IO
- Manhole
- Validation Locations
- Asbestos Pipe
- Sewer Easement
- Project Area

JOHN STOKES SQUARE

Validation Locations

FIGURE 3

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\680.10679 Sewer Easement - East - Validation Locations.mxd

APPENDIX B

Representative Photographic log

Removal of uncontrolled fill material - 1 – 8 September 2021

Photo 01 – Photo of the sewer easement along the eastern boundary of Lot B2 and B3. Photo taken from the north eastern corner of Lot B3 looking south.

Photo 02 – photo of manhole after the removal of asbestos pipe buried at 0.5m bgs within reworked backfilled material sewer trench.

Photo 03 – Photo of a trench after the removal of ACM in the backfilled material adjacent to the vent and sewer manhole.

Photo 04 – No excavation around the sewer manhole. This area was validated by SLR during the ACM removal in residential lots.

Photo 05–View of the eastern wall adjacent to the neighboring property's spa (eastern boundary) after the removal of large sheets of ACM in the uncontrolled fill

Photo 06 – Photo of the sewer easement after the removal of uncontrolled fill mateiral from Lot B2. The photograph was taken from the south east corner of Lot B2 facing towards north.

Visual Clearance of Excavation – 1 - 8 September 2021	
Photo 07 – View of ACM debris in poor to moderate condition identified on the eastern wall at the south east corner of Lot B2 adjacent to the sewer manhole. Area covered in 690.10679.00300-R10-v1.0-CLR2.	Photo 08 –Photo of asbestos cement pipe located adjacent to the manhole at northern part of the Lot B3 (refer to Appendix A for the location of where the asbestos pipe was found).

APPENDIX C

Airborne Asbestos Monitoring Reports

SLR Consulting Australia Laboratory Services - Darwin Office
ABN:29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-7
Date of Issue: Thursday, 2 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min) On	Off	Avg	Time On	Off	Total (min)	Count Fields	Fibres	Conc'n (fibres/ml)
01/09/2021	**Blank**		0				N/A	N/A		100	0	N/A
01/09/2021	AADZ-25	Control	1	1.00	0.95	0.98	7:15	16:22	547	100	1	<0.01
01/09/2021	AADZ-26	Control	2	1.00	1.00	1.00	7:16	16:23	547	100	0	<0.01
01/09/2021	AADZ-27	Control	3	1.00	0.95	0.98	7:18	16:27	549	100	0	<0.01
01/09/2021	AADZ-28	Control	4	1.00	1.00	1.00	7:20	16:28	548	100	2	<0.01

Monitoring Locations:

0 Blank
1 Northeast boundary of Lot C / Road Reserve work area
2 Northwest boundary of Lot C / Road Reserve work area
3 Southeast boundary of Lot C / Road Reserve work area
4 Southwest boundary of Lot C / Road Reserve work area

Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.

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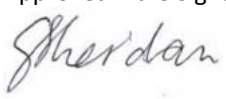
Approved Fibre Signatory: Gemma Sheridan



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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-8
Date of Issue: Monday, 6 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min) On	Off	Avg	Time On	Off	Total (min)	Count Fields	Fibres	Conc'n (fibres/ml)
02/09/2021	**Blank**		0				N/A	N/A		100	0	N/A
02/09/2021	AADZ-29	Control	1	07:33	16:54	561	1.00	1.10	1.05	100	0	<0.01
02/09/2021	AADZ-30	Control	2	07:34	16:55	561	1.00	0.90	0.95	100	1	<0.01
02/09/2021	AADZ-31	Control	3	07:36	16:57	561	1.00	1.00	1.00	100	1	<0.01
02/09/2021	AADZ-32	Control	4	07:38	16:59	561	1.00	1.00	1.00	100	2	<0.01

Monitoring Locations:

0 Blank
1 Southeast boundary of Lot B3 work area
2 Southwest boundary of Lot B3 work area
3 Northeast boundary of Lot B3 work area
4 Northwest boundary of Lot B3 work area

Notes:

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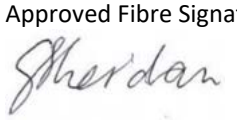

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-9
Date of Issue: Monday, 6 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min) On	Off	Avg	Time On	Off	Total (min)	Count Fields	Fibres	Conc'n (fibres/ml)
03/09/2021	**Blank**		0				N/A	N/A		100	0	N/A
03/09/2021	AADZ-33	Control	1	07:18	16:42	564	1.00	1.00	1.00	100	2	<0.01
03/09/2021	AADZ-34	Control	2	07:20	16:43	563	1.00	1.00	1.00	100	1	<0.01
03/09/2021	AADZ-35	Control	3	07:29	16:48	559	1.00	0.95	0.98	100	2	<0.01
03/09/2021	AADZ-36	Control	4	07:31	16:49	558	1.00	1.00	1.00	100	2.5	<0.01

Monitoring Locations:

0 Blank
1 Southeast boundary of Lot B3 work area
2 Southwest boundary of Lot B3 work area
3 Northeast boundary of Lot B3 work area
4 Northwest boundary of Lot B3 work area

Notes:

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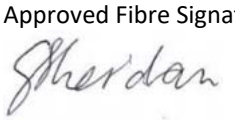
Approved Fibre Signatory: Gemma Sheridan



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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-10
Date of Issue: Tuesday, 7 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Airflow (L/min) On	Off	Avg	Time On	Off	Total (min)	Count Fields	Fibres	Conc'n (fibres/ml)
06/09/2021	**Blank**		0				N/A	N/A		100	1	N/A
06/09/2021	AADZ-37	Control	1	07:10	16:46	576	1.00	0.90	0.95	-	-	N/A (see Note 3)
06/09/2021	AADZ-38	Control	2	07:11	16:47	576	1.00	1.00	1.00	100	2	<0.01
06/09/2021	AADZ-39	Control	3	07:05	16:52	587	1.00	1.00	1.00	100	3	<0.01
06/09/2021	AADZ-40	Control	4	07:07	16:54	587	1.00	1.00	1.00	100	0.5	<0.01

Monitoring Locations:

0 Blank
1 Northwest boundary of Lot B3 work area
2 Northeast boundary of Lot B3 work area
3 Southeast boundary of Lot B3 work area
4 Southwest boundary of Lot B3 work area

Notes:

1) The results contained within this report relate only to the samples submitted for testing.
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3) Sample AADZ-37 was rejected as air sampling pump was found on the ground

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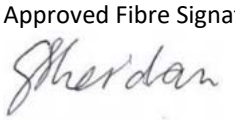

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-11
Date of Issue: Wednesday, 8 September 2021
Removal Contractor: N/A
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
07/09/2021	**Blank**		0				N/A	N/A		100	0	N/A
07/09/2021	AADZ-41	Control	1	07:20	16:49	569	1.00	1.00	1.00	100	2	<0.01
07/09/2021	AADZ-42	Control	2	07:22	16:53	571	1.00	0.95	0.98	100	1.5	<0.01
07/09/2021	AADZ-43	Control	3	07:30	16:58	568	1.00	1.10	1.05	100	0	<0.01
07/09/2021	AADZ-44	Control	4	07:31	16:59	568	1.00	1.00	1.00	100	1	<0.01

Monitoring Locations:

0 Blank
1 Northwest boundary of Lot B3 work area
2 Northeast boundary of Lot B3 work area
3 Southeast boundary of Lot B3 work area
4 Southwest boundary of Lot B3 work area

Notes:

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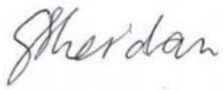
Approved Fibre Signatory: Gemma Sheridan



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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-12
Date of Issue: Thursday, 9 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
08/09/2021	**Blank**		0				N/A	N/A		100	0	N/A
08/09/2021	AADZ-45	Control	1	07:16	16:49	573	1.00	1.00	1.00	100	2	<0.01
08/09/2021	AADZ-46	Control	2	07:18	16:50	572	1.00	0.95	0.98	100	1	<0.01
08/09/2021	AADZ-47	Control	3	07:20	16:55	575	1.00	0.95	0.98	100	4	<0.01
08/09/2021	AADZ-48	Control	4	07:21	16:56	575	1.00	1.00	1.00	100	8	<0.01

Monitoring Locations:

0 Blank
1 Southeast boundary of Lot B2 work area
2 Northeast boundary of Lot B2 work area
3 Northwest boundary of Lot B2 work area
4 Southwest boundary of Lot B2 work area

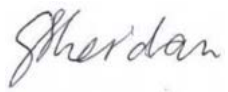
Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025-Testing. This report cannot be reproduced except in full.

Approved Fibre Counter: Flynn Mackley
Approved Fibre Signatory: Gemma Sheridan



APPENDIX D

Certified laboratory reports

Toll- MYTJ023725

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 3, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO 410, Canberra, ACT 2600
- ☐ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE, Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ GOLD COAST 194 Varsity Parade, Varsity Lakes, Q. D 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: Ground Floor, 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 5 Duncon Street Port Nelson, 7010 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting (NT)	**LABORATORY:**
PROJECT: 680.10679 John Stokes	**LABORATORY ADDRESS:**
PROJECT NUMBER: 680.30073	**SAMPLER: James Murdoch**
PROJECT MANAGER: Julie McDowell	**SAMPLER CONTACT No: 0405966440**
PM CONTACT No: +61 435 359 720	**Email Reports and Invoices to: jmcdowell@slrconsulting.com, rbirua@slrconsulting.com**

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS:

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Asbestos Soil Presentce and	Asbestos Soil FA/AF EA200	Additional Information (Comment on any gross contamination or specific requirements)
1	E-01-0.1	2/09/2021	Soil	1x 500g Asbestos bag	x		Rename to W-01-0.1
2	E-02-0.1	2/09/2021	Soil	1x 500g Asbestos bag	x		Rename to W-02-0.1
3	B-01-0.7	2/09/2021	Soil	1x 500g Asbestos bag		x	
4	B-02-0.7	2/09/2021	Soil	1x 500g Asbestos bag		x	
5	B-03-0.8	2/09/2021	Soil	1x 500g Asbestos bag		x	

Environmental Division
Newcastle
Work Order Reference
EN2107718

Telephone : +61 2 4014 2500

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	JAM	Date / Time	2/09/2021	**Received by**	Sign MM	Date / Time	03/09/21 9:30am
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

ALS Environmental

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EN2107718**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: 4/16 Charlton Ct Woolner NT 0820	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
E-mail	: jmcdowell@slrconsulting.com	E-mail	: Hannah.White@alsglobal.com
Telephone	: ----	Telephone	: +61 2 4014 2500
Facsimile	: ----	Facsimile	: +61 2 4967 7382
Project	: 680.10679 John Stokes	Page	: 1 of 2
Order number	: ----	Quote number	: ES2020HEGAUS0012 (EN/032/20 Primary Work Only)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: JAMES MURDOCH		

Dates

Date Samples Received	: 03-Sep-2021 09:30	Issue Date	: 06-Sep-2021
Client Requested Due Date	: 10-Sep-2021	Scheduled Reporting Date	: **10-Sep-2021**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: ----
Receipt Detail	:	No. of samples received / analysed	: 5 / 5

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by	SOIL - EA200N Asbestos in Soils - (<1kg samples ONLY)
EN2107718-001	02-Sep-2021 00:00	W-01-0.1		✓
EN2107718-002	02-Sep-2021 00:00	W-02-0.1		✓
EN2107718-003	02-Sep-2021 00:00	B-01-0.7	✓	
EN2107718-004	02-Sep-2021 00:00	B-02-0.7	✓	
EN2107718-005	02-Sep-2021 00:00	B-03-0.8	✓	

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

JULIE McDOWELL

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EN2107718**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: 4/16 Charlton Ct Woolner NT 0820	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 03-Sep-2021 09:30
Order number	: ----	Date Analysis Commenced	: 06-Sep-2021
C-O-C number	: ----	Issue Date	: 07-Sep-2021 12:46
Sampler	: JAMES MURDOCH		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 5		
No. of samples analysed	: 5		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	W-01-0.1	W-02-0.1	B-01-0.7	B-02-0.7	B-03-0.8
			Sampling date / time	02-Sep-2021 00:00	02-Sep-2021 00:00	02-Sep-2021 00:00	02-Sep-2021 00:00	02-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	EN2107718-001	EN2107718-002	EN2107718-003	EN2107718-004	EN2107718-005
				Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**-**	**-**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g	**805**	**625**	**730**	**689**	**658**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
ø **Asbestos Containing Material**	1332-21-4	0.1	g	<0.1	<0.1	**----**	**----**	**----**
ø **Asbestos Containing Material (as 15% Asbestos in ACM >7mm)**	1332-21-4	0.01	% (w/w)	<0.01	<0.01	**----**	**----**	**----**
ø **Weight Used for % Calculation**	----	0.0001	kg	**0.805**	**0.625**	**0.730**	**0.689**	**0.658**
ø **Fibrous Asbestos >7mm**	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	W-01-0.1 - 02-Sep-2021 00:00	Soil sample.
EA200: Description	W-02-0.1 - 02-Sep-2021 00:00	Soil sample.
EA200: Description	B-01-0.7 - 02-Sep-2021 00:00	Soil sample.
EA200: Description	B-02-0.7 - 02-Sep-2021 00:00	Soil sample.
EA200: Description	B-03-0.8 - 02-Sep-2021 00:00	Soil sample.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EN2107718**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: 4/16 Charlton Ct Woolner NT 0820	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 03-Sep-2021
Order number	: ----	Date Analysis Commenced	: 06-Sep-2021
C-O-C number	: ----	Issue Date	: 07-Sep-2021
Sampler	: JAMES MURDOCH		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 5		
No. of samples analysed	: 5		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EN2107718**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 03-Sep-2021
Site	: ----	Issue Date	: 07-Sep-2021
Sampler	: JAMES MURDOCH	No. of samples received	: 5
Order number	: ----	No. of samples analysed	: 5

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag: Separate bag received (EA200)							
W-01-0.1, W-02-0.1, B-01-0.7, B-02-0.7, B-03-0.8	**02-Sep-2021**	**----**	----	----	**06-Sep-2021**	01-Mar-2022	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag: Separate bag received (EA200N)							
W-01-0.1, W-02-0.1, B-01-0.7, B-02-0.7, B-03-0.8	**02-Sep-2021**	**----**	----	----	**06-Sep-2021**	01-Mar-2022	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).

Toll : MYTJ064108

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ CANBERRA: GPO 410, Canberra ACT 2600
- ☐ MACKAY: 3 L River Street, Mackay, QLD 4740
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: Ground Floor, 503 Murray Street, Perch, WA 6000
- ☐ NELSON: 5 Duncan Street, Port Nelson, 7010 NZ
- ☒ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting (NT)

PROJECT: 680.10679 John Stokes

PROJECT NUMBER: 680.10679

PROJECT MANAGER: Julie McDowell

PM CONTACT No: +61 435 359 720

LABORATORY:

LABORATORY ADDRESS:

SAMPLER: James Murdoch

SAMPLER CONTACT No: 0405966440

Email Reports and Invoices to: jmcdowell@slrconsulting.com, rbirua@slrconsulting.com

Turnaround Time (TAT)

- ☐ Standard TAT
- ☒ Non Standard or Urgent TAT

Required TAT: 24 hours

COC Number: 1 of

COMMENTS OR ADDITIONAL DIRECTIONS:

REQUESTED ANALYSIS

TAT

Additional Information *(Comment on any gross contamination or specific requirements)*

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Asbestos Soil Presence and	Asbestos Soil FA/AF EA200
1	B-04-0.1-.4	07-09-2021	Soil	1x 500g Asbestos bag		X
2	~~B-06-07~~	~~07-09-2021~~	~~Soil~~	~~1x 500g Asbestos bag~~		
3	B-08-0.7	07-09-2021	Soil	1x 500g Asbestos bag		X
4	~~B-[illegible]~~	~~07-09-2021~~	~~Soil~~	~~1x 500g Asbestos bag~~		
5	B07-1.2	07-09-2021	Soil	1x 500g Asbestos bag		X
6	E01-0.1	07-09-2021	Soil	1x 500g Asbestos bag	X	
7	E-02-0.1	07-09-2021	Soil	1x 500g Asbestos bag	X	
8	E-03-0.1	07-09-2021	Soil	1x 500g Asbestos bag	X	
9	E-07-0.1	07-09-2021	Soil	1x 500g Asbestos bag	X	
10	E-08-0.1	07-09-2021	Soil	1x 500g Asbestos bag	X	

Environmental Division
Newcastle
Work Order Reference
EN2107878

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	JMM	Date / Time	07-09-2021	Received by	Sign	Date / Time	11:54 am 07/09/21.
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	8/9/21 9:40
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received:

TO Newcastle

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO 410, Canberra, ACT 2600
- ✠ DARWIN: Unit 5, 21 Parap Road Parap NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: Ground Floor, 503 Murray Street, Perth, WA 6000
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 5 Duncan Street, Port Nelson, 7010 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting (NT)	**LABORATORY:**	**Turnaround Time (TAT)** / **COC Number** 1 of
PROJECT: 680.10679 John Stokes	**LABORATORY ADDRESS:**	
PROJECT NUMBER: 680.10679	**SAMPLER: James Murdoch**	☐ Standard TAT
PROJECT MANAGER: Julie McDowell	**SAMPLER CONTACT No: 0405966440**	✠ Non Standard or Urgent TAT
PM CONTACT No: +61 435 359 720	**Email Reports and Invoices to: jmcdowell@slrconsulting.com, rbirua@slrconsulting.com**	**Required TAT: 24 hours**

COMMENTS OR ADDITIONAL DIRECTIONS:

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Asbestos Soil Presentce and	Asbestos Soil FA/AF EA200	Additional Information (Comment on any gross contamination or specific requirements)
11	W-03-0.1	07-09-2021	Soil	1x 500g Asbestos bag	X		
12	W-06-0.1	07-09-2021	Soil	1x 500g Asbestos bag	X		
13	W-07-0.1	07-09-2021	Soil	1x 500g Asbestos bag	X		
14		07-09-2021	Soil	1x 500g Asbestos bag			
15		07-09-2021	Soil	1x 500g Asbestos bag			
16		07-09-2021	Soil	1x 500g Asbestos bag			
17		07-09-2021	Soil	1x 500g Asbestos bag			
18		07-09-2021	Soil	1x 500g Asbestos bag			
19		07-09-2021	Soil	1x 500g Asbestos bag			
20		07-09-2021	Soil	1x 500g Asbestos bag			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	JAM	Date / Time 07-09-2021	**Received by**	Sign	Date / Time	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SLR Consulting Australia Pty Ltd

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EN2107878**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
E-mail	: jmcdowell@slrconsulting.com	E-mail	: Hannah.White@alsglobal.com
Telephone	: ----	Telephone	: +61 2 4014 2500
Facsimile	: ----	Facsimile	: +61 2 4967 7382
Project	: 680.10679 John Stokes	Page	: 1 of 2
Order number	: ----	Quote number	: ES2020HEGAUS0012 (EN/032/20 Primary Work Only)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: JAMES MURDOCH		

Dates

Date Samples Received	: 08-Sep-2021 09:40	Issue Date	: 08-Sep-2021
Client Requested Due Date	: 09-Sep-2021	Scheduled Reporting Date	: **09-Sep-2021**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: ----
Receipt Detail	:	No. of samples received / analysed	: 11 / 11

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA200 Asbestos Identification in Soils -	SOIL - EA200N Asbestos in Soils - (<1kg samples ONLY)
EN2107878-001	08-Sep-2021 00:00	B-04-1.4		✓
EN2107878-002	08-Sep-2021 00:00	B-08-0.7		✓
EN2107878-003	08-Sep-2021 00:00	B-07-1.2		✓
EN2107878-004	08-Sep-2021 00:00	E-0.1-0.1	✓	
EN2107878-005	08-Sep-2021 00:00	E-02-0.1	✓	
EN2107878-006	08-Sep-2021 00:00	E-03-0.1	✓	
EN2107878-007	08-Sep-2021 00:00	E-07-0.1	✓	
EN2107878-008	08-Sep-2021 00:00	E-08-0.1	✓	
EN2107878-009	08-Sep-2021 00:00	W-03-0.1	✓	
EN2107878-010	08-Sep-2021 00:00	W-06-0.1	✓	
EN2107878-011	08-Sep-2021 00:00	W-07-0.1	✓	

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

JULIE McDOWELL

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EN2107878**	Page	: 1 of 5
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 08-Sep-2021 09:40
Order number	: ----	Date Analysis Commenced	: 08-Sep-2021
C-O-C number	: ----	Issue Date	: 09-Sep-2021 13:11
Sampler	: JAMES MURDOCH		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 11		
No. of samples analysed	: 11		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	B-04-1.4	B-08-0.7	B-07-1.2	E-0.1-0.1	E-02-0.1
			Sampling date / time	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	EN2107878-001	EN2107878-002	EN2107878-003	EN2107878-004	EN2107878-005
				Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**-**	**-**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g	**600**	**686**	**710**	**753**	**723**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
APPROVED IDENTIFIER:	----	-	--	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	<0.0004	<0.0004	<0.0004	----	----
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	<0.001	<0.001	<0.001	----	----
ø **Asbestos Containing Material**	1332-21-4	0.1	g	<0.1	<0.1	<0.1	----	----
ø **Asbestos Containing Material (as 15% Asbestos in ACM >7mm)**	1332-21-4	0.01	% (w/w)	<0.01	<0.01	<0.01	----	----
ø **Weight Used for % Calculation**	----	0.0001	kg	**0.600**	**0.686**	**0.710**	----	----
ø **Fibrous Asbestos >7mm**	----	0.0004	g	<0.0004	<0.0004	<0.0004	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	E-03-0.1	E-07-0.1	E-08-0.1	W-03-0.1	W-06-0.1
				Sampling date / time	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00
					EN2107878-006	EN2107878-007	EN2107878-008	EN2107878-009	EN2107878-010
					Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--		**-**	**-**	**-**	**-**	**-**
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g		**716**	**736**	**688**	**686**	**720**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
APPROVED IDENTIFIER:	----	-	--		**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	W-07-0.1	----	----	----	----
				Sampling date / time	08-Sep-2021 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		EN2107878-011	--------	--------	--------	--------
					Result	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	----	----	----	----
Asbestos Type	1332-21-4	-	--		**-**	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	----	----	----	----
Sample weight (dry)	----	0.01	g		**813**	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	----	----	----	----
Organic Fibre	----	0.1	g/kg		**No**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--		**B.SCHRADER**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	E-0.1-0.1 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	E-02-0.1 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	E-03-0.1 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	E-07-0.1 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	E-08-0.1 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	W-03-0.1 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	W-06-0.1 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	W-07-0.1 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	B-04-1.4 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	B-08-0.7 - 08-Sep-2021 00:00	A soil sample.
EA200: Description	B-07-1.2 - 08-Sep-2021 00:00	A soil sample.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EN2107878**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 08-Sep-2021
Order number	: ----	Date Analysis Commenced	: 08-Sep-2021
C-O-C number	: ----	Issue Date	: 09-Sep-2021
Sampler	: JAMES MURDOCH		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 11		
No. of samples analysed	: 11		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EN2107878**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 08-Sep-2021
Site	: ----	Issue Date	: 09-Sep-2021
Sampler	: JAMES MURDOCH	No. of samples received	: 11
Order number	: ----	No. of samples analysed	: 11

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
B-04-1.4, B-08-0.7, B-07-1.2, E-0.1-0.1, E-02-0.1, E-03-0.1, E-07-0.1, E-08-0.1, W-03-0.1, W-06-0.1, W-07-0.1	**08-Sep-2021**	**----**	----	----	**08-Sep-2021**	07-Mar-2022	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200N)							
B-04-1.4, B-08-0.7, B-07-1.2	**08-Sep-2021**	**----**	----	----	**08-Sep-2021**	07-Mar-2022	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).

Toll : MYTJ076437

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill QLD 4000
- ☐ CANBERRA: GPO 410, Canberra, ACT 2600
- ✠ DARWIN: Unit 5, 21 Parap Road, Parap NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: Ground Floor, 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 5 Duncan Street, Port Nelson, 7010 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: SLR Consulting (NT)	**LABORATORY:**	**Turnaround Time (TAT)**	**COC Number** 1 of 1
PROJECT: 680.10679 John Stokes	**LABORATORY ADDRESS:**		
PROJECT NUMBER: 680.30073	**SAMPLER: James Murdoch**	☐ Standard TAT	
PROJECT MANAGER: Julie McDowell	**SAMPLER CONTACT No: 0405966440**	✠ Non Standard or Urgent TAT	
PM CONTACT No: +61 435 359 720	**Email Reports and Invoices to: jmcdowell@slrconsulting.com, rbirua@slrconsulting.com**	**Required TAT: 24 Hour**	

COMMENTS OR ADDITIONAL DIRECTIONS:

REQUESTED ANALYSIS

TAT

Additional Information

(Comment on any gross contamination or specific requirements)

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Asbestos Soil Presence and Absence (EA200)	Asbestos Soil FA/AF EA200
1	E-04	8/09/2021	Soil	1x 500g Asbestos bag	x	
2	E-05	8/09/2021	Soil	1x 500g Asbestos bag	x	
3	E-06	8/09/2021	Soil	1x 500g Asbestos bag	x	
4	B-05-1.0	8/09/2021	Soil	1x 500g Asbestos bag		x
5	B-06-1.2	8/09/2021	Soil	1x 500g Asbestos bag		x
6	W-04	8/09/2021	Soil	1x 500g Asbestos bag	x	
7	W-05	8/09/2021	Soil	1x 500g Asbestos bag	x	

Environmental Division
Newcastle
Work Order Reference
EN2107911

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	JAM	Date / Time	8/09/2021	**Received by**	Sign	Date / Time	9/9/21 9:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

ALS Environmental

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EN2107911**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: 4/16 Charlton Ct Woolner NT 0820	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
E-mail	: jmcdowell@slrconsulting.com	E-mail	: Hannah.White@alsglobal.com
Telephone	: ----	Telephone	: +61 2 4014 2500
Facsimile	: ----	Facsimile	: +61 2 4967 7382
Project	: 680.10679 John Stokes	Page	: 1 of 2
Order number	: 680.30073	Quote number	: ES2020HEGAUS0012 (EN/032/20 Primary Work Only)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: JAMES MURDOCH		

Dates

Date Samples Received	: 09-Sep-2021 09:30	Issue Date	: 09-Sep-2021
Client Requested Due Date	: 10-Sep-2021	Scheduled Reporting Date	: **10-Sep-2021**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: ----
Receipt Detail	:	No. of samples received / analysed	: 7 / 7

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA200 Asbestos Identification in Soils -	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by
EN2107911-001	08-Sep-2021 00:00	E-04	✓	
EN2107911-002	08-Sep-2021 00:00	E-05	✓	
EN2107911-003	08-Sep-2021 00:00	E-06	✓	
EN2107911-004	08-Sep-2021 00:00	B-05-1.0		✓
EN2107911-005	08-Sep-2021 00:00	B-06-1.2		✓
EN2107911-006	08-Sep-2021 00:00	W-04	✓	
EN2107911-007	08-Sep-2021 00:00	W-05	✓	

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

JULIE McDOWELL

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com

ROBIN BIRUA

- *AU Certificate of Analysis - NATA (COA)	Email	rbirua@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	rbirua@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	rbirua@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	rbirua@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	rbirua@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	rbirua@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	rbirua@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	rbirua@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EN2107911**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: 4/16 Charlton Ct Woolner NT 0820	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 09-Sep-2021 09:30
Order number	: 680.30073	Date Analysis Commenced	: 09-Sep-2021
C-O-C number	: ----	Issue Date	: 10-Sep-2021 14:43
Sampler	: JAMES MURDOCH		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	E-04	E-05	E-06	B-05-1.0	B-06-1.2
				Sampling date / time	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00	08-Sep-2021 00:00
Compound	CAS Number	LOR	Unit		EN2107911-001	EN2107911-002	EN2107911-003	EN2107911-004	EN2107911-005
					Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--		**-**	**-**	**-**	**-**	**-**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g		**601**	**680**	**667**	**611**	**650**
APPROVED IDENTIFIER:	----	-	--		**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**
EA200N: Asbestos Quantification (non-NATA)									
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g		**----**	**----**	**----**	<0.0004	<0.0004
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)		**----**	**----**	**----**	<0.001	<0.001
ø **Weight Used for % Calculation**	----	0.0001	kg		**----**	**----**	**----**	**0.611**	**0.650**
ø **Fibrous Asbestos >7mm**	----	0.0004	g		**----**	**----**	**----**	<0.0004	<0.0004

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	W-04	W-05	----	----	----
			Sampling date / time	08-Sep-2021 00:00	08-Sep-2021 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EN2107911-006	EN2107911-007	--------	--------	--------
				Result	Result	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	----	----	----
Asbestos Type	1332-21-4	-	--	**-**	**-**	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	----	----	----
Organic Fibre	----	0.1	g/kg	**No**	**No**	----	----	----
Sample weight (dry)	----	0.01	g	**596**	**662**	----	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	E-04 - 08-Sep-2021 00:00	Soil sample.
EA200: Description	E-05 - 08-Sep-2021 00:00	Soil sample.
EA200: Description	E-06 - 08-Sep-2021 00:00	Soil sample.
EA200: Description	W-04 - 08-Sep-2021 00:00	Soil sample.
EA200: Description	W-05 - 08-Sep-2021 00:00	Soil sample.
EA200: Description	B-05-1.0 - 08-Sep-2021 00:00	Soil sample.
EA200: Description	B-06-1.2 - 08-Sep-2021 00:00	Soil sample.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EN2107911**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: 4/16 Charlton Ct Woolner NT 0820	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 09-Sep-2021
Order number	: 680.30073	Date Analysis Commenced	: 09-Sep-2021
C-O-C number	: ----	Issue Date	: 10-Sep-2021
Sampler	: JAMES MURDOCH		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EN2107911**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Telephone	: +61 2 4014 2500
Project	: 680.10679 John Stokes	Date Samples Received	: 09-Sep-2021
Site	: ----	Issue Date	: 10-Sep-2021
Sampler	: JAMES MURDOCH	No. of samples received	: 7
Order number	: 680.30073	No. of samples analysed	: 7

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag: Separate bag received (EA200)							
E-04, E-05, E-06, B-05-1.0, B-06-1.2, W-04, W-05	**08-Sep-2021**	**----**	----	----	**09-Sep-2021**	07-Mar-2022	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag: Separate bag received (EA200N)							
B-05-1.0, B-06-1.2	**08-Sep-2021**	**----**	----	----	**09-Sep-2021**	07-Mar-2022	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).

APPENDIX E

Shoal Bay Waste Management Facility Waste Disposal Dockets

G 5 H

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80165945-SB
Voucher No:

Time In: 1/09/2021 11:31:56 AM
Time Out: 1/09/2021 11:48:17 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2153
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		20.36t
TARE Weight:		12.26t
NET Weight:		8.10t
Chargeable Weight:		8.10t
Council Fee:		$3,070.64
EPA Levy:		$0.00
GST :		$307.06
Temporary Acc:		$0.00
Total Price:		$3,377.70

Payments:
ACCOUNT $3,377.70
Total Amount Tendered: $3,377.70
Change Given: $0.00

Driver:

Operator: Dave Yates

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166036-SB
Voucher No:

Time In: 1/09/2021 2:03:48 PM
Time Out: 1/09/2021 2:20:03 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		19.36t
TARE Weight:		11.82t
NET Weight:		7.54t
Chargeable Weight:		7.54t
Council Fee:		$2,858.35
EPA Levy:		$0.00
GST :		$285.83
Temporary Acc:		$0.00
Total Price:		$3,144.18

Payments:
ACCOUNT $3,144.18
Total Amount Tendered: $3,144.18
Change Given: $0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80165947-SB
Voucher No:

Time In: 1/09/2021 11:34:05 AM
Time Out: 1/09/2021 11:50:20 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		21.18t
TARE Weight:		11.82t
NET Weight:		9.36t
Chargeable Weight:		9.36t
Council Fee:		$3,548.29
EPA Levy:		$0.00
GST :		$354.83
Temporary Acc:		$0.00
Total Price:		$3,903.12

Payments:
ACCOUNT $3,903.12
Total Amount Tendered: $3,903.12
Change Given: $0.00

Driver:

Operator: Dave Yates

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80165987-SB
Voucher No:

Time In: 1/09/2021 12:35:23 PM
Time Out: 1/09/2021 12:46:01 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		21.10t
TARE Weight:		11.70t
NET Weight:		9.40t
Chargeable Weight:		9.40t
Council Fee:		$3,563.45
EPA Levy:		$0.00
GST :		$356.35
Temporary Acc:		$0.00
Total Price:		$3,919.80

Payments:
ACCOUNT $3,919.80
Total Amount Tendered: $3,919.80
Change Given: $0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166022-SB
Voucher No:

Time In: 1/09/2021 1:43:17 PM
Time Out: 1/09/2021 1:57:27 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	19.36t
TARE Weight:	12.28t
NET Weight:	7.08t
Chargeable Weight:	7.08t
Council Fee:	$2,683.96
EPA Levy:	$0.00
GST :	$268.40
Temporary Acc:	$0.00
Total Price:	$2,952.36

Payments:	
ACCOUNT	$2,952.36
Total Amount Tendered:	$2,952.36
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80165985-SB
Voucher No:

Time In: 1/09/2021 12:29:34 PM
Time Out: 1/09/2021 12:41:56 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	20.38t
TARE Weight:	12.24t
NET Weight:	8.14t
Chargeable Weight:	8.14t
Council Fee:	$3,085.80
EPA Levy:	$0.00
GST :	$308.58
Temporary Acc:	$0.00
Total Price:	$3,394.38

Payments:	
ACCOUNT	$3,394.38
Total Amount Tendered:	$3,394.38
Change Given:	$0.00

Driver:

Operator: Dennis

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John Stokes

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11503313301

80166177-SB

2/09/2021 9:50:43 AM
2/09/2021 10:04:27 AM

CD36BZ

HERN TRADE SOLUTIONS PT
12-A2151

F: Cell Stage 2 (Inert)

e Price
$379.09
Qty Price

22.58t
11.74t
10.84t

eight: 10.84t
$4,109.35
$0.00
$410.93
c: $0.00

$4,520.28

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166216-SB
Voucher No:

Time In: 2/09/2021 11:06:35 AM
Time Out: 2/09/2021 11:22:37 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		21.76t
TARE Weight:		11.84t
NET Weight:		9.92t
Chargeable Weight:		9.92t
Council Fee:		$3,760.58
EPA Levy:		$0.00
GST :		$376.06
Temporary Acc:		$0.00
Total Price:		$4,136.64

GST

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166146-SB
Voucher No:

Time In: 2/09/2021 8:49:36 AM
Time Out: 2/09/2021 9:05:17 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		23.78t
TARE Weight:		12.36t
NET Weight:		11.42t
Chargeable Weight:		11.42t
Council Fee:		$4,329.22
EPA Levy:		$0.00
GST :		$432.92
Temporary Acc:		$0.00
Total Price:		$4,762.14

John Stokes

3

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166254-SB
Voucher No:

Time In: 2/09/2021 12:12:15 PM
Time Out: 2/09/2021 12:27:01 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price
GROSS Weight:		22.74t
TARE Weight:		12.32t
NET Weight:		10.42t
Chargeable Weight:		10.42t
Council Fee:		$3,950.13
EPA Levy:		$0.00
GST :		$395.01
Temporary Acc:		$0.00
Total Price:		$4,345.14

Payments:

John Stokes

(3)

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166254-SB
Voucher No:

Time In: 2/09/2021 12:12:15 PM
Time Out: 2/09/2021 12:27:01 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.74t
TARE Weight:	12.32t
NET Weight:	10.42t
Chargeable Weight:	10.42t
Council Fee:	$3,950.13
EPA Levy:	$0.00
GST :	$395.01
Temporary Acc:	$0.00
Total Price:	$4,345.14

Payments:	
ACCOUNT	$4,345.14
Total Amount Tendered:	$4,345.14
Change Given:	$0.00

Driver:

Operator: Sam

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166146-SB
Voucher No:

Time In: 2/09/2021 8:49:36 AM
Time Out: 2/09/2021 9:05:17 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.78t
TARE Weight:	12.36t
NET Weight:	11.42t
Chargeable Weight:	11.42t
Council Fee:	$4,329.22
EPA Levy:	$0.00
GST :	$432.92
Temporary Acc:	$0.00
Total Price:	$4,762.14

Payments:	
ACCOUNT	$4,762.14
Total Amount Tendered:	$4,762.14
Change Given:	$0.00

Driver:

Operator: Dennis

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(2) John Stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166216-SB
Voucher No:

Time In: 2/09/2021 11:06:35 AM
Time Out: 2/09/2021 11:22:37 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	21.76t
TARE Weight:	11.84t
NET Weight:	9.92t
Chargeable Weight:	9.92t
Council Fee:	$3,760.58
EPA Levy:	$0.00
GST :	$376.06
Temporary Acc:	$0.00
Total Price:	$4,136.64

Payments:	
ACCOUNT	$4,136.64
Total Amount Tendered:	$4,136.64
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166180-SB
Voucher No:

Time In: 2/09/2021 9:57:04 AM
Time Out: 2/09/2021 10:10:24 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		
ASBESTOS		Price
Each Items	Qty	$379.09 Price

GROSS Weight:	19.52t
TARE Weight:	12.30t
NET Weight:	7.22t
Chargeable Weight:	7.22t
Council Fee:	$2,737.04
EPA Levy:	$0.00
GST :	$273.70
Temporary Acc:	$0.00
Total Price:	$3,010.74

Payments:	
ACCOUNT	$3,010.74
Total Amount Tendered:	$3,010.74
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166259-SB
Voucher No:

Time In: 2/09/2021 12:21:42 PM
Time Out: 2/09/2021 12:34:16 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 16-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		
ASBESTOS		Price
Each Items	Qty	$379.09 Price

GROSS Weight:	22.90t
TARE Weight:	12.32t
NET Weight:	10.58t
Chargeable Weight:	10.58t
Council Fee:	$4,010.78
EPA Levy:	$0.00
GST :	$401.08
Temporary Acc:	$0.00
Total Price:	$4,411.86

Payments:	
ACCOUNT	$4,411.86
Total Amount Tendered:	$4,411.86
Change Given:	$0.00

Driver:

Operator: Sam

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D. John Stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166177-SB
Voucher No:

Time In: 2/09/2021 9:50:43 AM
Time Out: 2/09/2021 10:04:27 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.58t
TARE Weight:	11.74t
NET Weight:	10.84t
Chargeable Weight:	10.84t
Council Fee:	$4,109.35
EPA Levy:	$0.00
GST :	$410.93
Temporary Acc:	$0.00
Total Price:	$4,520.28

Payments:	
ACCOUNT	$4,520.28
Total Amount Tendered:	$4,520.28
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166259-SB
voucher No:

Time In: 2/09/2021 12:21:42 PM
Time Out: 2/09/2021 12:34:16 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 16-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.90t
TARE Weight:	12.32t
NET Weight:	10.58t
Chargeable Weight:	10.58t
Council Fee:	$4,010.78
EPA Levy:	$0.00
GST :	$401.08
Temporary Acc:	$0.00
Total Price:	$4,411.86

Payments:	
ACCOUNT	$4,411.86
Total Amount Tendered:	$4,411.86
Change Given:	$0.00

Driver:

Operator: Sam

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G SH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166180-SB
Voucher No:

Time In: 2/09/2021 9:57:04 AM
Time Out: 2/09/2021 10:10:24 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	19.52t
TARE Weight:	12.30t
NET Weight:	7.22t
Chargeable Weight:	7.22t
Council Fee:	$2,737.04
EPA Levy:	$0.00
GST :	$273.70
Temporary Acc:	$0.00
Total Price:	$3,010.74

Payments:	
ACCOUNT	$3,010.74
Total Amount Tendered:	$3,010.74
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN:	11503313301
Ticket No:	80167043-SB
Voucher No:	
Time In:	6/09/2021 1:40:36 PM
Time Out:	6/09/2021 1:57:45 PM
Vehicle Rego:	CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.96t
TARE Weight:	12.30t
NET Weight:	14.66t
Chargeable Weight:	14.66t
Council Fee:	$5,557.47
EPA Levy:	$0.00
GST :	$555.75
Temporary Acc:	$0.00
Total Price:	$6,113.22

Payments:	
ACCOUNT	$6,113.22
Total Amount Tendered:	$6,113.22
Change Given:	$0.00

Driver:

Operator: Michael

$801859230œ

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN:	11503313301
Ticket No:	80166986-SB
Voucher No:	
Time In:	6/09/2021 12:15:03 PM
Time Out:	6/09/2021 12:33:14 PM
Vehicle Rego:	CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.04t
TARE Weight:	12.20t
NET Weight:	10.84t
Chargeable Weight:	10.84t
Council Fee:	$4,109.35
EPA Levy:	$0.00
GST :	$410.93
Temporary Acc:	$0.00
Total Price:	$4,520.28

Payments:	
ACCOUNT	$4,520.28
Total Amount Tendered:	$4,520.28
Change Given:	$0.00

Driver:

Operator: Michael

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GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN:	11503313301
Ticket No:	80166862-SB
Voucher No:	
Time In:	6/09/2021 8:58:37 AM
Time Out:	6/09/2021 9:15:11 AM
Vehicle Rego:	CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.74t
TARE Weight:	12.30t
NET Weight:	11.44t
Chargeable Weight:	11.44t
Council Fee:	$4,336.80
EPA Levy:	$0.00
GST :	$433.68
Temporary Acc:	$0.00
Total Price:	$4,770.48

Payments:	
ACCOUNT	$4,770.48
Total Amount Tendered:	$4,770.48
Change Given:	$0.00

Driver:

Operator: Dennis

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GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN:	11503313301
Ticket No:	80166893-SB
Voucher No:	
Time In:	6/09/2021 10:00:07 AM
Time Out:	6/09/2021 10:14:52 AM
Vehicle Rego:	CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.08t
TARE Weight:	12.32t
NET Weight:	11.76t
Chargeable Weight:	11.76t
Council Fee:	$4,458.11
EPA Levy:	$0.00
GST :	$445.81
Temporary Acc:	$0.00
Total Price:	$4,903.92

Payments:	
ACCOUNT	$4,903.92
Total Amount Tendered:	$4,903.92
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN:	11503313301
Ticket No:	80166940-SB
Voucher No:	
Time In:	6/09/2021 11:08:57 AM
Time Out:	6/09/2021 11:23:24 AM
Vehicle Rego:	CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.04t
TARE Weight:	12.26t
NET Weight:	12.78t
Chargeable Weight:	12.78t
Council Fee:	$4,844.78
EPA Levy:	$0.00
GST :	$484.48
Temporary Acc:	$0.00
Total Price:	$5,329.26

Payments:	
ACCOUNT	$5,329.26
Total Amount Tendered:	$5,329.26
Change Given:	$0.00

Driver:

Operator: Dennis

$80185816;œ

PR842

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80167077-SB
Voucher No:

Time In: 6/09/2021 2:25:27 PM
Time Out: 6/09/2021 2:38:39 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.96t
TARE Weight:	11.82t
NET Weight:	11.14t
Chargeable Weight:	11.14t
Council Fee:	$4,223.07
EPA Levy:	$0.00
GST :	$422.31
Temporary Acc:	$0.00
Total Price:	$4,645.38

Payments:	
ACCOUNT	$4,645.38
Total Amount Tendered:	$4,645.38
Change Given:	$0.00

Driver:

Operator: Michael

$80185960Ø

PR842

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166864-SB
Voucher No.

Time In: 6/09/2021 9:00:20 AM
Time Out: 6/09/2021 9:17:34 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	22.96t
TARE Weight:	11.90t
NET Weight:	11.06t
Chargeable Weight:	11.06t
Council Fee:	$4,192.75
EPA Levy:	$0.00
GST :	$419.27
Temporary Acc:	$0.00
Total Price:	$4,612.02

Payments:	
ACCOUNT	$4,612.02
Total Amount Tendered:	$4,612.02
Change Given:	$0.00

Driver:

Operator: Dennis

$80185732ØØ

PR842

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80167003-SB
Voucher No:

Time In: 6/09/2021 12:38:27 PM
Time Out: 6/09/2021 12:51:01 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 16-A2153
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.84t
TARE Weight:	11.78t
NET Weight:	13.06t
Chargeable Weight:	13.06t
Council Fee:	$4,950.93
EPA Levy:	$0.00
GST :	$495.09
Temporary Acc:	$0.00
Total Price:	$5,446.02

Payments:	
ACCOUNT	$5,446.02
Total Amount Tendered:	$5,446.02
Change Given:	$0.00

Driver:

Operator: Michael

$80185882LØ

PR842

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166905-SB
Voucher No:

Time In: 6/09/2021 10:14:32 AM
Time Out: 6/09/2021 10:29:53 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	23.16t
TARE Weight:	11.78t
NET Weight:	11.38t
Chargeable Weight:	11.38t
Council Fee:	$4,314.05
EPA Levy:	$0.00
GST :	$431.41
Temporary Acc:	$0.00
Total Price:	$4,745.46

Payments:	
ACCOUNT	$4,745.46
Total Amount Tendered:	$4,745.46
Change Given:	$0.00

Driver:

Operator: Dennis

$80185776_Ø

PR842

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80166951-SB
Voucher No:

Time In: 6/09/2021 11:26:38 AM
Time Out: 6/09/2021 11:41:41 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.98t
TARE Weight:	11.82t
NET Weight:	13.16t
Chargeable Weight:	13.16t
Council Fee:	$4,988.84
EPA Levy:	$0.00
GST :	$498.88
Temporary Acc:	$0.00
Total Price:	$5,487.72

Payments:	
ACCOUNT	$5,487.72
Total Amount Tendered:	$5,487.72
Change Given:	$0.00

Driver:

Operator: Dennis

$80185829ZØ

ASIA PACIFIC OFFICES

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Spring Hill QLD 4000
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Canberra ACT 2600
Australia
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F: +61 2 9427 8200

DARWIN
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Parap NT 0820
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Perth WA 6000
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Sub Base Platypus
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WOLLONGONG
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UoW Innovation Campus
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Auckland 1010
New Zealand
T: 0800 757 695

NELSON
6/A Cambridge Street
Richmond, Nelson 7020
New Zealand
T: +64 274 898 628

ASBESTOS CLEARANCE CERTIFICATE

Job Number:	680.10679.00200	Document Ref:	680.10679.00200-R10-v1.0-CLR-20210918.docx
Date of Issue:	18 September 2021	Signatures:	
Clearance Inspection Undertaken By and Competency:	Robin Birua Environmental Scientist		

1	CLIENT DETAILS	
1.1	Client Name:	HK Solutions Pty Ltd on behalf of Department of Infrastructure, Planning and Logistics.
1.2	Client Contact Name:	Tony Hopkinson
1.3	Client Address:	Building 2, Level 1 631 Stuart Highway Berrimah NT 0828
1.4	Client Telephone Number:	0410 824 575

2	ASBESTOS REMOVAL DETAILS			
2.1	Date of Clearance Inspections:	14 September 2021	Time of Clearance Inspections:	1600 (14 September 2021)
2.2	Site Address:	47 Progress Drive, Nightcliff, Darwin, Northern Territory (the Project Area)		
2.3	Asbestos Removal Location:	• Uncontrolled fill material that has historically contained debris of asbestos containing material (ACM) was present in the sewer easement located on the southern and eastern boundaries of the Project Area. • SLR were engaged to oversee the removal of this uncontrolled fill material within the sewer easement, down to either natural soils or in the area where the existing sewer trench is located - backfill material (i.e. mostly reworked natural soils). • The removal of uncontrolled fill material within the sewer easement has been undertaken in three phases. This clearance report has been prepared with respect to the third phase of the proposed work, which includes the removal of uncontrolled fill from the sewer easement located at the southern boundary within the new allotment referred to Lot B2. • The extent of the excavation that this Clearance Certificate applies to is shown in Appendix A. • The removal of the uncontrolled fill material containing ACM debris was undertaken by a Class A licensed asbestos removalist, Northern Trade Solutions (NTS) under asbestos conditions. Removal works commenced on 9 September and was completed on 14 September 2021 for Phase 3 of the proposed works. • The material excavated was placed directly into skip bins for appropriate offsite disposal to a licensed waste management facility (Shoal Bay Waste Management Facility) (SBWMF)). Disposal dockets have been included in Appendix E.		

2	ASBESTOS REMOVAL DETAILS	
		• On 14 September 2021, once the uncontrolled fill material had been removed, SLR visually inspected the surfaces of the excavation for evidence of ACM debris and collected validation soil samples from the walls and base. • Appendix A shows the locations of the validation samples collected. • Samples were submitted to a NATA accredited laboratory for analysis (ALS Pty Ltd).
2.4	Asbestos Removal Contractor Company & Licence Number:	Northern Trade Solutions (NTS) EPL 225
2.5	Asbestos Removal Contractor Supervisor & Licence Number:	Tony Karambetis CPCCDE3015A
2.6	Details of Asbestos Removal Activities and Areas Inspected:	Uncontrolled Fill Material Oversight (9 – 14 September 2021): • The removal of uncontrolled fill material, including asbestos debris, was conducted on between 9 and 14 September 2021 and were excavated in accordance with the NT WorkSafe "Code of Practice How to Safely Remove Asbestos 2011". • Depth of the resultant excavation ranged from 0.1 m to 1.2 m below ground surface. The deeper excavation depths were within the existing sewer trench. • The uncontrolled fill was characterised by dark grey coloured sandy silt and included some organic matter and vegetation. The uncontrolled fill was excavated down to the red natural soil material or in the instance of the existing sewer trench, excavated down to backfill material typically consisting of reworked natural soils. • ACM debris was found at various depths ranging from 0.1 to 0.3 m in the uncontrolled fill material. ACM debris (broken asbestos pipe) was also found in the backfill material at depths ranging from 0.4 to 0.8 m. • The ACM debris found in the uncontrolled fill was in poor to moderate condition and were primarily fragments of asbestos sheeting. • The ACM debris found within the backfilled natural soil was primarily fragments of an asbestos cement pipe and appeared to be buried during the existing sewer pipe installation. This debris appeared to be in relatively bonded condition (i.e. good condition). • ACM debris was also noted in the uncontrolled fill material on the eastern boundary between the site and adjacent residential properties. ACM debris was removed as far as practicable, but its presence was noted to extend into the adjacent residential property. • From west to east, the extent of the final area excavated was approximately 3.0 m wide by and approximately 43.4 m long and then reduced to approximately 2.0m wide for approximately 17 m (approximately) before expanding back out to 3.0m for the remaining section towards the eastern boundary. • To minimising dust generation, the area to be excavated was wetted down prior to commencing excavation works. This included ripping the ground surface to facilitate water penetration into the deeper soil profile. • Asbestos debris encountered and surrounding fill material were loaded directly into lined skip bins and removed by a licensed "Class A" asbestos removalist (NTS) for appropriate offsite disposal to the SBWMF.

2	ASBESTOS REMOVAL DETAILS	
		• During the excavation and skip bin loading, the spoil was sprayed continuously with water to control dust generation and to stop potential release of asbestos fibres. • As part of these works, approximately 140 m^3 of asbestos impacted uncontrolled fill material including asbestos debris were removed from the site for appropriate offsite disposal. • One excavator was used solely for the excavation of ACM debris and potentially asbestos impacted soil between 9 and 14 September 2021. This excavator was then decontaminated prior to demobilise from the site. • Following the completion of the excavations works, the resultant excavation's surfaces (bases and walls) were visually inspected by a suitably qualified environmental consultant for the presence of asbestos debris by systematically walking over the area. • Validation soil samples were collected from resultant benches and base of the resultant excavation on 14 September 2021. Validation samples were then submitted to a National Association of Testing Authorities (NATA) accredited laboratory for asbestos analyses. Validation soil samples from the shallower benches were collected and submitted for presence/absence asbestos analyses. Samples collected from the backfill material within the existing sewer trench were also analysed for asbestos fines/fibrous asbestos (AF/FA) analyses. • A sample was also collected from the uncontrolled fill layer on the eastern wall of the excavation and analysed for presence/absence asbestos analysis.

3	CLEARANCE INSPECTIONS – VISUAL	
3.1	Method:	• Visual inspections of the excavated areas created due to the removal of asbestos debris and impacted soils at the site were undertaken by a suitably qualified environmental consultant from SLR. • The base and walls of the excavation were visually inspected for ACM debris and representative soil samples were also collected from the excavation's surfaces (i.e. walls and base). • Asbestos material encountered during the removal of fill material were removed in accordance with the Code of Practice How to Safely Remove Asbestos 2011. Refer to Appendix A for details of the area where visual clearance for asbestos related impact have been undertaken at the site.
3.2	Visual Summary:	It is the opinion of Robin Birua of SLR that the excavated area associated with the removal of ACM and potentially asbestos impacted soil as detailed in Section 2.6 of this Clearance Certificate, have been visually inspected, as far as reasonably practicable and are free from visible ACM in the fill layer, unless specified otherwise in Section 2.6 (i.e. ACM debris noted in the eastern property boundary wall). Representative photographs of the area inspected, following removal of asbestos impacted soil, are provided at Appendix B.

3	CLEARANCE INSPECTIONS – VISUAL	
3.3	Limitations:	It should however be noted that: • The Visual Clearance Inspection and Clearance Certificate are limited to accessible visible surfaces as detailed in Section 2.6 only. • Inspections are conducted in a conscientious and professional manner. The nature of the task and the likely disproportion between any damage or loss which might arise from the work or Clearance Certificate prepared and the cost of our services, is such that SLR cannot guarantee that all asbestos materials/issues of concern have been identified and/or addressed. • Unless specified in this Clearance Certificate, this Clearance Certificate does not guarantee that the dust present in or around those areas mentioned in Section 2.3 and Section 2.6 of this Clearance Certificate are free of asbestos contamination. The inspection is for visible ACM as detailed in Section 2.6 only. • It is possible that ACM are present in areas that were inaccessible/visually obscured during the inspection. If any ACM or assumed ACM fragments are encountered on site, access to the materials should be appropriately restricted and advice sought from a suitably qualified and experienced consultant. • The inspections were carried out at the times of the completion of the remediation works and were dependent upon site conditions at that time. • SLR accepts no responsibility or liability for the completeness of the removal by the appointed licensed asbestos removal contractor. The appointed licensed asbestos removal contractor is responsible for ensuring all work is conducted in a safe and competent manner by suitably trained staff, the necessary approvals are obtained from regulatory authorities prior to starting any asbestos removal or maintenance activities (if applicable) and that work methods and procedures comply with the relevant legislation, codes of practice and industry standards, as required.

4	CLEARANCE INSPECTION - ASBESTOS AIRBORNE FIBRE MONITORING	
4.1	Background Monitoring:	Air monitoring for airborne fibres was conducted for each day of intrusive works were carried out as part of the asbestos removal works. Four monitoring stations were setup at the boundary of the excavation area, positioned in line with adjacent sensitive receptors (residents). Control (as required) and background airborne fibre monitoring was conducted, in general accordance with Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust, 2nd Edition [NOHSC: 3003 (2005)] and SLR's in-house technical procedures.
4.2	Clearance Monitoring:	Clearance airborne fibre monitoring was not requested and does not form a part of this clearance certificate.
4.3	Results:	The analysis of all asbestos airborne fibre monitoring was undertaken by SLR at our NATA accredited laboratory. All airborne asbestos monitoring results showed less than the minimum detection limit of the method used which is 0.01 fibres/mL (refer to the SLR Airborne Asbestos Monitoring Reports ref: 680.10679.00200-AADZ-13 through to 680.10679.00200-AADZ-16 that are included in Appendix C.

5	VALIDATION SAMPLE RESULTS	
5.1	Method:	• Validation samples were collected from the base/benched surfaces and external wall (eastern property boundary) of the excavation at a minimum rate of one sample per 25m^2 and one sample per five linear metres. • Samples were collected in general accordance with AS4482.1-2005 and SLR's standard operating procedures (SOPs). Dedicated disposable nitrile gloves, a decontaminated trowel and laboratory supplied sample containers were used for sample collection. • Validation soil samples were collected from the base and external wall (eastern property boundary) of the resultant excavation, as detailed in Section 2.3, Section 2.6 and locations are shown in Appendix A. The purpose of these samples was to confirm that ACM impacted soil material had been removed from the area to a satisfactory standard. • All samples were submitted to a NATA accredited laboratory (ALS Pty Ltd) for analysis. • The base samples were collected from the benches' surfaces (natural soil material) and from the backfill material within the sewer trench. The wall sample was collected along the property boundary, targeting the uncontrolled fill material layer that extends offsite. • For each sample that targeted the backfill material in the existing sewer trench, a 10 L sample was collected in a bucket and passed through a 7mm grid sieve. The material that did not pass through the sieve was inspected for the presence of any potential ACM debris and if found, samples of the fragments were collected and submitted to a NATA accredited laboratory for identification purposes. • Following a visual inspection of the less than 7 mm fraction of sieved soil, a sub-sample (at least 500 mL) was collected and submitted for laboratory analyses. Asbestos analysis for the samples included presence/absence and AF/FA in general accordance with the Western Australia Department of Health's Guidelines for the Assessment, Remediation and Management of Asbestos-Contamination Sites in Western Australia (WA DoH 2009).

5.2	Results:	• The certified laboratory report received for the soil samples collected during this clearance is included in Appendix D.
		• A total of 16 soil samples were collected from the excavation area associated with the removal of uncontrolled fill material present within the sewer easement on Lot B2.
		• A total of 15 validation samples collected from the base/benches of the excavation are represented by samples with the following prefix:
		  ◦ "N" which were collected from the surface of the northern bench (natural soil material) – 5 samples;
		  ◦ "B" which were collected from the backfill material within the sewer trench – 5 samples; and
		  ◦ "S" which were collected from the southern bench (natural soil material – 5 samples.
		• One soil sample was collected from the site's eastern property boundary (E01-0.4). This sample targeted the uncontrolled fill material that extends onto the adjacent residential property.
		• Asbestos was only detected in the sample collected from the wall along the site's eastern property boundary E01-0.4.
		• Geofabric has been placed over the eastern wall of the excavation to prevent asbestos fibres/ACM debris from falling onto the site (refer to photolog). This clearance certificate is issued subject to the continued presence of the geofabric on the eastern property boundary.

		• Asbestos was not detected in any of the soil samples collected from the excavation's base/benches that were submitted for laboratory analysis (presence/absence, AF/FA).

6	RE-OCCUPATION
6.1	It is the opinion of SLR that the areas detailed in Section 2.3 and outlined in Appendix A of this Clearance Certificate are fit for re-occupation and for normal excavation works to proceed. The asbestos removal work area and the surrounding area have been inspected, as far as reasonably practicable, and are considered to be free of visible assumed or suspected asbestos debris, unless specified otherwise in Section 2.6 (i.e. eastern property boundary wall). Within the scope of works executed, all asbestos impacted soil material has been stripped from the area of excavation as per Section 2.6 of this Clearance Certificate (please note the limitations in Section 3.3). As asbestos was detected in the soil sample collected from the site's eastern property boundary, geofabric has been placed over the eastern wall of the excavation to prevent asbestos fibres/ACM debris from falling onto the site. This clearance certificate is issued subject to the continued presence of the geofabric on the eastern property boundary. While SLR carries out the work to the best of our ability, we totally exclude any loss or damages which may arise from services provided to the Client and/or associated parties. This Clearance Certificate and/or information produced by SLR should not be reproduced and/or presented/reviewed except in full.

APPENDIX A

Approximate extent of removal work area and area visually inspected

JOHN STOKES SQUARE

Validation Locations (East)

FIGURE 1

- Manhole
- Vent
- Validation Locations
- Approximate Location of Geofabric
- Sewer Easement
- Project Area

0 2.5 5 m

Coordinate System:	GDA 1994 MGA Zone 52
Scale:	1:300 at A4
Project Number:	680.10679
Date:	18-May-2022
Drawn by:	JG

SLR

H:\Projects-SLR\620-BNE\680-DRW\680.10679 - John Stokes Square\GIS\68010679 Sewer Easement - South - Validation Locations E.mxd

APPENDIX B

Representative Photographic log

Visual Clearance of Excavation

Photo 01 – 14/9/2021 - Photo of the sewer easement from the south eastern corner of the Project Area – looking west along the southern boundary.

Photo 02 – 14/9/2021 – Photo of the sewer easement from the south west corner of Lot B2 – looking east along the southern boundary.

Photo 03 – – 14/9/2021 – Photo of the vent located in the middle of the clearance areas. Photo is taken facing east.

Photo 04– 17/9/2021 – Photo of the geofabric placed along the eastern wall of the excavation where asbestos impact is still present.

Photo 5 – 9/9/2021 – Photo of the asbestos pipe debris found in the backfill material within the existing sewer trench.

APPENDIX C

Airborne Asbestos Monitoring Reports

SLR Consulting Australia Laboratory Services - Darwin Office
ABN:29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-13
Date of Issue: Friday, 10 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
09/09/2021	**Blank**		0				N/A	N/A		100	0	N/A
09/09/2021	AADZ-49	Control	1	07:17	16:43	566	1.00	1.00	1.00	100	2	<0.01
09/09/2021	AADZ-50	Control	2	07:20	16:46	566	1.00	1.00	1.00	100	2.5	<0.01
09/09/2021	AADZ-51	Control	3	07:15	16:42	567	1.00	1.10	1.05	100	1	<0.01
09/09/2021	AADZ-52	Control	4	07:19	16:45	566	1.00	1.00	1.00	100	1	<0.01

Monitoring Locations:

0 Blank
1 Southeast boundary of Lot B2 work area
2 Southwest boundary of Lot B2 work area
3 Northeast boundary of Lot B2 work area
4 Northwest boundary of Lot B2 work area

Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025-Testing. This report cannot be reproduced except in full.

Approved Fibre Counter: Flynn Mackley
Approved Fibre Signatory: Gemma Sheridan

SLR Consulting Australia Laboratory Services - Darwin Office
ABN:29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-14
Date of Issue: Monday, 13 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
10/09/2021	**Blank**		0				N/A	N/A		100	0	N/A
10/09/2021	AADZ-53	Control	1	07:21	16:40	559	1.00	0.96	0.98	100	0	<0.01
10/09/2021	AADZ-54	Control	2	07:22	16:41	559	1.00	1.00	1.00	100	1	<0.01
10/09/2021	AADZ-55	Control	3	07:25	16:50	565	1.00	0.90	0.95	100	1.5	<0.01
10/09/2021	AADZ-56	Control	4	07:26	16:51	565	1.00	1.00	1.00	100	1	<0.01

Monitoring Locations:

0 Blank
1 Northwest boundary of Lot B2 work area
2 Southwest boundary of Lot B2 work area
3 Northeast boundary of Lot B2 work area
4 Southeast boundary of Lot B2 work area

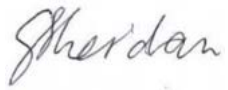
Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025-Testing. This report cannot be reproduced except in full.

Approved Fibre Counter: Flynn Mackley
Approved Fibre Signatory: Gemma Sheridan



SLR Consulting Australia Laboratory Services - Darwin Office
ABN:29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-15
Date of Issue: Wednesday, 15 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
13/09/2021	**Blank**		0				N/A	N/A		100	0	N/A
13/09/2021	AADZ-57	Control	1	07:33	12:41	308	2.00	2.10	2.05	100	0	<0.01
13/09/2021	AADZ-58	Control	2	07:37	12:29	292	2.00	2.00	2.00	100	1	<0.01
13/09/2021	AADZ-59	Control	3	07:29	12:37	308	2.00	2.00	2.00	100	1.5	<0.01
13/09/2021	AADZ-60	Control	4	07:31	12:43	312	2.00	2.00	2.00	100	2	<0.01

Monitoring Locations:

0 Blank
1 Northwest boundary of Lot B2 work area
2 Southwest boundary of Lot B2 work area
3 Northeast boundary of Lot B2 work area
4 Southeast boundary of Lot B2 work area

Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025-Testing. This report cannot be reproduced except in full.

Approved Fibre Counter: Flynn Mackley
Approved Fibre Signatory: Paul Turyn

SLR Consulting Australia Laboratory Services - Darwin Office
ABN:29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.10679.00200-AADZ-16
Date of Issue: Wednesday, 15 September 2021
Removal Contractor: Northern Trade Solutions Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: HK Solutions
Building 2, Level 1
631 Stuart Highway
Berrimah NT 0828

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
14/09/2021	**Blank**		0				N/A	N/A	N/A	100	1	N/A
14/09/2021	AADZ-61	Control	1	07:18	17:02	584	1.00	0.90	0.95	100	1	<0.01
14/09/2021	AADZ-62	Control	2	07:19	17:03	584	1.00	1.00	1.00	100	2	<0.01
14/09/2021	AADZ-63	Control	3	07:20	17:10	590	1.00	1.00	1.00	100	1	<0.01
14/09/2021	AADZ-64	Control	4	07:23	17:04	581	1.00	1.00	1.00	100	0	<0.01

Monitoring Locations:

0 Blank
1 Northeast boundary of Lot B2 work area
2 Southeast boundary of Lot B2 work area
3 Northwest boundary of Lot B2 work area
4 Southwest boundary of Lot B2 work area

Notes:

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APPENDIX D

Certified laboratory reports

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EN2108121**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
E-mail	: jmcdowell@slrconsulting.com	E-mail	: Hannah.White@alsglobal.com
Telephone	: ----	Telephone	: +61 2 4014 2500
Facsimile	: ----	Facsimile	: +61 2 4967 7382
Project	: 680.10679 DIPL John Stokes Square - Lot 82 Sewer Easement	Page	: 1 of 3
Order number	: ----	Quote number	: ES2020HEGAUS0012 (EN/032/20 Primary Work Only)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: ROBIN BIRUA		

Dates

Date Samples Received	: 16-Sep-2021 09:30	Issue Date	: 16-Sep-2021
Client Requested Due Date	: 16-Sep-2021	Scheduled Reporting Date	: **16-Sep-2021**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: ----
Receipt Detail	: B05_0.7 to be analysed for EA200F as per Robin.	No. of samples received / analysed	: 18 / 18

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method Sample ID	Sample Container Received	Preferred Sample Container for Analysis
Asbestos Classification and Quantitation per NEPM 2013 : EA200N		
B01_0.8	- Snap Lock Bag	- Snap Lock Bag: Separate bag received
B02_0.8	- Snap Lock Bag	- Snap Lock Bag: Separate bag received
B03_1.10	- Snap Lock Bag	- Snap Lock Bag: Separate bag received
B04_0.8	- Snap Lock Bag	- Snap Lock Bag: Separate bag received
B05_0.7	- Snap Lock Bag	- Snap Lock Bag: Separate bag received

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA200 Asbestos Identification in Soils -	SOIL - EA200F Asbestos Quantitation (FA+AF) in Soil by
EN2108121-001	14-Sep-2021 00:00	B01_0.8		✓
EN2108121-002	14-Sep-2021 00:00	B02_0.8		✓
EN2108121-003	14-Sep-2021 00:00	B03_1.10		✓
EN2108121-004	14-Sep-2021 00:00	B04_0.8		✓
EN2108121-005	14-Sep-2021 00:00	N01_0.1	✓	
EN2108121-006	14-Sep-2021 00:00	N02_0.1	✓	
EN2108121-007	14-Sep-2021 00:00	N03_0.1	✓	
EN2108121-008	14-Sep-2021 00:00	N04_0.1	✓	
EN2108121-009	14-Sep-2021 00:00	N05_0.3	✓	
EN2108121-010	14-Sep-2021 00:00	S01_0.2	✓	
EN2108121-011	14-Sep-2021 00:00	S02_0.2	✓	
EN2108121-012	14-Sep-2021 00:00	S03_0.10	✓	
EN2108121-013	14-Sep-2021 00:00	S04_0.20	✓	
EN2108121-014	14-Sep-2021 00:00	S05_0.2	✓	
EN2108121-015	14-Sep-2021 00:00	E01_0.4	✓	
EN2108121-016	14-Sep-2021 00:00	E02_0.6	✓	
EN2108121-017	14-Sep-2021 00:00	E03_0.3	✓	
EN2108121-018	14-Sep-2021 00:00	B05_0.7		✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

JULIE McDOWELL

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com

PAUL TURYN

- *AU Certificate of Analysis - NATA (COA)	Email	pturyn@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	pturyn@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	pturyn@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	pturyn@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	pturyn@slrconsulting.com
- EDI Format - ENMRG (ENMRG)	Email	pturyn@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	pturyn@slrconsulting.com

SLR

Toll: MYTJ 150 433.

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT / OFFICE (Tick one)

CLIENT: HJK Solutions

PROJECT: John Stokes Square - Lot B3 Sewer Easement

PROJECT NUMBER: 660.10679 DIP John Stokes Square

PROJECT MANAGER: Julie McDowell

PM CONTACT No: 0435 559 720

LABORATORY: ALS Newcastle

LABORATORY ADDRESS: ALS Sydney & Newcastle

SAMPLER: Robin Blrua

SAMPLER CONTACT No: 0435 559 720

Email Reports and Invoices to: pburyn@slrconsulting.com, jmcdowell@slrconsulting.com

Turnaround Time (TAT): ☑ Same Day TAT ☐ Non Standard or Urgent TAT. Require 8 TAT: Standard

COC Number - NA. 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS: SLR Quote - EN/832/20 - PWD

No.	Sample ID	Date & Time	Matrix	Container/s and Preservatives	REQUESTED ANALYSIS: EA200 (Asbestos in 500g Soil includes identification/quantification)	REQUESTED ANALYSIS: NEPM Asbestos in Soil (EA200) (Minimum FA+AF calculated %as asbestos/soil)	On Hold	Additional Information (Comments on special handling, storage or disposal requirements)
1	B01_0.8	14-09-2021	Soil	500gx1 Bag		x		
2	B02_0.8	14-09-2021	Soil	500gx1 Bag		x		
3	B03_1.10	14-09-2021	Soil	500gx1 Bag		x		
4	B04_0.8	14-09-2021	Soil	500gx1 Bag		x		
5	N01_0.1	14-09-2021	Soil	500gx1 Bag	x			
6	N02_0.1	14-09-2021	Soil	500gx1 Bag	x			
7	N03_0.1	14-09-2021	Soil	500gx1 Bag	x			
8	N04_0.1	14-09-2021	Soil	500gx1 Bag	x			
9	N05_0.3	14-09-2021	Soil	500gx1 Bag	x			
10	S01_0.2	14-09-2021	Soil	500gx1 Bag	x			Same Day TAT
11	S02_0.2	14-09-2021	Soil	500gx1 Bag	x			
12	S03_0.10	14-09-2021	Soil	500gx1 Bag	x			
13	S04_0.20	14-09-2021	Soil	500gx1 Bag	x			
14	S05_0.2	14-09-2021	Soil	500gx1 Bag	x			
15	E01_0.4	14-09-2021	Soil	500gx1 Bag	x			
16	E02_0.6	14-09-2021	Soil	500gx1 Bag	x			
17	E03_0.3	14-09-2021	Soil	500gx1 Bag	x			

Sample Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP = Airfreight Unpreserved Plastic; VA = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved VOA; SG = Sulphuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulphuric Preserved Plastic; E = Non-preserved EDTA; ZH = Zinc Acetate Preserved Bottle; B = Unpreserved Bag; C = Jar; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; F = Unpreserved Bag; W = Bottle - Other Container; Cryovial = Cryovial.

If 'other' or the proper field sampling procedures were used during the collection of these samples.

Relinquished by Sampler	Robin Blrua	Date + Time	15-09-2021	Received by		16.9.21 10am
Relinquished by	Name	Date + Time		Received by	Name	Date + Time
Relinquished by	Name	Date + Time		Received by	Name	Date + Time

Temperature Received:

Environmental Division
Newcastle
Work Order Reference
EN2108121

Telephone : +61 2 4014 2500

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EN2108121**	Page	: 1 of 7
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 DIPL John Stokes Square - Lot 82 Sewer Easement	Date Samples Received	: 16-Sep-2021 09:30
Order number	: ----	Date Analysis Commenced	: 16-Sep-2021
C-O-C number	: ----	Issue Date	: 16-Sep-2021 15:46
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 18		
No. of samples analysed	: 18		

ilac-MRA NATA
Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	B01_0.8	B02_0.8	B03_1.10	B04_0.8	N01_0.1
				Sampling date / time	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00
Compound	CAS Number	LOR	Unit		EN2108121-001	EN2108121-002	EN2108121-003	EN2108121-004	EN2108121-005
					Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--		**-**	**-**	**-**	**-**	**-**
Asbestos (Trace)	1332-21-4	5	Fibres		**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g		**535**	**581**	**657**	**719**	**606**
Synthetic Mineral Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	0.1	g/kg		**No**	**No**	**No**	**No**	**No**
APPROVED IDENTIFIER:	----	-	--		**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**
EA200N: Asbestos Quantification (non-NATA)									
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g		<0.0004	<0.0004	<0.0004	<0.0004	**----**
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)		<0.001	<0.001	<0.001	<0.001	**----**
ø **Weight Used for % Calculation**	----	0.0001	kg		**0.535**	**0.581**	**0.657**	**0.719**	**----**
ø **Fibrous Asbestos >7mm**	----	0.0004	g		<0.0004	<0.0004	<0.0004	<0.0004	**----**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	N02_0.1	N03_0.1	N04_0.1	N05_0.3	S01_0.2
			Sampling date / time	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	EN2108121-006	EN2108121-007	EN2108121-008	EN2108121-009	EN2108121-010
				Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**-**	**-**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g	**646**	**758**	**715**	**695**	**663**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**Yes**	**No**	**No**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
APPROVED IDENTIFIER:	----	-	--	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	S02_0.2	S03_0.10	S04_0.20	S05_0.2	E01_0.4
			Sampling date / time	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	EN2108121-011	EN2108121-012	EN2108121-013	EN2108121-014	EN2108121-015
				Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**No**	**Yes**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**-**	**Ch + Am**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**No**	**No**
Sample weight (dry)	----	0.01	g	**703**	**617**	**629**	**647**	**482**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**Yes**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
APPROVED IDENTIFIER:	----	-	--	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	E02_0.6	E03_0.3	B05_0.7	----	----
			Sampling date / time	14-Sep-2021 00:00	14-Sep-2021 00:00	14-Sep-2021 00:00	----	----
Compound	CAS Number	LOR	Unit	EN2108121-016	EN2108121-017	EN2108121-018	--------	--------
				Result	Result	Result	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**----**	**----**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**----**	**----**
Asbestos (Trace)	1332-21-4	5	Fibres	**No**	**No**	**No**	**----**	**----**
Sample weight (dry)	----	0.01	g	**556**	**580**	**618**	**----**	**----**
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	**No**	**No**	**----**	**----**
Organic Fibre	----	0.1	g/kg	**No**	**No**	**No**	**----**	**----**
APPROVED IDENTIFIER:	----	-	--	**B.SCHRADER**	**B.SCHRADER**	**B.SCHRADER**	**----**	**----**
EA200N: Asbestos Quantification (non-NATA)								
ø **Asbestos (Fines and Fibrous <7mm)**	1332-21-4	0.0004	g	**----**	**----**	<0.0004	**----**	**----**
ø **Asbestos (Fines and Fibrous FA+AF)**	----	0.001	% (w/w)	**----**	**----**	<0.001	**----**	**----**
ø **Weight Used for % Calculation**	----	0.0001	kg	**----**	**----**	**0.618**	**----**	**----**
ø **Fibrous Asbestos >7mm**	----	0.0004	g	**----**	**----**	<0.0004	**----**	**----**

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	N01_0.1 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	N02_0.1 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	N03_0.1 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	N04_0.1 - 14-Sep-2021 00:00	A soil sample containing a collection of synthetic mineral fibre insulation.
EA200: Description	N05_0.3 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	S01_0.2 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	S02_0.2 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	S03_0.10 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	S04_0.20 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	S05_0.2 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	E01_0.4 - 14-Sep-2021 00:00	A soil sample containing one piece of fibrous asbestos fibre board approximately 20x15x5mm and several smaller fragments approximately 5x5x1mm.
EA200: Description	E02_0.6 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	E03_0.3 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	B01_0.8 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	B02_0.8 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	B03_1.10 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	B04_0.8 - 14-Sep-2021 00:00	A soil sample.
EA200: Description	B05_0.7 - 14-Sep-2021 00:00	A soil sample.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EN2108121**	Page	: 1 of 3
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Contact	: Hannah White
Address	: Unit 5 21 Parap Rd DARWIN 0800	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: 680.10679 DIPL John Stokes Square - Lot 82 Sewer Easement	Date Samples Received	: 16-Sep-2021
Order number	: ----	Date Analysis Commenced	: 16-Sep-2021
C-O-C number	: ----	Issue Date	: 16-Sep-2021
Sampler	: ROBIN BIRUA		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 18		
No. of samples analysed	: 18		

ilac-MRA NATA
Accreditation No. 825
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EN2108121**	Page	: 1 of 4
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Newcastle
Contact	: JULIE McDOWELL	Telephone	: +61 2 4014 2500
Project	: 680.10679 DIPL John Stokes Square - Lot 82 Sewer Easement	Date Samples Received	: 16-Sep-2021
Site	: ----	Issue Date	: 16-Sep-2021
Sampler	: ROBIN BIRUA	No. of samples received	: 18
Order number	: ----	No. of samples analysed	: 18

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag (EA200)							
B01_0.8, B02_0.8, B03_1.10, B04_0.8, N01_0.1, N02_0.1, N03_0.1, N04_0.1, N05_0.3, S01_0.2, S02_0.2, S03_0.10, S04_0.20, S05_0.2, E01_0.4, E02_0.6, E03_0.3, B05_0.7	**14-Sep-2021**	**----**	----	----	**16-Sep-2021**	13-Mar-2022	✓
EA200N: Asbestos Quantification (non-NATA)							
Snap Lock Bag (EA200N)							
B01_0.8, B02_0.8, B03_1.10, B04_0.8, B05_0.7	**14-Sep-2021**	**----**	----	----	**16-Sep-2021**	13-Mar-2022	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Asbestos Classification and Quantitation per NEPM 2013	* EA200N	SOIL	Asbestos Classification and Quantitation per NEPM with Confirmation of Identification by AS 4964 - Gravimetric determination of Asbestos Containing Material, Fibrous Asbestos, Asbestos Fines and sample weight and calculation of percentage concentrations per NEPM protocols. Asbestos (Fines and Fibrous FA+AF) is reported as the equivalent weight in the sample received after accounting for sub-sampling (where applicable for the <7mm and/or <2mm fractions).

APPENDIX E

Shoal Bay Waste Management Facility Waste Disposal Dockets

8 Stokes
PR842

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80167918-SB
Voucher No:

Time In: 9/09/2021 8:54:41 AM
Time Out: 9/09/2021 9:09:27 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	18.78t
TARE Weight:	11.46t
NET Weight:	7.32t
Chargeable Weight:	7.32t
Council Fee:	$2,774.95
EPA Levy:	$0.00
GST :	$277.49
Temporary Acc:	$0.00
Total Price:	$3,052.44

Payments:	
ACCOUNT	$3,052.44
Total Amount Tendered:	$3,052.44
Change Given:	$0.00

Driver:

Operator: 39 Dave Yates

$80186876]œ

8 Stokes
PR842

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80167957-SB
Voucher No:

Time In: 9/09/2021 9:56:43 AM
Time Out: 9/09/2021 10:12:05 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.36t
TARE Weight:	11.74t
NET Weight:	13.62t
Chargeable Weight:	13.62t
Council Fee:	$5,163.22
EPA Levy:	$0.00
GST :	$516.32
Temporary Acc:	$0.00
Total Price:	$5,679.54

Payments:	
ACCOUNT	$5,679.54
Total Amount Tendered:	$5,679.54
Change Given:	$0.00

Driver:

Operator: 38 Dave Yates

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80167919-SB
Voucher No:

Time In: 9/09/2021 8:56:08 AM
Time Out: 9/09/2021 9:15:19 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	25.76t
TARE Weight:	12.32t
NET Weight:	13.44t
Chargeable Weight:	13.44t
Council Fee:	$5,094.98
EPA Levy:	$0.00
GST :	$509.50
Temporary Acc:	$0.00
Total Price:	$5,604.48

Payments:	
ACCOUNT	$5,604.48
Total Amount Tendered:	$5,604.48
Change Given:	$0.00

Driver:

Operator: 37 Dave Yates

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PR842

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80168062-SB
Voucher No:

Time In: 9/09/2021 12:16:20 PM
Time Out: 9/09/2021 12:34:45 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.52t
TARE Weight:	12.24t
NET Weight	14.28t
Chargeable Weight:	14.28t
Council Fee:	$5,413.42
EPA Levy:	$0.00
GST :	$541.34
Temporary Acc:	$0.00
Total Price:	$5,954.76

Payments:	
ACCOUNT	$5,954.76
Total Amount Tendered:	$5,954.76
Change Given:	$0.00

Driver:

Operator: 36 Dave Yates

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GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80168336-SB
Voucher No:

Time In: 10/09/2021 10:02:29 AM
Time Out: 10/09/2021 10:22:22 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.84t
TARE Weight:	12.32t
NET Weight:	12.52t
Chargeable Weight:	12.52t
Council Fee:	$4,746.22
EPA Levy:	$0.00
GST :	$474.62
Temporary Acc:	$0.00
Total Price:	$5,220.84
Payments:	
ACCOUNT	$5,220.84
Total Amount Tendered:	$5,220.84
Change Given:	$0.00

Driver:

Operator: Dave

$80187306

GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80168294-SB
Voucher No:

Time In: 10/09/2021 8:52:30 AM
Time Out: 10/09/2021 9:08:38 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.00t
TARE Weight:	12.36t
NET Weight:	13.64t
Chargeable Weight:	13.64t
Council Fee:	$5,170.80
EPA Levy:	$0.00
GST :	$517.08
Temporary Acc:	$0.00
Total Price:	$5,687.88
Payments:	
ACCOUNT	$5,687.88
Total Amount Tendered:	$5,687.88
Change Given:	$0.00

Driver:

Operator: Dave

$80187264

GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80168504-SB
Voucher No:

Time In: 10/09/2021 2:05:10 PM
Time Out: 10/09/2021 2:16:53 PM

Vehicle Rego: CD99YR-10

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.68t
TARE Weight:	12.34t
NET Weight:	12.34t
Chargeable Weight:	12.34t
Council Fee:	$4,677.98
EPA Levy:	$0.00
GST :	$467.80
Temporary Acc:	$0.00
Total Price:	$5,145.78
Payments:	
ACCOUNT	$5,145.78
Total Amount Tendered:	$5,145.78
Change Given:	$0.00

Driver:

Operator: Michael

$80187494

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80168555-SB
Voucher No:

Time In: 10/09/2021 3:13:18 PM
Time Out: 10/09/2021 3:41:12 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	15.06t
TARE Weight:	12.34t
NET Weight:	2.72t
Chargeable Weight:	2.72t
Council Fee:	$1,031.13
EPA Levy:	$0.00
GST :	$103.11
Temporary Acc:	$0.00
Total Price:	$1,134.24
Payments:	
ACCOUNT	$1,134.24
Total Amount Tendered:	$1,134.24
Change Given:	$0.00

Driver:

Operator: Michael

$80187551

GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80168459-SB
Voucher No:

Time In: 10/09/2021 1:02:25 PM
Time Out: 10/09/2021 1:18:46 PM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.76t
TARE Weight:	12.30t
NET Weight:	12.46t
Chargeable Weight:	12.46t
Council Fee:	$4,723.47
EPA Levy:	$0.00
GST :	$472.35
Temporary Acc:	$0.00
Total Price:	$5,195.82

Payments:	
ACCOUNT	$5,195.82
Total Amount Tendered:	$5,195.82
Change Given:	$0.00

Driver:

Operator: Michael

$80187447J

GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80168400-SB
Voucher No:

Time In: 10/09/2021 11:36:50 AM
Time Out: 10/09/2021 11:54:18 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	28.62t
TARE Weight:	12.34t
NET Weight:	16.28t
Chargeable Weight:	16.28t
Council Fee:	$6,171.60
EPA Levy:	$0.00
GST :	$617.16
Temporary Acc:	$0.00
Total Price:	$6,788.76

Payments:	
ACCOUNT	$6,788.76
Total Amount Tendered:	$6,788.76
Change Given:	$0.00

Driver:

Operator: Dave

$80187382B

John Hobbs.

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80168844-58
Voucher No:

Time In: 13/09/2021 9:27:03 AM
Time Out: 13/09/2021 9:42:53 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	19.72t
TARE Weight:	11.44t
NET Weight:	8.28t
Chargeable Weight:	8.28t
Council Fee:	$3,138.87
EPA Levy:	$0.00
GST :	$313.89
Temporary Acc:	$0.00
Total Price:	$3,452.76

Payments:

ACCOUNT	$3,452.76
Total Amount Tendered:	$3,452.76
Change Given:	$0.00

Driver:

Operator: Sam

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$80187866hc

GSG, John Stokes
(5)

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169337-SB
Voucher No:

Time In: 14/09/2021 12:19:25 PM
Time Out: 14/09/2021 12:31:20 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	20.76t
TARE Weight:	11.58t
NET Weight:	9.18t
Chargeable Weight:	9.18t
Council Fee:	$3,480.05
EPA Levy:	$0.00
GST :	$348.01
Temporary Acc:	$0.00
Total Price:	$3,828.06

Payments:	
ACCOUNT	$3,828.06
Total Amount Tendered:	$3,828.06
Change Given:	$0.00

Driver:

Operator: Dennis

$801384447@

GSG John Stokes

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169397-SB
Voucher No:

Time In: 14/09/2021 1:38:06 PM
Time Out: 14/09/2021 1:52:41 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.34t
TARE Weight:	12.06t
NET Weight:	12.28t
Chargeable Weight:	12.28t
Council Fee:	$4,655.24
EPA Levy:	$0.00
GST :	$465.52
Temporary Acc:	$0.00
Total Price:	$5,120.76

Payments:	
ACCOUNT	$5,120.76
Total Amount Tendered:	$5,120.76
Change Given:	$0.00

Driver:

Operator: Dennis

$801885136@

GSH

CITY OF DARWIN

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169300-SB
Voucher No:

Time In: 14/09/2021 11:39:39 AM
Time Out: 14/09/2021 11:55:53 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	27.26t
TARE Weight:	12.40t
NET Weight:	14.86t
Chargeable Weight:	14.86t
Council Fee:	$5,633.29
EPA Levy:	$0.00
GST :	$563.33
Temporary Acc:	$0.00
Total Price:	$6,196.62

Payments:	
ACCOUNT	$6,196.62
Total Amount Tendered:	$6,196.62
Change Given:	$0.00

Driver:

Operator: Michael

$80188401j@

GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169189-SB
Voucher No:

Time In: 14/09/2021 8:51:48 AM
Time Out: 14/09/2021 9:09:11 AM

Vehicle Rego: CD99YR-6

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	20.40t
TARE Weight:	11.92t
NET Weight:	8.48t
Chargeable Weight:	8.48t
Council Fee:	$3,214.69
EPA Levy:	$0.00
GST :	$321.47
Temporary Acc:	$0.00
Total Price:	$3,536.16

Payments:	
ACCOUNT	$3,536.16
Total Amount Tendered:	$3,536.16
Change Given:	$0.00

Driver:

Operator: Michael

$80188232{@

GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169251-SB
Voucher No:

Time In: 14/09/2021 10:19:03 AM
Time Out: 14/09/2021 10:33:25 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	26.50t
TARE Weight:	12.24t
NET Weight:	14.26t
Chargeable Weight:	14.26t
Council Fee:	$5,405.84
EPA Levy:	$0.00
GST :	$540.58
Temporary Acc:	$0.00
Total Price:	$5,946.42

Payments:	
ACCOUNT	$5,946.42
Total Amount Tendered:	$5,946.42
Change Given:	$0.00

Driver:

Operator: Michael

$80188314•@

GSG, John Stokes
0.

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169190-SB
Voucher No:

Time In: 14/09/2021 8:53:57 AM
Time Out: 14/09/2021 9:14:22 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	20.20t
TARE Weight:	11.44t
NET Weight:	8.76t
Chargeable Weight:	8.76t
Council Fee:	$3,320.84
EPA Levy:	$0.00
GST :	$332.08
Temporary Acc:	$0.00
Total Price:	$3,652.92

Payments:	
ACCOUNT	$3,652.92
Total Amount Tendered:	$3,652.92
Change Given:	$0.00

Driver:

Operator: Michael

$80188233

GSG, John stokes
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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169263-SB
Voucher No:

Time In: 14/09/2021 10:41:19 AM
Time Out: 14/09/2021 10:57:47 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	24.58t
TARE Weight:	11.72t
NET Weight:	12.86t
Chargeable Weight:	12.86t
Council Fee:	$4,875.11
EPA Levy:	$0.00
GST :	$487.51
Temporary Acc:	$0.00
Total Price:	$5,362.62

Payments:	
ACCOUNT	$5,362.62
Total Amount Tendered:	$5,362.62
Change Given:	$0.00

Driver:

Operator: Michael

$80188338

GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169690-SB
Voucher No:

Time In: 15/09/2021 12:41:34 PM
Time Out: 15/09/2021 1:00:47 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	18.60t
TARE Weight:	11.96t
NET Weight:	6.64t
Chargeable Weight:	6.64t
Council Fee:	$2,517.16
EPA Levy:	$0.00
GST :	$251.72
Temporary Acc:	$0.00
Total Price:	$2,768.88

Payments:	
ACCOUNT	$2,768.88
Total Amount Tendered:	$2,768.88
Change Given:	$0.00

Driver:

Operator: Dennis

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169650-SB
Voucher No:

Time In: 15/09/2021 11:50:53 AM
Time Out: 15/09/2021 12:06:35 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	19.92t
TARE Weight:	11.50t
NET Weight:	8.42t
Chargeable Weight:	8.42t
Council Fee:	$3,191.95
EPA Levy:	$0.00
GST :	$319.19
Temporary Acc:	$0.00
Total Price:	$3,511.14

Payments:	
ACCOUNT	$3,511.14
Total Amount Tendered:	$3,511.14
Change Given:	$0.00

Driver:

Operator: Dennis

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$80188782Ua

GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169591-SB
Voucher No:

Time In: 15/09/2021 10:29:53 AM
Time Out: 15/09/2021 10:45:24 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	21.32t
TARE Weight:	11.42t
NET Weight:	9.90t
Chargeable Weight:	9.90t
Council Fee:	$3,753.00
EPA Levy:	$0.00
GST :	$375.30
Temporary Acc:	$0.00
Total Price:	$4,128.30

Payments:	
ACCOUNT	$4,128.30
Total Amount Tendered:	$4,128.30
Change Given:	$0.00

Driver:

Operator: Michael

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169546-SB
Voucher No:

Time In: 15/09/2021 9:17:14 AM
Time Out: 15/09/2021 9:33:48 AM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste		Price
ASBESTOS		$379.09
Each Items	Qty	Price

GROSS Weight:	16.92t
TARE Weight:	11.84t
NET Weight:	5.08t
Chargeable Weight:	5.08t
Council Fee:	$1,925.78
EPA Levy:	$0.00
GST :	$192.58
Temporary Acc:	$0.00
Total Price:	$2,118.36

Payments:	
ACCOUNT	$2,118.36
Total Amount Tendered:	$2,118.36
Change Given:	$0.00

Driver:

Operator: Michael

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CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169719-SB
Voucher No:

Time In: 15/09/2021 1:25:03 PM
Time Out: 15/09/2021 1:38:58 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Qty	Price
ASBESTOS		$379.09
Each Items		

GROSS Weight:	20.08t
TARE Weight:	11.96t
NET Weight:	8.12t
Chargeable Weight:	8.12t
Council Fee:	$3,078.22
EPA Levy:	$0.00
GST :	$307.82
Temporary Acc:	$0.00
Total Price:	$3,386.04

Payments:	
ACCOUNT	$3,386.04
Total Amount Tendered:	$3,386.04
Change Given:	$0.00

Driver:

Operator: Dennis

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GSH

CITY OF DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80169754-SB
Voucher No:

Time In: 15/09/2021 2:04:21 PM
Time Out: 15/09/2021 2:19:53 PM

Vehicle Rego: CD36BZ

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste	Qty	Price
ASBESTOS		$379.09
Each Items		

GROSS Weight:	19.78t
TARE Weight:	11.82t
NET Weight:	7.96t
Chargeable Weight:	7.96t
Council Fee:	$3,017.56
EPA Levy:	$0.00
GST :	$301.76
Temporary Acc:	$0.00
Total Price:	$3,319.32

Payments:	
ACCOUNT	$3,319.32
Total Amount Tendered:	$3,319.32
Change Given:	$0.00

Driver:

Operator: Dennis

$80188888№

ITY OF
DARWIN

Delivery Docket

Bay

8930 0408

11503313301

No: 80170251-SB
r No:

n: 17/09/2021 9:04:28 AM
ut: 17/09/2021 9:23:37 AM

e Rego: CD99YR-12

: NORTHERN TRADE SOLUTIONS PT
al no. 12-A2151
Number:
ct:

ationLF: Cell Stage 2 (Inert)

d Waste Price
OS $379.09
tems Qty Price

weight: 17.54t
eight: 12.40t
ight: 5.14t

able Weight: 5.14t
l Fee: $1,948.53
vy: $0.00
$194.85
ary Acc: $0.00

Price: $2,143.38

nts:

CITY OF
DARWIN

Delivery Docket

Shoal Bay

Phone: 8930 0408

ABN: 11503313301

Ticket No: 80170280-SB
Voucher No:

Time In: 17/09/2021 9:53:26 AM
Time Out: 17/09/2021 10:09:37 AM

Vehicle Rego: CD99YR-12

Client: NORTHERN TRADE SOLUTIONS PT
Approval no. 12-A2151
Order Number:
Contract:

DestinationLF: Cell Stage 2 (Inert)

Weighed Waste Price
ASBESTOS $379.09
Each Items Qty Price

GROSS Weight: 15.04t
TARE Weight: 12.30t
NET Weight: 2.74t

Chargeable Weight: 2.74t
Council Fee: $1,038.71
EPA Levy: $0.00
GST : $103.87
Temporary Acc: $0.00

Total Price: $1,142.58

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APPENDIX C

Imported Fill Soil Characterisation Report

Memorandum

To:	John Mousellis	At:	Mousellis & Sons Pty Ltd
From:	Julie McDowell	At:	SLR Consulting Australia Pty Ltd
Date:	12 October 2021	Ref:	680.30093.00000-M01-v1.0-20211012.docx
Subject:	Fill Characterisation Extractive Mining Pits - MA24585 and MA24642		

CONFIDENTIALITY

This document is confidential and may contain legally privileged information. If you are not a named or authorised recipient you must not read, copy, distribute or act in reliance on it. If you have received this document in error, please telephone our operator immediately and return the document by mail.

1 Introduction

SLR Consulting Australia Pty Ltd (SLR) were commissioned to assess the contamination status of soil/gravel proposed to be used as backfill material for the sewer headworks upgrade project at the John Stokes Square Redevelopment site located at 47 Progress Drive, Nightcliff, Northern Territory (NT).

1.1 Background

Information provided by Mousellis & Sons Pty Ltd (Mousellis) indicated that the material proposed to be used as backfill is from two different sources:

1. Virgin excavated natural material (VENM) from the extractive mining pits operating under licences MA24585 and MA24642.

2. Screened stockpiled soil that had been excavated from other construction worksites within Darwin. Based on the information provided by Mousellis, the soil was not sourced from sites operated by the Department of Defence, Airports and/or other sites where current and historical use of firefighting foam had occurred (i.e. sites typically associated with having a high potential of containing PFAS chemicals).

1.2 Objective

The objective of this assessment is to characterise the contamination status of the soil that is being proposed to backfill excavations at the John Stokes Square Redevelopment site as part of the sewer headworks upgrade project.

1.3 Scope of Works

The following scope of works were undertaken to meet the aforementioned objective.

- SLR mobilised a suitably experienced environmental consultant to collect representative soil samples from the material proposed to be used at the John Stokes Square Redevelopment site. At the time of sampling, the stockpiled material was located at the Mousellis Depot, 16 Willes Road, Berrimah, NT.

- A total of 13 soil samples were collected from the stockpiled material to adequately characterise the soil proposed to be used at the John Stokes Square Redevelopment site. Sampling rate adopted is in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999, revised 2013 (ASC NEPM 2013) - Schedule B2 Guideline on Site Characterisation, and equates to at least one sample per 25 m^3 of soil material with a minimum of three samples collected from each stockpile.
- Samples were submitted and analysed for contaminants of potential concern (COPCs) at a National Association of Testing Authorities (NATA) accredited laboratory. COPCs were deemed to be:
  - Total Recoverable Hydrocarbons (TRH).
  - Benzene, toluene, ethylbenzene, xylene and naphthalene (BTEXN).
  - Polycyclic aromatic hydrocarbons (PAHs).
  - Total polychlorinated biphenyls (PCBs).
  - Organochlorine and organophosphorus pesticides (OCPs/OPPs).
  - Metals (arsenic, cadmium, chromium, copper, lead, nickel, zinc, and mercury).
  - Phenoxyacid herbicides.
- SLR reviewed the asbestos analytical results provided by the Client (Greencap Pty Ltd, report reference: NT85146).
- Assess the analytical results against the screening criteria specified in the ASC NEPM 2013 guidelines and New South Wales (NSW) Environment Protection Authority (EPA) Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014, The excavated natural material order 2014 (NSW EPA 2014).
- Preparation of this report.

1.4 Limitations

The following information will assist in understanding the uncertainties relating to the interpretation of the data obtained during this investigation and the recommendations presented in the report and help with assessment and interpretation of the report.

SLR assumes no responsibility for the quality or accuracy of data obtained from external sources, or for occurrences outside the scope of works defined in this report.

All work conducted, and reports produced by SLR are prepared for a particular Client's objective and are based on a specific scope, conditions and limitations, as agreed upon between SLR and the Client. Information and/or report(s) prepared by SLR may therefore not be suitable for any use other than the intended objective.

Before passing on to a third party any information and/or report(s) prepared by SLR, the Client is to inform fully the third party of the objective and scope, and all limitations and conditions, including any other relevant information which applies to the information and/or report(s) prepared by SLR.

It is the responsibility of third parties to investigate fully to their satisfaction if any information and/or report(s) prepared by SLR, is suitable for a specific objective.

Services were conducted in a conscientious and professional manner. The nature of the task, however, and the likely disproportion between any damage or loss which might arise from the work and any report prepared as a result and the cost of our services is such that SLR cannot guarantee that all issues of concern/contamination have been identified.

The report(s) and/or information produced by SLR should not be reproduced and/or presented/reviewed except in full.

2 Methodology

Works undertaken were completed in general accordance with the following guidelines and standards.

- National Environment Protection Council (1999, 2013 revision), National Environment Protection (Assessment of Site Contamination) Measure (ASC NEPM 2013).
- Standards Australia AS 4482.1-2005, Guide to the Sampling and Investigation of Potentially Contaminated Soil. Part 1: Non-volatile and semi-volatile compounds (AS4482.1-2005).
- NSW EPA Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014, The excavated natural material order 2014 (NSW EPA 2014).
- NT EPA Contaminated Land Guidelines 2017.

In addition, SLR's Standard Operating Procedures (SOPs) were followed to ensure integrity was maintained and sampling procedures were completed in general accordance with the relevant guidelines and standards.

2.1 Soil Sampling Methodology

Soil samples were collected in accordance with the methodology outlined below in Table 1.

Table 1 Summary of soil sampling methodology

Activity	Detail / Comment
Soil sampling	Sample collection was undertaken in general accordance with AS4482.1-2005. Samples were collected in a three-dimensional systematic grid sampling pattern across the stockpile to account for spatial variability. Representative samples were collected from stockpiled material to provide an indication of contamination status. Samples were collected from a least 0.3m below the surface of the stockpile. Samples were collected directly from the stockpiled material by hand (clean nitrile gloves were used for each sample collected) and placed in laboratory supplied sample containers. Environmental samples were collected and handled by an experienced SLR environmental consultant.
Sample preservation	Samples were placed in laboratory supplied jars and bags and were stored as close to 4°C as practicable, in insulated chilled containers while onsite and in transit to the laboratory.
Sample submission	Chain of Custody (COC) documentation were completed at the time of sample collection and accompanied the samples to the laboratory.

Activity	Detail / Comment
Sample analysis	All samples were submitted to a NATA accredited laboratory, ALS Pty Ltd (ALS), and were analysed for the following COPCs. • TRH • BTEXN • OCPs/OPPs • PCBs • PAHs • Metals (arsenic, cadmium, chromium, copper, lead, nickel, zinc, and mercury) • Phenoxy acetic acid herbicides. Samples collected for asbestos analysis were submitted to the Greencap Pty Ltd (Greencap) laboratory, which is NATA accredited for this analysis.

2.2 Nominated Investigation Levels

The nominated investigation levels (ILs) adopted for this assessment included the following.

- ASC NEPM 2013 human health based ILs and human health screening levels specified for residential land use scenarios (HBIL/HSL-A).
- ASC NEPM 2013 ecological ILs and screening levels specified for urban residential and open space land use scenarios (EIL/ESL - URPOS).
- NSW EPA 2014 maximum average and absolute maximum concentrations specified for excavated natural material.

3 Summary of Results

A total of three (3) stockpiles were sampled as part of these works - Stockpile A (approximately 14 m^3), Stockpile B (approximately 25 m^3) and Stockpile C (approximately 56 m^3). Details of these stockpiles are provided below.

- Stockpiles A and B comprise of VENM sourced from extractive mining pits operating under licences MA24585 and MA24642. Stockpiles A and B can be described as red-orange, silty/clayey sandy gravel, where the sandy component was well sorted, and gravel was angular.
- Stockpile C was a mixture of gravel and soil sourced from different worksites operated by Mousellis. Stockpile C is similar to Stockpiles A and B with the addition of "blue metal" gravel. One piece of nylon rope and one piece of reinforced steel ("reo") was noted in this stockpile.

A visual inspection of all three stockpiles did not find any evidence of visible asbestos containing material (ACM), odours and/or stains.

The number of soil samples collected by SLR from each stockpile is listed below.

- Stockpile A – three (3) samples.
- Stockpile B – three (3) samples.
- Stockpile C – seven (7) samples.

A third party collected 16 soil samples for the purpose of investigating asbestos impact.

Laboratory certificates are included in Attachment A. Table 2 below provides a summary of the analytical soil results with respect to the detected analytes and the corresponding nominated ILs.

Table 2 Summary of laboratory results

Analyte	Unit	IL (NSW EPA 2014 VENM)		IL (ASC NEPM 2013)		Range		Samples exceeding IL
		Max. Ave	Abs. Max.	HBIL/HSL – A	EIL/ESL – URPOS	Stockpiles A & B	Stockpile C	
Arsenic	mg/kg	20	40	100	100	<5 – 7	7 – 8	None
Cadmium	mg/kg	0.5	1	20	NA	<1	<1	None
Total chromium (III+VI)	mg/kg	75	150	100 (VI only)	190 (III)	18 - 55	37 – 67	None
Copper	mg/kg	100	200	6000	60	<5 - 17	7 - 12	None
Lead	mg/kg	50	100	300	1100	8 - 12	12 – 19	None
Mercury	mg/kg	0.5	1	40	NA	<0.1	<0.1	None
Nickel	mg/kg	30	60	400	30	<2 – 4	2 – 6	None
Zinc	mg/kg	150	300	4700	70	<5 – 6	12 – 29	None
PCBs	mg/kg	NA	NA	1	NA	<0.1	<0.1	None
OCPs	mg/kg	NA	NA	Various	Various	Non-detect	Non-detect for all except dieldrin	None
OCP (Aldrin and Dieldrin)	mg/kg	NA	NA	6	NA	<0.05	0.05	None
OPPs	mg/kg	NA	NA	Various	Various	Non-detect	Non-detect	None
Benzo(a)pyrene	mg/kg	0.5	1	3	0.7	<0.5	<0.5	None
Naphthalene	mg/kg	NA	NA	3	170	<0.5	<0.5	None
Total PAHs	mg/kg	20	40	300	NA	Non-detect	Non-detect	None
TPH C6-C9	mg/kg	NA	NA	NA	NA	<10	<10	None
TRH F1 – TRH C6-C10	mg/kg	NA	NA	NA	180	<10	<10	None
TRH F1 - TRH C6-C10 minus BTEX	mg/kg	NA	NA	45	NA	<10	<10	None
TPH C10-C14	mg/kg	NA	NA	NA	NA	<50	<50	None
TRH F2 – TRH C10 – C16	mg/kg	NA	NA	NA	120	<50	<50	None
TRH F2 – TRH C10-C16 minus naphthalene	mg/kg	NA	NA	110	NA	<50	<50	None
TPH C15-C28	mg/kg	NA	NA	NA	NA	<100	<100	None
TRH F3 – C16-C34	mg/kg	NA	NA	NA	300	<100	<100	None
TPH C29-C36	mg/kg	NA	NA	NA	NA	<100	<100	None
TRH F4 – C34-C40	mg/kg	NA	NA	NA	2800	<50	<50	None
TPH C10-C36 (Total)	mg/kg	250	500	NA	NA	<50	<50	None
Benzene	mg/kg	NA	0.5	0.5	50	<0.2	<0.2	None
Ethylbenzene	mg/kg	NA	65	55	70	<0.5	<0.5	None
Toluene	mg/kg	NA	25	160	85	<0.5	<0.5	None
Xylene Total	mg/kg	NA	15	40	105	<0.5	<0.5	None
Phenoxy Acetic Acid Herbicides	mg/kg	NA	NA	Various	NA	Non-detect	Non-detect	None

In addition to the analytical results summarised in Table 2 and included in Attachment A, a review of the Greencap analytical report found that asbestos was not detected in any of the 16 soil samples collected and submitted for analysis. The Greencap analytical report is also included in Attachment A.

4 Conclusion

Based on the analytical results obtained, SLR is of the opinion that the contamination status of the stockpiles sampled would not prevent them being used as backfill material for the sewer headworks upgrade project at the John Stokes Square Redevelopment site located at 47 Progress Drive, Nightcliff, NT.

SLR is also of the opinion that the material sourced from extractive mining pits operating under licences MA24585 and MA24642, meets the soil quality requirements required to be classified as VENM.

5 Further Communication

Should you have any queries relating the any of the above information, please do not hesitate to contact myself on 0435 359 720.

Yours sincerely

Julie McDowell

Principal Consultant

Checked/
Authorised by: PT

Attachment A: Laboratory Documentation

ATTACHMENT A – LABORATORY DOCUMENTATION

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT ☐ ☐ ☐ ☐ ☐

OFFICE ☐ ☐ ☐ ☐ ☐

(Tick one) ☐ ☐ ☐ ☐ ☐

CLIENT: Halikos	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 1 of 2
PROJECT: John Stokes Square Sewage Easment (LOT 9017)	LABORATORY ADDRESS:	Standard TAT	
PROJECT NUMBER: 680.30093	SAMPLER: James Murdoch	Non Standard or Urgent TAT	
PROJECT MANAGER: Jullie McDowell	SAMPLER CONTACT No: 0405966440	Required TAT: 24 hour	
PM CONTACT No: 0435359720	Email Reports and Invoices to: jmurdoch@slrconsulting.com; jmcdowell@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS EN-032-20-PWO

No.	Sample ID	Date & Time	Matrix (Soil, Water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: (5-16)	Phenoxy Herbicides (EP202)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	STP-A.1	24/09/2021	Soil	1x Medium Soil Jar	x	x		In esky in ALS fridge
2	STP-A.2	24/09/2021	Soil	1x Medium Soil Jar	x	x		Droped off 24-09-2021
3	STP-A.3	24/09/2021	Soil	1x Medium Soil Jar	x	x		
4	STP-B.1	24/09/2021	Soil	1x Medium Soil Jar	x	x		
5	STP-B.2	24/09/2021	Soil	1x Medium Soil Jar	x	x		
6	STP-B.3	24/09/2021	Soil	1x Medium Soil Jar	x	x		
7	STP-C.1	24/09/2021	Soil	1x Medium Soil Jar	x	x		
8	STP-C.2	24/09/2021	Soil	1x Medium Soil Jar	x	x		
9	STP-C.3	24/09/2021	Soil	1x Medium Soil Jar	x	x		
10	STP-C.4	24/09/2021	Soil	1x Medium Soil Jar	x	x		
11	STP-C.5	24/09/2021	Soil	1x Medium Soil Jar	x	x		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler		Date / Time 24/09/2021	**Received by**	Sign Kim	Date / Time 28.09.21 6:30am	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

Environmental Division
Sydney
Work Order Reference
ES2134625

Telephone : 61-2-8784 8555

TAT

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

CLIENT: Hallkos	LABORATORY: ALS	Turnaround Time (TAT)	COC Number 2 of 2
PROJECT: John Stokes Square Sewage Easment (LOT 9017)	LABORATORY ADDRESS:	Standard TAT	
PROJECT NUMBER: 680.30093	SAMPLER: James Murdoch	Non Standard or Urgent TAT	
PROJECT MANAGER: Jullie McDowell	SAMPLER CONTACT No: 0405966440	Required TAT: 24 hour	
PM CONTACT No: 0435359720	Email Reports and Invoices to: jmurdoch@slrconsulting.com; jmcdowell@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS:

ALS EN-032-20-PWD

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	(S-16)	Phenoxy Herbicides (EP202)	Hold	Additional Information (Comment on any gross contamination or specific requirements)
12	STP-C.6	24/09/2021	Soil	1x Medium Soil Jar	x	x		In esky in ALS fridge
13	STP-C.7	24/09/2021	Soil	1x Medium Soil Jar	x	x		Droped off 24-09-2021

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[signature]	Date / Time 24/09/2021	**Received by**	Sign [signature] Kim	Date / Time 28.09.21 6.30am	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2134625**

Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: JULIE McDOWELL	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd PARAP 0820	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: jmcdowell@slrconsulting.com	E-mail	: Tyler.Anderson@ALSGlobal.com
Telephone	: ----	Telephone	: +61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 680.30093 John Stokes Square Sewage Eastment (LOT 9017)	Page	: 1 of 2
Order number	: ----	Quote number	: ES2020HEGAUS0012 (EN/032/20 Primary Work Only)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: JAMES MURDOCH		

Dates

Date Samples Received	: 28-Sep-2021 06:30	Issue Date	: 28-Sep-2021
Client Requested Due Date	: 29-Sep-2021	Scheduled Reporting Date	: **29-Sep-2021**

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 6.9' C STD
Receipt Detail	:	No. of samples received / analysed	: 13 / 13

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - EP202(solids) Phenoxyacetic acids	SOIL - S-16 TRH/BTEXN/PAH/OC/OP/PCB/8Metals
ES2134625-001	24-Sep-2021 00:00	STP-A.1	✓	✓	✓
ES2134625-002	24-Sep-2021 00:00	STP-A.2	✓	✓	✓
ES2134625-003	24-Sep-2021 00:00	STP-A.3	✓	✓	✓
ES2134625-004	24-Sep-2021 00:00	STP-B.1	✓	✓	✓
ES2134625-005	24-Sep-2021 00:00	STP-B.2	✓	✓	✓
ES2134625-006	24-Sep-2021 00:00	STP-B.3	✓	✓	✓
ES2134625-007	24-Sep-2021 00:00	STP-C.1	✓	✓	✓
ES2134625-008	24-Sep-2021 00:00	STP-C.2	✓	✓	✓
ES2134625-009	24-Sep-2021 00:00	STP-C.3	✓	✓	✓
ES2134625-010	24-Sep-2021 00:00	STP-C.4	✓	✓	✓
ES2134625-011	24-Sep-2021 00:00	STP-C.5	✓	✓	✓
ES2134625-012	24-Sep-2021 00:00	STP-C.6	✓	✓	✓
ES2134625-013	24-Sep-2021 00:00	STP-C.7	✓	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE AU

- A4 - AU Tax Invoice (INV)	Email	accountspayableau@slrconsulting.com

JAMES MURDOCH

- *AU Certificate of Analysis - NATA (COA)	Email	jmurdoch@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmurdoch@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmurdoch@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmurdoch@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmurdoch@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmurdoch@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmurdoch@slrconsulting.com

JULIE McDOWELL

- *AU Certificate of Analysis - NATA (COA)	Email	jmcdowell@slrconsulting.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jmcdowell@slrconsulting.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jmcdowell@slrconsulting.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jmcdowell@slrconsulting.com
- A4 - AU Tax Invoice (INV)	Email	jmcdowell@slrconsulting.com
- Chain of Custody (CoC) (COC)	Email	jmcdowell@slrconsulting.com
- EDI Format - ESDAT (ESDAT)	Email	jmcdowell@slrconsulting.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2134625**	Page	: 1 of 18
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: JULIE McDOWELL	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd PARAP 0820	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.30093 John Stokes Square Sewage Eastment (LOT 9017)	Date Samples Received	: 28-Sep-2021 06:30
Order number	: ----	Date Analysis Commenced	: 28-Sep-2021
C-O-C number	: ----	Issue Date	: 29-Sep-2021 16:42
Sampler	: JAMES MURDOCH		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 13		
No. of samples analysed	: 13		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP202: Particular samples required dilution due to matrix interferences. LOR values have been adjusted accordingly.
- EP202: Poor matrix spike recoveries for Clopyralid due to matrix effects.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP068: Positive results have been confirmed by re-extraction and re-analysis.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-A.1	STP-A.2	STP-A.3	STP-B.1	STP-B.2
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-001	ES2134625-002	ES2134625-003	ES2134625-004	ES2134625-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	1.3	3.2	5.8	5.2	5.4
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	<5	5	5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	26	18	22	26	35
Copper	7440-50-8	5	mg/kg	6	<5	<5	10	17
Lead	7439-92-1	5	mg/kg	10	9	8	8	7
Nickel	7440-02-0	2	mg/kg	4	3	3	<2	<2
Zinc	7440-66-6	5	mg/kg	6	6	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-A.1	STP-A.2	STP-A.3	STP-B.1	STP-B.2
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-001	ES2134625-002	ES2134625-003	ES2134625-004	ES2134625-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-A.1	STP-A.2	STP-A.3	STP-B.1	STP-B.2
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-001	ES2134625-002	ES2134625-003	ES2134625-004	ES2134625-005
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-A.1	STP-A.2	STP-A.3	STP-B.1	STP-B.2
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-001	ES2134625-002	ES2134625-003	ES2134625-004	ES2134625-005
				Result	Result	Result	Result	Result
EP080: BTEXN - Continued								
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP202A: Phenoxyacetic Acid Herbicides by LCMS								
4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
2.4-DB	94-82-6	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
Dicamba	1918-00-9	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
Mecoprop	93-65-2	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
MCPA	94-74-6	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
2.4-DP	120-36-5	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
2.4-D	94-75-7	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
Triclopyr	55335-06-3	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
2.4.5-T	93-76-5	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
MCPB	94-81-5	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
Picloram	1918-02-1	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
Clopyralid	1702-17-6	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
Fluroxypyr	69377-81-7	0.02	mg/kg	<0.02	<0.02	<0.02	<0.04	<0.04
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**104**	**92.8**	**100**	**83.4**	**93.2**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**110**	**96.4**	**102**	**92.3**	**97.9**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**108**	**102**	**116**	**114**	**121**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**81.0**	**98.1**	**88.8**	**96.9**	**102**
2-Chlorophenol-D4	93951-73-6	0.5	%	**80.8**	**96.9**	**85.4**	**93.1**	**92.0**
2.4.6-Tribromophenol	118-79-6	0.5	%	**57.2**	**71.1**	**71.0**	**58.8**	**78.1**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**98.2**	**99.2**	**93.1**	**99.2**	**99.5**
Anthracene-d10	1719-06-8	0.5	%	**93.5**	**81.7**	**97.0**	**95.2**	**111**
4-Terphenyl-d14	1718-51-0	0.5	%	**94.4**	**102**	**95.6**	**98.8**	**85.6**
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**119**	**115**	**115**	**113**	**103**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-A.1	STP-A.2	STP-A.3	STP-B.1	STP-B.2
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-001	ES2134625-002	ES2134625-003	ES2134625-004	ES2134625-005
				Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued								
Toluene-D8	2037-26-5	0.2	%	109	107	107	106	91.7
4-Bromofluorobenzene	460-00-4	0.2	%	96.2	96.0	96.3	93.9	83.3
EP202S: Phenoxyacetic Acid Herbicide Surrogate								
2.4-Dichlorophenyl Acetic Acid	19719-28-9	0.02	%	57.2	66.6	67.0	62.2	68.6

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-B.3	STP-C.1	STP-C.2	STP-C.3	STP-C.4
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-006	ES2134625-007	ES2134625-008	ES2134625-009	ES2134625-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	5.7	6.7	7.3	6.8	6.5
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	8	7	8	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	55	44	37	67	56
Copper	7440-50-8	5	mg/kg	16	9	8	8	8
Lead	7439-92-1	5	mg/kg	12	14	12	12	13
Nickel	7440-02-0	2	mg/kg	<2	2	2	4	6
Zinc	7440-66-6	5	mg/kg	<5	12	14	13	23
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-B.3	STP-C.1	STP-C.2	STP-C.3	STP-C.4
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-006	ES2134625-007	ES2134625-008	ES2134625-009	ES2134625-010
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	**0.05**	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-B.3	STP-C.1	STP-C.2	STP-C.3	STP-C.4
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-006	ES2134625-007	ES2134625-008	ES2134625-009	ES2134625-010
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-B.3	STP-C.1	STP-C.2	STP-C.3	STP-C.4
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-006	ES2134625-007	ES2134625-008	ES2134625-009	ES2134625-010
				Result	Result	Result	Result	Result
EP080: BTEXN - Continued								
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP202A: Phenoxyacetic Acid Herbicides by LCMS								
4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
2.4-DB	94-82-6	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
Dicamba	1918-00-9	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
Mecoprop	93-65-2	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
MCPA	94-74-6	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
2.4-DP	120-36-5	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
2.4-D	94-75-7	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
Triclopyr	55335-06-3	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
2.4.5-T	93-76-5	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
MCPB	94-81-5	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
Picloram	1918-02-1	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
Clopyralid	1702-17-6	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
Fluroxypyr	69377-81-7	0.02	mg/kg	<0.04	<0.02	<0.02	<0.02	<0.02
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**87.1**	**88.1**	**86.6**	**96.0**	**95.8**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**93.4**	**94.8**	**87.9**	**100**	**105**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**116**	**121**	**109**	**110**	**139**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**99.8**	**99.0**	**94.4**	**103**	**89.1**
2-Chlorophenol-D4	93951-73-6	0.5	%	**93.8**	**95.5**	**89.9**	**94.5**	**95.0**
2.4.6-Tribromophenol	118-79-6	0.5	%	**57.8**	**66.7**	**77.9**	**72.0**	**76.8**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**102**	**102**	**96.7**	**87.7**	**95.8**
Anthracene-d10	1719-06-8	0.5	%	**105**	**102**	**108**	**108**	**107**
4-Terphenyl-d14	1718-51-0	0.5	%	**108**	**99.2**	**106**	**99.0**	**101**
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**107**	**112**	**109**	**115**	**116**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-B.3	STP-C.1	STP-C.2	STP-C.3	STP-C.4
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00
Compound	CAS Number	LOR	Unit	ES2134625-006	ES2134625-007	ES2134625-008	ES2134625-009	ES2134625-010
				Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued								
Toluene-D8	2037-26-5	0.2	%	**98.8**	**105**	**105**	**108**	**108**
4-Bromofluorobenzene	460-00-4	0.2	%	**86.9**	**98.9**	**91.3**	**93.9**	**94.9**
EP202S: Phenoxyacetic Acid Herbicide Surrogate								
2.4-Dichlorophenyl Acetic Acid	19719-28-9	0.02	%	**66.3**	**78.7**	**77.4**	**65.3**	**65.4**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-C.5	STP-C.6	STP-C.7	----	----
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2134625-011	ES2134625-012	ES2134625-013	--------	--------
				Result	Result	Result	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**6.0**	**7.7**	**8.7**	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**7**	**8**	**7**	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	**51**	**32**	**53**	----	----
Copper	7440-50-8	5	mg/kg	**8**	**12**	**7**	----	----
Lead	7439-92-1	5	mg/kg	**19**	**17**	**12**	----	----
Nickel	7440-02-0	2	mg/kg	**3**	**4**	**4**	----	----
Zinc	7440-66-6	5	mg/kg	**28**	**29**	**16**	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	**0.05**	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-C.5	STP-C.6	STP-C.7	----	----
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2134625-011	ES2134625-012	ES2134625-013	--------	--------
				Result	Result	Result	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	**0.05**	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-C.5	STP-C.6	STP-C.7	----	----
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2134625-011	ES2134625-012	ES2134625-013	--------	--------
				Result	Result	Result	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-C.5	STP-C.6	STP-C.7	----	----
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2134625-011	ES2134625-012	ES2134625-013	--------	--------
				Result	Result	Result	----	----
EP080: BTEXN - Continued								
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	----	----
EP202A: Phenoxyacetic Acid Herbicides by LCMS								
4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
2.4-DB	94-82-6	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Dicamba	1918-00-9	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Mecoprop	93-65-2	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
MCPA	94-74-6	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
2.4-DP	120-36-5	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
2.4-D	94-75-7	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Triclopyr	55335-06-3	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
2.4.5-T	93-76-5	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
MCPB	94-81-5	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Picloram	1918-02-1	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Clopyralid	1702-17-6	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Fluroxypyr	69377-81-7	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**99.7**	**84.2**	**102**	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**105**	**90.7**	**85.9**	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**136**	**116**	**93.8**	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**85.6**	**94.1**	**91.5**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**86.1**	**91.7**	**89.1**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**63.8**	**64.5**	**62.6**	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**97.2**	**96.4**	**96.4**	----	----
Anthracene-d10	1719-06-8	0.5	%	**95.4**	**101**	**110**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**90.3**	**93.9**	**99.5**	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**118**	**114**	**117**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	STP-C.5	STP-C.6	STP-C.7	----	----
			Sampling date / time	24-Sep-2021 00:00	24-Sep-2021 00:00	24-Sep-2021 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2134625-011	ES2134625-012	ES2134625-013	--------	--------
				Result	Result	Result	----	----
EP080S: TPH(V)/BTEX Surrogates - Continued								
Toluene-D8	2037-26-5	0.2	%	**109**	**102**	**105**	**----**	**----**
4-Bromofluorobenzene	460-00-4	0.2	%	**95.7**	**91.2**	**95.8**	**----**	**----**
EP202S: Phenoxyacetic Acid Herbicide Surrogate								
2.4-Dichlorophenyl Acetic Acid	19719-28-9	0.02	%	**64.5**	**62.4**	**75.2**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130
EP202S: Phenoxyacetic Acid Herbicide Surrogate			
2.4-Dichlorophenyl Acetic Acid	19719-28-9	45	139

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2134625**	Page	: 1 of 12
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: JULIE McDOWELL	Contact	: Tyler Anderson
Address	: Unit 5 21 Parap Rd PARAP 0820	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: 680.30093 John Stokes Square Sewage Eastment (LOT 9017)	Date Samples Received	: 28-Sep-2021
Order number	: ----	Date Analysis Commenced	: 28-Sep-2021
C-O-C number	: ----	Issue Date	: 29-Sep-2021
Sampler	: JAMES MURDOCH		
Site	: ----		
Quote number	: EN/032/20 Primary Work Only		
No. of samples received	: 13		
No. of samples analysed	: 13		

ilac-MRA NATA
Accreditation No. 825
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3926284)									
ES2134625-009	STP-C.3	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	67	61	9.5	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	2	50.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	8	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	8	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	13	12	0.0	No Limit
ES2133910-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	3	3	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	8	15.2	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	72	78	7.2	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3925562)									
ES2134200-021	Anonymous	EA055: Moisture Content	----	0.1	%	14.7	14.8	0.0	0% - 20%
ES2134384-016	Anonymous	EA055: Moisture Content	----	0.1	%	14.9	13.4	10.9	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3926034)									
ES2134536-001	Anonymous	EA055: Moisture Content	----	0.1	%	9.2	9.4	2.1	0% - 20%
ES2134536-009	Anonymous	EA055: Moisture Content	----	0.1	%	15.6	15.0	4.1	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3926035)									
ES2134625-011	STP-C.5	EA055: Moisture Content	----	0.1	%	6.0	5.8	2.9	No Limit
ES2134797-005	Anonymous	EA055: Moisture Content	----	0.1	%	37.8	40.0	5.7	0% - 20%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3926287)									
ES2134625-009	STP-C.3	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2133910-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 3925636)									
ES2134625-001	STP-A.1	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2134625-011	STP-C.5	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3925635)									
ES2134625-001	STP-A.1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2134625-011	STP-C.5	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3925635) - continued									
ES2134625-011	STP-C.5	EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3925635)									
ES2134625-001	STP-A.1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2134625-011	STP-C.5	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3925635) - continued									
ES2134625-011	STP-C.5	EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3925634)									
ES2134625-001	STP-A.1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2134625-011	STP-C.5	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3925634) - continued									
ES2134625-011	STP-C.5	EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3925633)									
ES2134625-001	STP-A.1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2134625-011	STP-C.5	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3925652)									
ES2134625-001	STP-A.1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2134625-008	STP-C.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3925633)									
ES2134625-001	STP-A.1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2134625-011	STP-C.5	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3925652)									
ES2134625-001	STP-A.1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2134625-008	STP-C.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 3925652)									
ES2134625-001	STP-A.1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2134625-008	STP-C.2	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 3925652) - continued									
ES2134625-008	STP-C.2	EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QC Lot: 3925543)									
ES2134625-002	STP-A.2	EP202: 4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-DB	94-82-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Dicamba	1918-00-9	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Mecoprop	93-65-2	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: MCPA	94-74-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-DP	120-36-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-D	94-75-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Triclopyr	55335-06-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4.5-T	93-76-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: MCPB	94-81-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Picloram	1918-02-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Clopyralid	1702-17-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Fluroxypyr	69377-81-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
ES2134625-011	STP-C.5	EP202: 4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-DB	94-82-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Dicamba	1918-00-9	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Mecoprop	93-65-2	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: MCPA	94-74-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-DP	120-36-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-D	94-75-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Triclopyr	55335-06-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4.5-T	93-76-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: MCPB	94-81-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Picloram	1918-02-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Clopyralid	1702-17-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Fluroxypyr	69377-81-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3926284)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	102	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	88.5	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	101	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	98.6	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	90.3	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	94.9	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	88.6	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3926287)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	101	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 3925636)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	95.4	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 3925635)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	102	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	100	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.3	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.9	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	102	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	100	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	100	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.1	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	104	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	99.7	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	101	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	98.6	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3925635)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3925635) - continued								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	103	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	87.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	104	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	99.4	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	92.9	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.9	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.9	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.9	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	96.0	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.1	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.3	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	96.8	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	68.2	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3925634)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	94.0	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	106	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	99.9	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	101	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	107	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	90.1	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	93.0	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	94.5	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	94.1	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	97.6	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	92.6	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	102	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	95.4	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	90.6	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	90.8	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	105	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3925633)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	105	75.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3925633) - continued								
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	103	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	104	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3925652)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	104	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3925633)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	103	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	102	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	101	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3925652)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	106	68.4	128
EP080: BTEXN (QCLot: 3925652)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	110	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	103	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	99.2	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	100	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	100	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	81.5	63.0	119
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QCLot: 3925543)								
EP202: 4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.02	0.1 mg/kg	91.3	54.4	128
EP202: 2.4-DB	94-82-6	0.02	mg/kg	<0.02	0.1 mg/kg	95.3	45.5	130
EP202: Dicamba	1918-00-9	0.02	mg/kg	<0.02	0.1 mg/kg	99.2	51.7	135
EP202: Mecoprop	93-65-2	0.02	mg/kg	<0.02	0.1 mg/kg	99.0	60.0	130
EP202: MCPA	94-74-6	0.02	mg/kg	<0.02	0.1 mg/kg	94.8	56.8	131
EP202: 2.4-DP	120-36-5	0.02	mg/kg	<0.02	0.1 mg/kg	94.9	50.0	141
EP202: 2.4-D	94-75-7	0.02	mg/kg	<0.02	0.1 mg/kg	87.9	68.5	131
EP202: Triclopyr	55335-06-3	0.02	mg/kg	<0.02	0.1 mg/kg	99.1	50.8	141
EP202: 2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.02	0.1 mg/kg	88.5	40.8	126
EP202: 2.4.5-T	93-76-5	0.02	mg/kg	<0.02	0.1 mg/kg	95.9	57.4	139
EP202: MCPB	94-81-5	0.02	mg/kg	<0.02	0.1 mg/kg	94.5	38.9	137
EP202: Picloram	1918-02-1	0.02	mg/kg	<0.02	0.1 mg/kg	68.6	48.7	129
EP202: Clopyralid	1702-17-6	0.02	mg/kg	<0.02	0.1 mg/kg	57.1	49.4	106
EP202: Fluroxypyr	69377-81-7	0.02	mg/kg	<0.02	0.1 mg/kg	94.1	53.2	128

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3926284)							
ES2133910-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	103	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.6	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	97.4	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	93.8	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	99.7	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	96.8	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	121	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3926287)							
ES2133910-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	117	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 3925636)							
ES2134625-001	STP-A.1	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	104	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3925635)							
ES2134625-001	STP-A.1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	109	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	92.1	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	101	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	94.4	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	88.8	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	96.3	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3925635)							
ES2134625-001	STP-A.1	EP068: Diazinon	333-41-5	0.5 mg/kg	107	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	98.8	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	89.0	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	90.2	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	96.2	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3925634)							
ES2134625-001	STP-A.1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	98.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	101	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3925633)							
ES2134625-001	STP-A.1	EP071: C10 - C14 Fraction	----	480 mg/kg	114	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	108	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	111	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3925652)							
ES2134625-001	STP-A.1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	107	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3925633)							
ES2134625-001	STP-A.1	EP071: >C10 - C16 Fraction	----	860 mg/kg	114	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	107	53.0	131

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3925633) - continued							
ES2134625-001	STP-A.1	EP071: >C34 - C40 Fraction	----	890 mg/kg	119	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3925652)							
ES2134625-001	STP-A.1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	109	70.0	130
EP080: BTEXN (QCLot: 3925652)							
ES2134625-001	STP-A.1	EP080: Benzene	71-43-2	2.5 mg/kg	110	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	101	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	102	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	100	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	100	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	102	70.0	130
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QCLot: 3925543)							
ES2134625-002	STP-A.2	EP202: Mecoprop	93-65-2	0.1 mg/kg	98.6	60.0	140
		EP202: MCPA	94-74-6	0.1 mg/kg	94.8	57.0	143
		EP202: 2.4-D	94-75-7	0.1 mg/kg	89.9	68.0	139
		EP202: Triclopyr	55335-06-3	0.1 mg/kg	96.8	51.0	145
		EP202: 2.4.5-T	93-76-5	0.1 mg/kg	96.1	57.0	142
		EP202: Picloram	1918-02-1	0.1 mg/kg	53.3	49.0	138
		EP202: Clopyralid	1702-17-6	0.1 mg/kg	# 24.7	49.0	149

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2134625**	Page	: 1 of 8
Client	: **SLR Consulting Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: JULIE McDOWELL	Telephone	: +61 2 8784 8555
Project	: 680.30093 John Stokes Square Sewage Eastment (LOT 9017)	Date Samples Received	: 28-Sep-2021
Site	: ----	Issue Date	: 29-Sep-2021
Sampler	: JAMES MURDOCH	No. of samples received	: 13
Order number	: ----	No. of samples analysed	: 13

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP202A: Phenoxyacetic Acid Herbicides by LCMS	ES2134625--002	STP-A.2	**Clopyralid**	1702-17-6	24.7 %	49.0-149%	**Recovery less than lower data quality objective**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**----**	----	----	**28-Sep-2021**	08-Oct-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	23-Mar-2022	✓	**28-Sep-2021**	23-Mar-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	22-Oct-2021	✓	**28-Sep-2021**	22-Oct-2021	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	08-Oct-2021	✓	**28-Sep-2021**	07-Nov-2021	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	08-Oct-2021	✓	**28-Sep-2021**	07-Nov-2021	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	08-Oct-2021	✓	**28-Sep-2021**	07-Nov-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	08-Oct-2021	✓	**28-Sep-2021**	07-Nov-2021	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	08-Oct-2021	✓	**28-Sep-2021**	08-Oct-2021	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	08-Oct-2021	✓	**28-Sep-2021**	08-Oct-2021	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	08-Oct-2021	✓	**28-Sep-2021**	08-Oct-2021	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP202A: Phenoxyacetic Acid Herbicides by LCMS							
Soil Glass Jar - Unpreserved (EP202)							
STP-A.1, STP-A.2, STP-A.3, STP-B.1, STP-B.2, STP-B.3, STP-C.1, STP-C.2, STP-C.3, STP-C.4, STP-C.5, STP-C.6, STP-C.7	**24-Sep-2021**	**28-Sep-2021**	08-Oct-2021	✓	**28-Sep-2021**	07-Nov-2021	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	6	55	**10.91**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	SOIL	In house: LCMS (Electrospray in negative mode). Residues of acid herbicides are extracted from soil samples under the alkaline condition. An aliquot of the alkaline aqueous phase is taken and acidified before a SPE cleanup. After eluting off from the SPE cartridge, residues of acid herbicides are dissolved in HPLC mobile phase prior to instrument analysis.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Extraction for Phenoxy Acid Herbicides in Soils.	EP202-PR	SOIL	In-House: Alkaline extract followed by SPE clean up of acidified portion of the sample extract.

Preparation Methods	Method	Matrix	Method Descriptions
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

Greencap Pty Ltd
ABN: 76 006 318 010
Unit 11 Winnellie Central | 14 Winnellie Road
Winnellie NT 0820
Australia
T: 08 7906 1300

Report Date: Tuesday, 21/09/2021

Our ref: C120472:NT85146

John Mousellis
Mousellis & Sons Pty Ltd
GPO Box 4616
DARWIN NT 0801

Dear John,

Re: Asbestos Identification Analysis - 400m3 Stockpile

This letter presents the results of asbestos fibre identification analysis performed on 16 samples as received by Greencap on Friday, 17 September 2021. The samples were stated to be from 400m3 Stockpile.

All sample analysis was performed using polarised light microscopy, including dispersion staining and trace analysis in our Darwin Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation .

The analysis was completed on Tuesday, 21 September 2021.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact our Darwin laboratory.

Yours sincerely,
Greencap

Lulu Jones : Approved Identifier

Lulu Jones : Approved Signatory

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Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No. 5450, Site No. 24550 Darwin Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Sampling was not conducted by Greencap and is therefore outside the scope of our NATA accreditation.

Report Date: Tuesday, 21/09/2021 Our ref: C120472:NT85146

Site Location:	400m3 Stockpile		
	Sample ID	**Sample Location/Description/Weight or Size**	**Analysis Result**
1	NT85146 - 001	As received '1' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 827.6 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
2	NT85146 - 002	As received '2' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1102.3 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
3	NT85146 - 003	As received '3' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1219.4 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
4	NT85146 - 004	As received '4' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 922.4 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
5	NT85146 - 005	As received '5' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1228.3 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
6	NT85146 - 006	As received '6' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1496.2 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
7	NT85146 - 007	As received '7' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 873.5 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
8	NT85146 - 008	As received '8' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1492.4 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
9	NT85146 - 009	As received '9' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1191.7 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
10	NT85146 - 010	As received '10' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1905.2 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2

Report Date: Tuesday, 21/09/2021 Our ref: C120472:NT85146

Site Location:		400m3 Stockpile	
	Sample ID	**Sample Location/Description/Weight or Size**	**Analysis Result**
11	NT85146 - 011	As received '11' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1707.4 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
12	NT85146 - 012	As received '12' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1371.4 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
13	NT85146 - 013	As received '13' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1191.5 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
14	NT85146 - 014	As received '14' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1372.4 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
15	NT85146 - 015	As received '15' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1781.8 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2
16	NT85146 - 016	As received '16' Brown non-homogenous fine-grained soil, organic matter & rocks ~ 1548.3 gm	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1 & 2

*** Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.**
If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.

PLEASE NOTE The samples in this report are 'As Received'. Greencap does not take responsibility for the sampling procedure or accuracy of the sample location descriptions which have been provided by the client.

NOTE 1 The reporting limit for this non-homogeneous analysis is 0.1g/kg (0.01%). The above result can be interpreted that the sample contains no detectable 'respirable' asbestos fibres (AS4964-2004 Clause 9.5).

NOTE 2 Soil analysis conducted in accordance with WA Guidelines for the assessment, remediation and management of asbestos-contaminated sites (May 2009), Recommended procedures for laboratory analysis of asbestos in soil (June 2011) and NEPM Schedule B1: Guideline on investigation levels for soil & groundwater, Schedule B2: Guideline on site characterisation.
Recommendation of minimum 500mL sample have been analysed as per NEPM Guideline.
Results denoted with * is outside our scope of accreditation.

APPENDIX D

Phase 2 Air Quality Monitoring Reports

SLR Consulting Australia Laboratory Services - Darwin Office
ABN:29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-1
Date of Issue: Friday, 17 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
16/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
16/09/2021	AADZ-1	Control	1	11:55	16:20	265	2.00	2.00	2.00	100	1	<0.01
16/09/2021	AADZ-2	Control	2	11:56	16:19	263	2.00	2.00	2.00	100	2	<0.01
16/09/2021	AADZ-3	Control	3	11:57	16:18	261	2.00	2.00	2.00	100	N/A	N/A
16/09/2021	AADZ-4	Control	4	11:58	16:19	261	2.00	2.00	2.00	100	1	<0.01

Monitoring Locations:

0 Blank
1 Southeast end of excavation work area
2 Northeast end of excavation work area
3 Southwest end of excavation work area
4 Northwest end of excavation work area

Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.
3)Sample AAEE-3 rejected due to filter being obscured with dust.

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Approved Fibre Counter: Flynn Mackley
Approved Fibre Signatory: Paul Turyn

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T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-D2
Date of Issue: Saturday, 18 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
17/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
17/09/2021	AADZ-5	Control	1	07:27	15:30	483	1.00	1.00	1.00	100	0	<0.01
17/09/2021	AADZ-6	Control	2	07:28	15:32	484	1.00	1.10	1.05	100	1	<0.01
17/09/2021	AADZ-7	Control	3	07:29	15:34	485	1.00	1.10	1.05	100	1	<0.01
17/09/2021	AADZ-8	Control	4	07:30	15:35	484	1.00	1.00	1.00	100	2	<0.01

Monitoring Locations:

0 Blank
1 Southeast end of excavation work area
2 Northeast end of excavation work area
3 Northwest end of excavation work area
4 Southwest end of excavation work area

Notes:

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Approved Fibre Signatory: Paul Turyn

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-D3
Date of Issue: Tuesday, 21 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
20/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
20/09/2021	AADZ-9	Control	1	07:20	16:04	524	1.00	1.00	1.00	100	2	<0.01
20/09/2021	AADZ-10	Control	2	07:22	16:05	523	1.00	1.00	1.00	100	1	<0.01
20/09/2021	AADZ-11	Control	3	07:24	16:07	523	1.00	1.00	1.00	100	1	<0.01
20/09/2021	AADZ-12	Control	4	07:26	16:09	523	1.00	1.00	1.00	100	0	<0.01

Monitoring Locations:

0 Blank
1 Southwest end of excavation work area
2 Northwest end of excavation work area
3 Southeast end of excavation work area
4 Northeast end of excavation work area

Notes:

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Approved Fibre Signatory: Paul Turyn

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-4
Date of Issue: Thursday, 23 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
21/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
21/09/2021	AAEE-13	Control	1	07:20	16:35	555	1.00	1.00	1.00	100	2	<0.01
21/09/2021	AAEE-14	Control	2	07:21	16:35	554	1.00	1.00	1.00	100	2	<0.01
21/09/2021	AAEE-15	Control	3	07:24	16:33	549	1.00	1.00	1.00	100	0.5	<0.01
21/09/2021	AAEE-16	Control	4	07:25	16:34	549	1.00	1.00	1.00	100	1	<0.01

Monitoring Locations:

0 Blank
1 Southeast end of excavation work area
2 Northeast end of excavation work area
3 Southwest end of excavation work area
4 Northwest end of excavation work area

Notes:

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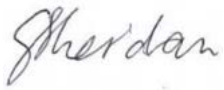
Approved Fibre Counter: Flynn Mackley
Approved Fibre Signatory: Gemma Sheridan



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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-5
Date of Issue: Thursday, 23 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
22/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
22/09/2021	AAEE-17	Control	1	07:20	16:18	538	1.00	1.00	1.00	100	1	<0.01
22/09/2021	AAEE-18	Control	2	07:21	16:19	538	1.00	1.00	1.00	100	2	<0.01
22/09/2021	AAEE-19	Control	3	07:24	16:20	536	1.00	1.10	1.05	100	1	<0.01
22/09/2021	AAEE-20	Control	4	07:25	16:20	535	1.00	1.00	1.00	100	1	<0.01

Monitoring Locations:

0 Blank
1 Southeast end of excavation work area
2 Northeast end of excavation work area
3 Southwest end of excavation work area
4 Northwest end of excavation work area

Notes:

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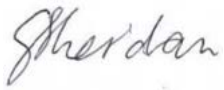
Approved Fibre Signatory: Gemma Sheridan



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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-6
Date of Issue: Friday, 24 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
23/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
23/09/2021	AAEE-21	Control	1	07:34	17:00		1.00	1.00	1.00	100	1	<0.01
23/09/2021	AAEE-22	Control	2	07:34	17:01		1.00	1.00	1.00	100	0	<0.01
23/09/2021	AAEE-23	Control	3	07:32	16:57		1.00	1.00	1.00	100	1	<0.01
23/09/2021	AAEE-24	Control	4	07:33	16:58		1.00	1.00	1.00	100	2	<0.01

Monitoring Locations:

0 Blank
1 Northeast of excavation work area
2 Northwest of excavation work area
3 Southeast of excavation work area
4 Southwest of excavation work area

Notes:
1) The results contained within this report relate only to the samples submitted for testing.
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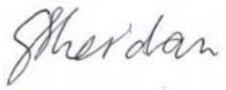
Approved Fibre Counter: Gemma Sheridan
Approved Fibre Signatory: Gemma Sheridan



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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-7
Date of Issue: Monday, 27 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
24/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
24/09/2021	AAEE-25	Control	1	07:18	16:19	541	1.00	1.00	1.00	-	-	N/A (see note 3)
24/09/2021	AAEE-26	Control	2	07:20	16:21	541	1.00	1.00	1.00	100	1	<0.01
24/09/2021	AAEE-27	Control	3	07:23	16:22	539	1.00	1.00	1.00	100	2.5	<0.01
24/09/2021	AAEE-28	Control	4	07:24	16:23	539	1.00	1.00	1.00	100	2	<0.01

Monitoring Locations:

0 Blank
1 East of work area, south side
2 West of work area, south side
3 East of work area, north side
4 West of work area, north side

Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.
3) Sample AAEE-25 rejected – filter obscured by grit

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Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-8
Date of Issue: Tuesday, 28 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
27/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
27/09/2021	AAEE-29	Control	1	07:40	16:36	541	1.00	1.00	1.00	100	1	<0.01
27/09/2021	AAEE-30	Control	2	07:41	16:37	541	1.00	1.00	1.00	100	0	<0.01
27/09/2021	AAEE-31	Control	3	07:44	16:38	539	1.00	1.00	1.00	-	-	N/A (see note 3)
27/09/2021	AAEE-32	Control	4	07:45	16:37	539	1.00	1.00	1.00	100	1	<0.01

Monitoring Locations:

0 Blank
1 Southeast of Lot B2 excavation
2 Southwest of Lot B2 excavation
3 Northeast of Lot B2 excavation
4 Northwest of Lot B2 excavation

Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.
3) Sample AAEE-31 rejected – filter obscured by grit

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Approved Fibre Signatory: Gemma Sheridan

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-9
Date of Issue: Wednesday, 29 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Time Off	Total (min)	Airflow (L/min) On	Airflow (L/min) Off	Airflow (L/min) Avg	Count Fields	Count Fibres	Conc'n (fibres/ml)
28/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
28/09/2021	AAEE-33	Control	1	07:30	15:39	489	1.00	1.00	1.00	100	0	<0.01
28/09/2021	AAEE-34	Control	2	07:30	15:38	488	1.00	1.00	1.00	-	-	N/A (see note 3)
28/09/2021	AAEE-35	Control	3	07:31	15:33	482	1.00	1.00	1.00	100	1.5	<0.01
28/09/2021	AAEE-36	Control	4	07:31	15:35	484	1.00	1.00	1.00	100	5	<0.01

Monitoring Locations:

0 Blank
1 Northeast of work area
2 Northwest of work area
3 Southeast of work area
4 Southwest of work area

Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.
3) Sample AAEE-34 rejected – filter obscured by grit

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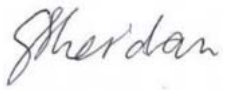
Approved Fibre Signatory: Gemma Sheridan



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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-10
Date of Issue: Thursday, 30 September 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
29/09/2021	**Blank**		0				N/A	N/A	N/A	100	1	N/A
29/09/2021	AAEE-37	Control	1	07:27	16:30	543	1.00	1.00	1.00	100	1	<0.01
29/09/2021	AAEE-38	Control	2	07:27	16:31	544	1.00	1.00	1.00	100	0	<0.01
29/09/2021	AAEE-39	Control	3	07:29	16:32	543	1.00	1.00	1.00	100	2	<0.01
29/09/2021	AAEE-40	Control	4	07:28	16:33	545	1.00	1.00	1.00	100	1	<0.01

Monitoring Locations:

0 Blank
1 Northeast of work area
2 Northwest of work area
3 Southeast of work area
4 Southwest of work area

Notes:

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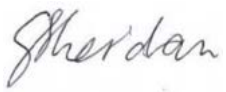
Approved Fibre Signatory: Gemma Sheridan



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http://www.slrconsulting.com

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Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-11
Date of Issue: Friday, 1 October 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
30/09/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
30/09/2021	AAEE-41	Control	1	07:29	15:40	491	1.00	1.00	1.00	100	0	<0.01
30/09/2021	AAEE-42	Control	2	07:29	15:40	491	1.00	1.00	1.00	100	0	<0.01
30/09/2021	AAEE-43	Control	3	07:30	15:38	488	1.00	1.00	1.00	-	-	N/A (see Note 3)
30/09/2021	AAEE-44	Control	4	07:30	-	-	1.00	-	-	-	-	N/A (see Note 4)

Monitoring Locations:

0 Blank
1 Northeast of work area
2 Northwest of work area
3 Southwest of work area
4 Southeast of work area

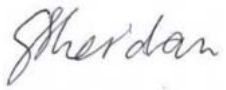
Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.
3) Sample AAEE-43 rejected – filter obscured by grit
4) Sample AAEE-44 rejected – pump failure

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025-Testing. This report cannot be reproduced except in full.

Approved Fibre Counter: Gemma Sheridan
Approved Fibre Signatory: Gemma Sheridan



SLR Consulting Australia Laboratory Services - Darwin Office
ABN:29 001 584 612
http://www.slrconsulting.com

Unit 5 21 Parap Road NT 0820
T: 61 8 8998 0100 F: 61 2 9427 8200

Airborne Asbestos Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

Reference: 680.30093.00000-AAEE-12
Date of Issue: Tuesday, 5 October 2021
Removal Contractor: Mousellis & Sons Pty Ltd
Job Location: John Stokes Square Redevelopment – 47 Progress Drive, Nightcliff NT 0810
Field Lab Address: N/A

Client: Halikos Group
Level 18/19 Smith St, Darwin City NT 0800

Date of Test	Sample Code	Type	Mon Loc'n	Time On	Off	Total (min)	Airflow (L/min) On	Off	Avg	Count Fields	Fibres	Conc'n (fibres/ml)
01/10/2021	**Blank**		0				N/A	N/A	N/A	100	0	N/A
01/10/2021	AAEE-45	Control	1	12:20	16:11	231	2.00	1.80	1.90	100	2	<0.01
01/10/2021	AAEE-46	Control	2	12:19	16:10	231	2.00	2.00	2.00	100	2	<0.01
01/10/2021	AAEE-47	Control	3	12:21	16:09	228	2.00	2.00	2.00	100	1	<0.01
01/10/2021	AAEE-48	Control	4	12:20	16:09	229	2.00	2.00	2.00	100	1.5	<0.01

Monitoring Locations:

0 Blank
1 Northwest of work area
2 Northeast of work area
3 Southwest of work area
4 Southeast of work area

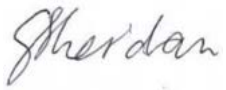
Notes:

1) The results contained within this report relate only to the samples submitted for testing.
2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.

NATA ACCREDITED LABORATORY NUMBER:3130

Accredited for compliance with ISO/IEC 17025-Testing. This report cannot be reproduced except in full.

Approved Fibre Counter: Flynn Mackley
Approved Fibre Signatory: Gemma Sheridan



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Appendix D

Client and Consultant Correspondence

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C1 16 March 2020

Ms Sinead Redmond
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics

Email: sinead.redmond@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Sinead,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

The following documents were reviewed:

- Agon Environmental (29 February 2020) Detailed Site Investigation, John Stokes Square, 47 Progress Drive, Nightcliff (ref. JF1006.DSI)

This letter details the main areas of works that require additional information or clarification. There will likely be additional minor editorial comments to be provided at a later date, however these items were considered a priority.

1) Source of ACM and AF/FA
   a) Previous discussions identified the source of the ACM to be formwork from the building foundations. Greencap report identified that this was not likely to be source as ACM was not observed adhered to the concrete. During inspection of the concrete stockpiles, was ACM observed adhering to the concrete?
   b) Testpits located away from the buildings also contaminated ACM. Is it possible that the ACM is from both imported contaminated fill and formwork from the building foundations?
   c) AF/FA has been identified by Greencap in the soil across the site. A review of the data has found that almost all samples were identified by the laboratory to be weathered cement sheeting, including >7mm, 2-7mm, and <2mm. Two samples of vinyl tiles were also identified. No other asbestos fines or fibrous asbestos has been identified in the laboratory reports; therefore the source of the asbestos is likely to be weathered and degraded ACM.
2) Appendix A1:
   a) The Greencap asbestos in soil calculations were done using a variety of 30%, 80% and 100% asbestos content, though no justification was given other than "based on laboratory assessment" though the laboratory certificates do not mention anything about asbestos content. The standard asbestos content for fibre cement is 15%. When the Greencap data is adjusted to reflect the standard 15% asbestos content (and 25% for vinyl tile as per Health and Safety Executive 'Asbestos: The survey guide, HSG264) only 1 sample exceeds the relevant criteria for AF (TP20, 0.0047%w/w). However, ACM was found in the following test pit logs but was not analysed at the laboratory or

reported as containing asbestos in the text of the report (TP36, TP46, TP55 and TP57) and may therefore also contain asbestos exceeding allowable levels. These areas will require inspection during civil works and then addressed under the unexpected finds process in the CEMP.

3) Section 9.5.1 (asbestos in soil remediation works)
   a) Please identify the 'three locations containing friable asbestos materials' that were disposed to landfill as asbestos contaminated waste, show on a figure, provide volume of soil disposed from each location, landfill dockets and observations during remediation (i.e. was there anything unique about this area or material to explain the contamination?).
   b) Please provide details of the lateral and vertical validation sampling or multiple lines of evidence justifying why this was not considered necessary.
4) Section 9.5.1 (Concrete crushing works)
   a) Please provide details of the segregation and clearance process of the material prior to crushing. For example, were only solid pieces of concrete crushed or were smaller pieces also crushed.
   b) Previous discussions identified old ACM formwork as a source of the ACM contamination of the site. What was done to ensure this material was not crushed or damaged in the mechanical sieve?
   c) Following crushing, the material was stockpiled and sampled. Please provide details of the volumes involved and sampling rates to assess if the sampling density met WA DoH validation density (1 per $70m^3$). Please provide details of the stockpiling and sampling methods to assess if representative samples were collected.
   d) 4 of 67 samples reportedly failed validation sampling. Was this material unique in any way? How was this material kept separate to avoid cross contamination? Please provide the calculation methodology for the samples 'Stockpile 2 Validation 17/10'
   e) The crushed concrete that passed validation sampling was reused in the commercial area. Was this material inspected when spread across the commercial area and if so, can a clearance certificate be provided?
   f) Where were the four uncrushed concrete stockpiles located and was the ground surface validated after their removal?
   g) Where was the mechanical sieve, concrete crusher and stockpiles located and has the ground surface been validated?
5) Road and reserve sampling
   a) Please clarify the extent of the road and reserve and area to be handed back to council. For example, does it include the substation, pedestrian areas, car park in the south west corner, etc. Showing the boundaries of this area on a figure with the sampling locations would assist.
   b) A high density of sampling has been undertaken across the site, but this has focused on areas outside of the road and road reserve with no samples collected from the road. Samples from within the road reserve (TP54) and immediately adjacent (TP39, TP40, TP42, TP43) have identified ACM, though all below acceptable levels. Therefore, if this area is to be handed back to City of Darwin unencumbered, it will require close supervision of civil works (down to natural soils) by a suitably qualified asbestos specialist and remediation and validation when asbestos is identified. The remediation will need to also remove locations of previously identified ACM.
   c) The proposed use of an asbestos unexpected finds protocol within a CEMP may be effective in meeting the previous point provided there is sufficient close supervision of civil works by a suitably qualified asbestos specialist to identify when ACM is observed. A copy of this protocol will need to be provided for review.
   d) If the above strategy is implemented successfully, it may be sufficient to ensure the area is free of known ACM and suitable for the proposed use without a post audit management plan or condition requiring the area capped. However, the only way to guarantee the area is completely free of ACM is for all fill materials to be removed, but I do not require this.
6) ACM has been identified in multiple locations across the site both on the surface and within the fill material. The ACM appears to be weathered, resulting in smaller fragments of ACM and release of

asbestos fibres. Over time, the ACM will continue to weather and potentially result in concentrations above allowance levels. As a precautionary measure, all areas not subject to the close supervision as per item 5c will need to be capped (i.e. permanent hardstand such as paving or building or cleanfill layer) or the fill removed.

7) As there is potential for ACM to be present within the fill across the site, a simple procedure will also be required during occupancy to identify the potential for encountering ACM when undertaking excavation works and what to do if asbestos is encountered. This would be written as a condition or recommendation in the audit report and audit statement rather than a management plan.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C2 24 April 2020

Ms Sinead Redmond
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics

Email: sinead.redmond@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Sinead,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I previously approved a strategy regarding the management of the construction works on Lot A (the police stations site). Following discussions with DIPL we understand that due to the identification of geotechnically unsuitable material during excavations and with the aim of further reducing the level of residual contamination, the proposed strategy has changed. I am supportive of undertaking additional works which will result in a lower level of long term risk to the community.

The following documents were reviewed:

- SLR (22 April 2020) Memorandum: Remediation Strategy, John Stokes Square – Lot A (ref. 680.30002.00000 Remediation Strategy 20200422.docx); and
- Email from SLR (23 April 2020) proposing changes to the sampling strategy due to material types being observed onsite and changes to the depth of excavation.

I provide the following comments:

1. General. Please note that weathered ACM and AF/FA has been identified in previous investigations at the site. How will this material be identified and managed, including risks to onsite workers and if mechanical screening is being used?
2. Section 5.2: Please provide additional detail on the proposed site supervision and how this ties into the objectives of the works. For example, if the objective is to ensure the fill is as completely free of asbestos as possible, then a higher level of supervision would be necessary than if the objective is to remove geotechnically unsuitable material and any asbestos observed with risks from any residual asbestos observed managed via capping, etc.
3. Section 5.3, Table 2:
   a) The sampling density is supported, but please note that EPA Publication IWRG702 also supports lower sampling densities in some circumstances.
   b) Please verify what 'substantial variability' means in terms of decision making on additional analysis.
   c) Where possible, please track and incorporate existing insitu data or include justification why this is not proposed.

d) Is it proposed to sample the existing crushed concrete? If not, it is recommended that some sampling for asbestos would be beneficial to verify the material is free of asbestos as previously reported.
e) Presume that standard NEPM/AS4482.1 QA/QC requirements will be complied with (i.e. duplicate sampling, etc).

4. Section 5.4. Will a broader analyte suite be necessary to facilitate waste classification and offsite disposal? Based on previous sampling, asbestos and OCPs are the key contaminants of concern and any further reduction in analysis should not apply to these contaminants.
5. Section 5.5. Please specify the criteria for ACM (this is specific to land use) and AF/FA.
6. Section 5.6. Please provide additional details regarding the airborne asbestos fibre monitoring such as the locations of monitors, duration of monitoring per day and flow rates to ensure compliance with NOHSC method, and whether personal or static.
7. If static monitoring at site boundaries, then it should be compliant with the DoH public health criteria of 0.01 f/mL.
8. How will the decision regarding material reuse on-site/reuse off-site/disposal be reported?
9. Will the footprint of the stockpile locations be validated?

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C3 27 May 2020

Ms Sinead Redmond
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics

Email: sinead.redmond@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Sinead,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I have been requested to review the proposed remediation strategy for the management of the remediation and construction works on Lot B1, B2 and B3 (the residential sites). Following discussions with DIPL we understand that due to the identification of geotechnically unsuitable material during excavations on the commercial lot (Lot A), and with the aim of further reducing the level of residual contamination, the original strategy was changed. I am supportive of undertaking additional works which will result in a lower level of long-term risk to the community.

The following documents were reviewed:

- SLR (14 May 2020) Memorandum: Remediation Strategy, John Stokes Square – Residential Lots (Lots B1, B2 and B3) (ref. Appendix J - DRAFT Remediation Strategy.docx); and
- Halikos Construction (May 2020) Construction Environmental Management Plan Revision 2.0, John Stokes Square, Broad Scale Site Remediation and Construction Preparation Works (ref. Broad Scale Remediation).

I provide the following comments:

Remediation Strategy

1. Section 1, last paragraph. The Agon reports have been reviewed and considered reliable with a note that we are resolving a minor issue regarding the crushed concrete stockpile sampling, reuse and disposal
2. Section 4. Please include NT EPA publications
3. Section 5.1,
   a) Paragraph 2. It should be noted that there is an increased risk of ACM in this material.
   b) Will SLR be inspecting the oversize screened material for ACM?
   c) Tracking of material should be documented and reported by SLR.
   d) Final paragraph. Given the previous identification of ACM and asbestos fines, these controls should be implemented from the start unless additional justification is provided.

4. Section 5.3. As per previous advice, please provide additional detail on the proposed site supervision and how this ties into the objectives of the works. For example, if the objective is to ensure the fill is as completely free of asbestos as possible, then a higher level of supervision would be necessary than if the objective is to remove geotechnically unsuitable material and any asbestos observed with risks from any residual asbestos observed managed via capping, etc.
5. Section 5.7. Air monitoring criteria should be public health (<0.01 f/mL) as monitoring is proposed on the site boundary, the occupational criteria (<0.1 f/mL) is only appropriate for workers.
6. The reuse of soil onsite is understood to be placed down in layers for compaction purposes and each lift is to be inspected for ACM by SLR with a clearance certificate issued for each lift. If ACM is observed, it will need to be removed and validated. Please note that this was the agreed approach for the commercial area, but we understand that this was not undertaken. This process provides an important extra check for ACM and needs to be undertaken for the residential allotments.
7. How will the decision regarding material reuse on-site/reuse off-site/disposal be reported?
8. Due to current COVID-19 travel restrictions, please include photographic record of the works.
9. If unexpected contamination is identified, please call to discuss the management strategy.

Construction Environmental Management Plan (CEMP)

The CEMP details the objectives, key performance indicators and targets, and environmental management measures to be implemented during the remediation and construction works. This includes erosion and sedimentation, dust and air quality, soil, waste, and asbestos management amongst other things. It also details training, including induction training for workers.

1. Due to the presence of asbestos please ensure the site is fenced if this is not already done.
2. Please include an unexpected finds protocol.
3. Appendix I.
    a. The investigations to date have identified asbestos in soil which is understood to remain onsite. The AMP should be revised to reflect this and any other associated implications.
    b. Section 8 proposes a weekly 2 hours inspection for asbestos, this is not consistent with the remediation strategy.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C4 1 June 2020

Ms Sinead Redmond
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics

Email: sinead.redmond@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Sinead,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I have been requested to review the proposed sampling and analysis quality plan for the road reserve and Lot C as documented in:

- SLR (22 May 2020) Sampling, Analysis and Quality Plan, Detailed Site Investigation, John Stokes Square (ref. 680.10679-R01-v2.0).

The SAQP is accepted, subject to inclusion of the following comments:

1. Section 5 states that test pits will be excavated to mechanical refusal (estimated to be approximately 1 mbgl), though Table 4 states "samples will be collected …surface, 0.5mbgl, 1.0 mbgl, and every metre thereafter until target depth, intersected groundwater or auger/excavator refusal". Please note that all sampling locations should extend a minimum of 0.5m in to natural soils;
2. Section 8.5, 3rd and 4th dot points. Please ensure ACM identified during field sieving is to be weighed to enable a concentration calculations;
3. Table 5. 1. Due to identified ACM at the site, the fill at each location should be sieved and tested for ACM. Please include pH, CEC, etc to allow for calculation of EIL/ESLs;
4. Section 10. Please include data from relevant sampling locations by Agon and Greencap; and
5. General. Please photograph each test pit and include in the report as we currently can not travel to observe the investigation works.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C5 4 June 2020

Ms Sinead Redmond
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics
Email: sinead.redmond@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Sinead,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I have been requested to review the following revised documents:

- SLR (3 June 2020) Memorandum: Remediation Strategy, John Stokes Square – Residential Lots (Lots B1, B2 and B3) (ref. 680.10679.00000-M04-v2.0);
- Halikos Construction (June 2020) Construction Environmental Management Plan Revision 3.0, John Stokes Square, Broad Scale Site Remediation and Construction Preparation Works (ref. Broad Scale Remediation v3.0); and
- SLR (3 June 2020) Sampling, Analysis and Quality Plan, Detailed Site Investigation, John Stokes Square (ref. 680.10679-R01-v3.0).. If no a

The above documents have been revised based on comments provided in audit review letter C3 (dated 27 May 2020) and C4 (dated 1 June 2020). The revised reports have addressed the comments and are considered acceptable with the following notes:

- SLR SAQP - Note that Figure 3 is missing and should be included when; and
- SLR SAQP – If no asbestos is observed within the fill materials, please still continue to collect a jar sample for potential asbestos analysis but hold off analysis as proposed. This will provide us the opportunity to undertake the analysis should it be necessary at a later date.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C6

19 August 2020

Ms Sinead Redmond
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics
Email: sinead.redmond@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Sinead,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I have been requested to review the following document:

- SLR (14 July 2020) Detailed Site Investigation, John Stokes Square Development – Road Reserve and Lot C (ref. 680.10679-R03-v1.0);

The road reserve and Lot C sampling program appears to have been implemented in accordance with the approved SAQP. I provide the following notes for inclusion in the final report:

- Appendix D – laboratory certificate of analysis are missing for samples from TP25 to TP35.
- Appendix E – Sample results are missing for TP26 from Table 1, several sample results are missing from Table 5.

In either the RAP, a revised DSI or overall completion report for the site, we will need figures and tables consolidated all of the data from the various site investigations along with details of samples characterising the final site condition upon which we will base our opinion of site suitability.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C7 19 August 2020

Ms Sinead Redmond
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics
Email: sinead.redmond@hksolutions.com.au

Auditor Advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Sinead,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I have been requested to review the following document:

- SLR (7 August 2020) Remediation Action Plan, John Stokes Square Redevelopment, Road Reserve and Lot C (ref. 680.10679-R04-v4.0).

The RAP was discussed at a teleconference between SLR, DIPL, HK Solutions and AEA on 17 August 2020, with further details to be provided. The RAP details the remedial strategy for the remediation of the identified 'known asbestos impact area' which covers a small portion of the overall road reserve and Lot C area. The RAP also covers the removal of services. It is understood from the teleconference that the asbestos impacted area and all services will be dug up under asbestos conditions. During removal of all existing services, the excavation trenches will be inspected to determine if any asbestos is present within the material. To ensure adequate characterisation has been achieved, the extent of the services removed will be mapped against the previous investigation locations. If there are any areas that have not been assessed, additional investigation trenches will be completed, and the material inspected. Where any asbestos is identified, this material will be removed under asbestos remediation conditions.

Our current understanding of the site is that the asbestos within the road reserve and Lot C is isolated to the known asbestos impacted area. If during the above works, asbestos is found to be more widespread, then additional remediation works would be necessary, such as the excavation and abatement/disposal of all fill materials within this area.

If further widespread asbestos is not found, then it would be appropriate to proceed with the civil works.

The civil works within the road reserve and Lot C will need to be undertaken under a Construction Environmental Management Plan (CEMP) with appropriate controls in place to protect the site workers from asbestos and unexpected finds protocol.

As discussed at the meeting, there is an element of risk to the project that some asbestos within the road reserve and Lot C may not be identified during the remedial and investigative works and that asbestos may be encountered during civil works. If asbestos is identified during civil works, it is understood that the works in that area will cease, and a suitably experienced environmental consultant/hygienist will be

engaged to advise the process. If asbestos is identified in multiple areas during civil works a strategy may need to be formulated to address the removal, such as further removal of fill materials.

A separate environmental audit report and accompanying statement/certificate will be provided for the road reserve and Lot C following completion of the civil works to allow the auditor to provide ongoing audit services in case of unexpected finds during civil works.

Please update the remediation plan to reflect the above or give us a call to discuss.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C15 28 April 2021

Mr Tony Hopkinson
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics
Email: tony.hopkinson@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Tony,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I have been requested to review the following document:

- SLR (25 February 2021) Validation Report, John Stokes Square Redevelopment – Lot A (ref. 680.10679-R02-v1.0).

The report is well written and appears reliable for the work undertaken, subject to addressing the following comments:

1. Please include an executive summary.
2. When analysing soil for asbestos (AF/FA) in line with WA DoH guidelines a 500mL (minimum) sample should be provided to the laboratory analysis. It appears that this may not have always been done. Please provide lines of evidence as to why this is acceptable.
3. Previous environmental investigations have been briefly summarised. However, I need consolidated data from all investigations (where sample locations remain following remediation, including historical, validation, stockpiles, imported fill), with details of samples characterising the final site condition. It should also include a table of all suspected material remaining onsite if there is residual uncertainty - i.e. fate of some stockpiles, etc. The other areas may be able to avoid this requirement due to the extensive remediation works undertaken, but as this area has had less remediation completed, incorporation of previous environmental data may be necessary.
4. The deviations to the proposed remediation strategy identified some residual issues regarding the reuse of crushed concrete and potential reuse of impacted soil, and lack of documentation regarding the methodology of reuse or inspection. Please clarify the level of involvement by SLR. As SLR was not present during reinstatement of the screened spoil, additional information will be required by the contractor detailing the inspection and observations of potential ACM during the reinstatement of the screened material.
5. Section 4.1. Was the excavated surface still fill material or natural soil? Was the base and walls of the excavation inspected prior to backfill? Were any underground services encountered or removed and what is the likelihood of any remaining? Please provide additional detail regarding the removal and backfill of any trenches.
6. Section 4.2. Please show 'VAL-A' on a figure.

7. Section 4.3. Additional information is required to determine if the soil stockpiles that reported asbestos concentrations were reused onsite. Therefore documentation regarding any material disposed to landfill, dates and volumes of disposal and disposal dockets and a reconciliation against the impacted stockpiles and volumes would assist in determining if any impacted material was reused.
8. Section 4.3. What volume of material was imported to site?
9. Section 4.3. Imported fill was sourced from a defence site without the auditors knowledge and without the ability to conduct sampling to verify the presence/absence if PFAS contamination. Therefore the PFAS may potentially be present in this material and if the material is to be removed from the site, the material will need to be assessed as per waste characterisation requirements, though the analyte suite will need to include PFAS. The risk to human health and the environment from the PFAS is unlikely to present a risk to proposed site use.
10. Figure – please include a conceptual site model with hydrogeological cross section characterising the final site condition. Either a single plan for the entire site would be sufficient or a CSM for each area.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C15a 16 September 2021

Mr Tony Hopkinson
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics
Email: tony.hopkinson@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
47 Progress Drive, Nightcliff, Northern Territory

Dear Tony,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

I have been requested to review the following revised report and spreadsheet in response to Auditor review letter C15 (dated 28 April 2021):

- SLR (24 August 2021) Validation Report, John Stokes Square Redevelopment – Lot A (ref. 680.10679-R02-v2.0); and
- Response spreadsheet (ref. 680.10679.00100-R02-v1.0 Response to Auditor Comments).

The revised report has addressed the majority of our previous comments with the following comments requiring resolution split between those applicable to SLR and those applicable to the Contractor.

Contractor

Previous Comments:

- *The deviations to the proposed remediation strategy identified some residual issues regarding the reuse of crushed concrete and potential reuse of impacted soil, and lack of documentation regarding the methodology of reuse or inspection. Please clarify the level of involvement by SLR. As SLR was not present during reinstatement of the screened spoil, additional information will be required by the contractor detailing the inspection and observations of potential ACM during the reinstatement of the screened material.*
- *Section 4.3. Additional information is required to determine if the soil stockpiles that reported asbestos concentrations were reused onsite. Therefore documentation regarding any material disposed to landfill, dates and volumes of disposal and disposal dockets and a reconciliation against the impacted stockpiles and volumes would assist in determining if any impacted material was reused.*
- *Section 4.3. What volume of material was imported to site?*

SLR has reported on items that they were involved in which is acceptable. However, we require resolution of the following from the Contractor:

1. SLR Exec Summary: *The Civil Contractor reinstated and compacted the excavated areas at the Site without the presence of a SLR Consultant as required in the remediation strategy. Subsequently visual clearance of the surface of each compacted lift during reinstatement of the excavated areas could not be provided.* Did the contractor observe any demolition waste or potential asbestos containing material during their works that were not subsequently removed and how attentive was the contractor during this process?
2. SLR Exec Summary: *Further assessment was recommended by SLR to determine if stockpiled crushed concrete could be reused onsite from a contamination perspective, or at least receive advice/endorsement from the CLA that previous investigation works conducted on this material was sufficient to enable its reuse. The material was reused at the Site without being resampled, prior to CLA advice or endorsement being received. Based on the stockpile characterisation results, SLR recommended further segregation works be undertaken for three stockpiles to ensure their suitability for reuse on Site. As SLR did not receive information from the Civil Contractor on the methodology that they used to reinstate the excavations using stockpiled spoil and/or crushed concrete, it is unclear if the recommended further segregation works were completed.* Contractor to advise if segregation occurred and the location and depth (below base on concrete slab) the material was reused.
3. Please advise of the approximate volume of imported soil from the Larrakeyah Defence Base and the location/depth used.

SLR

Previous Comment: *Section 4.1. Was the excavated surface still fill material or natural soil? Was the base and walls of the excavation inspected prior to backfill? Were any underground services encountered or removed and what is the likelihood of any remaining? Please provide additional detail regarding the removal and backfill of any trenches.* SLR Response: *The final excavation at the Site had an area of approximately 3,620 m2 and generally extended down into the natural red soils to a maximum depth of 0.3 m.*

A. Given Lot A has an area of 3,619 m^2 – the entire footprint was Lot A was excavated. Is this correct?
B. Was the entire Lot A excavated to natural or were there residual fill materials in the base and if so, did the fill materials contain asbestos or construction and demolition wastes? From our discussions with SLR, the geotechnically unsuitable fill material contained the vast majority of the asbestos and all of this fill was removed from Lot A. The final surface comprised the red natural soils which would be a combination of reworked natural and virgin natural soils with no known residual asbestos within these soils. If this is correct, please amend to provide this type of clarification within the report.
C. When the excavation face around the boundary of Lot A was inspected, were any asbestos or construction and demolition wastes observed?
D. Are there any known or potential residual underground services beneath Lot A that could contain asbestos within the fill or asbestos containing services (water pipes, Telstra pits, etc)?

SLR Exec Summary: *Due to deviations from the remediation strategy, SLR does not have sufficient evidence to provide comment on the suitability of material blended and used to backfill the excavated areas within Lot A.*

E. Please calculate the weighted average for the stockpiles assuming the material was reused onsite without removal of the asbestos to help demonstrate the quantum of risk involved for future workers.

SLR Exec Summary: *Likewise, any persons conducting future excavations at the Site (Lot A) may encounter asbestos impacted soils or fragments of ACM debris, if asbestos impacted material was used to*

backfill/reinstate excavated areas within Lot A. As a precautionary measure the following should be included in the workplans of any persons/contractor conducting excavation works at the Site (Lot A) to ensure appropriate controls are implemented in the event unexpected asbestos is encountered.

· Asbestos management plan

· Unexpected finds protocol

· Associated training.

F. Is SLR recommending an asbestos management plan for the site or for the contractor undertaken excavation works to prepare the plan for their specific works? I.e. is it a 'Site' asbestos management plan or a 'Contractor's" asbestos management plan? In your response, please advise how this aligns with WA DOH Asbestos Guidelines and WH&S requirements.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C16 28 April 2021

Mr Tony Hopkinson
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics
Email: tony.hopkinson@hksolutions.com.au

DRAFT Auditor advice
John Stokes Square Redevelopment
Lot A
47 Progress Drive, Nightcliff, Northern Territory

Dear Tony,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

As part of my role as auditor, I have reviewed the characterisation, remediation and validation of Lot A (the site), being developed at John Stokes Square. Several phases of investigation were completed which identified asbestos within fill material across the site. The majority of the fill material on the site was progressively excavated, inspected during excavation for asbestos. The soil was screened and stockpiled and any material containing asbestos was to be removed from the site an accredited landfill facility. The reporting provided by SLR has left some uncertainty whether the asbestos impacted material was removed or reinstated with the validated fill material. Additionally, the reinstatement was not inspected by an environmental consultant to provide any clearance that asbestos was not placed back down onto the site. Therefore I am not able to verify if any asbestos remains at the site. However, assuming some asbestos was reinstated, I believe the risk of any human receptors being exposed to this material being is likely to be low if covered by the presence of permanent hardstand or 0.5m of verified asbestos free material. Please confirm the final built form/site coverings, clean fill thickness, etc.

Although there is no known asbestos onsite, there is the potential for residual asbestos to be present as noted above and within the SLR report. It is therefore warranted that an unexpected find protocol be implemented for any subsurface works, to say that asbestos may be encountered if digging. I will likely need to make a notation to this effect in the audit determinations/conditions.

Imported fill was sourced from a defence site without the auditors knowledge and without the ability to conduct verification sampling to determine if PFAS was present, acknowledging the waste classification report noted that known PFAS contamination was segregated. Therefore, PFAS may potentially be present in this material, but at levels that are unlikely to present a risk to human health or the environment at the site. As the imported fill may contain PFAS, any soil removed from this portion of the site may need to include PFAS within the waste classification sampling. This does not apply to other areas of the site (i.e. Road Reserve) unless the imported fill was reused in other areas of the site – please advise.

Regarding my determination of site suitability, I am only permitted to provide this determination within my Environmental Audit Report and accompanying Certificate or Statement of Environmental Audit. However, based on current information and subject to review of the updated SLR report, I am not aware of

contamination issues that would preclude the proposed development, subject to maintaining the surface covering noted above. Due to the uncertainty around the material reinstated following the remediation and validation activities that were completed, specifically the uncertainty around the placement of fill material potentially impacted with asbestos, the site may not be suitable for residential development without additional assessment. The need for these restrictions will be reviewed based on the updated SLR report.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

AUSTRALIAN
ENVIRONMENTAL AUDITORS

AEA Ref: EA0729-C17 3 November 2021

Mr Tony Hopkinson
Project Management Lead, HK Solutions
On behalf of Department of Infrastructure, Planning and Logistics
Email: tony.hopkinson@hksolutions.com.au

Auditor advice
John Stokes Square Redevelopment
Lot A and completed portion of Road Reserve
47 Progress Drive, Nightcliff, Northern Territory

Dear Tony,

I have been commissioned to conduct an environmental audit of the abovementioned site in accordance with Section 53X of the Environment Protection Act 1970 (Vic), pursuant to Part 6 of the Northern Territory's Waste Management and Pollution Control Act.

The audit is in the process of completion with the site investigation and remediation works completed, but awaiting finalisation of your consultants reports before we can complete population of our environmental audit report and statement of environmental audit/

I understand that the police station (Lot A) and the completed northern portion of the road reserve will be utilised prior to completion of the audit. Whilst this is unusual and use is not at our risk, I consider the risk to be minimal for the following reasons:

- The site investigations have identified that the key contaminant of concern is limited to asbestos within fill materials and former underground services (pipes and pits).
- Within Lot A, the majority of the asbestos contaminated fill has been excavated and disposed of offsite. However, there is potential for asbestos to remain within residual reworked natural soils, redundant underground services, and potentially within the backfill material. Based on the environmental works undertaken during investigation and remediation of the site, the potential for residual asbestos is considered low, however as the removal of asbestos within the stockpiles can not be verified it is considered that there is potential for asbestos in the form of ACM and AF/FA to remain within soils and infrastructure onsite. The entire site is covered by concrete, as such there is no exposure risk to site users (i.e. visitors and workers) while this concrete is in place. In the event that subsurface works are required below the concrete, then controls should be implemented on the basis that the workers may encounter ACM in the soils or ACM infrastructure.
- Within the northern portion of the road reserve, all known asbestos has been excavated and disposed of offsite. We have been advised that all of the fill materials within the entire road reserve have been excavated and any identified asbestos removed from site along with removal of all asbestos underground services, with documentation to demonstrate this yet to be finalised. The potential for residual unknown asbestos is therefore considered low. The road reserve comprises bitumen road, concrete foot path and pockets of inground gardens (with at least 0.5m of clean fill present above residual soils), as such there is no exposure risk to site users (i.e. visitors and workers) while these are in place. In the event that subsurface works are required, then controls

should be implemented on the basis that the workers may encounter ACM in the soils or ACM infrastructure, until such time as the Auditor consider documentation proves that this is not necessary.

Please note that this is not a determination of site suitability, as I am only permitted to provide this determination within my Environmental Audit Report and accompanying Certificate or Statement of Environmental Audit. Rather, this is an opinion on the human health risk from site contamination.

Please contact me if you have any questions regarding this letter.

Regards,

Australian Environmental Auditors

Jean Paul Pearce

EPA Appointed Environmental Auditor (Contaminated Land)

NOTIFICATION OF REQUEST TO ISSUE A CERTIFICATE OF ENVIRONMENTAL AUDIT

21 November 2019
Manager – Environmental Audit
NT EPA
GPO Box 3675
Darwin NT 0801
c/o Christopher.coombes@nt.gov.au

I, Jean Paul Pearce, a person appointed as an environmental auditor (contaminated land) by the Environment Protection Authority under s. 53S of the *Environment Protection Act 1970* (Vic.) and in accordance with Part 6 of the Northern Territory's Waste Management and Pollution Control Act, have been requested to issue a certificate of environmental audit for the site; 47 Progress Drive, Nightcliff; Northern Territory. Details are as follows.

Auditor	Jean Paul PEARCE
Auditor account number	101292
Auditor appointment end date	26 November 2022
Auditor's appointment category	CL
Audit Type	53X (site suitability audit)
Name of person requesting audit	Ms Sinead Redmond Project Management Lead Northern Territory Department of Infrastructure, Planning and Logistics Land Development Unit sinead.redmond@hksolutions EPA customer account number (if available). – n/a
Relationship of person requesting audit to site	Authorised representative of site owner
Name of premises owner	DIPL Representative Project Manager
Date of auditor engagement	20/11/2019
Proposed completion date of the audit	1/04/2020
Reason for audit	Due to the identified pesticide and asbestos contamination, we understand EPA has required an Auditor to determine the site is suitable for use;
Audit categorisation	Risk
Environmental Segments	Air, Land, Groundwater, Surface water
If the audit was required by an EPA notice, licence or other, please provide EPA service order number	n/a
Current land use zoning	Zone MR (Medium Density Residential)
EPA Region	Darwin
Municipality	Nightcliff
Dominant Lot on title plan	Lot 9077 Town of Nightcliff
Additional Lot on title plan(s)	
Site/Premises name	John Stokes Square Nightcliff Development
Building/complex sub-unit/Lot No.	--
Street/Lot – Lower No.	47
Street/Lot – Upper No.	
Street Name	Progress,
Street type (road, court, etc)	Drive

Street suffix (North, South etc)	--
Suburb	Nightcliff
Postcode	0810
GIS Coordinate of Site centroid[1] Latitude (GDA94)	-12.388587°
Longitude (GDA94)	130.850751°
Site area (in square metres)	18,900 m^2
Plan of site/premises showing the audit site boundary attached	Yes
Plan of site/premises showing the audit site boundary attached in a spatial data format	No
Proposed support team	Shandel Coleman (internal audit support).
Is this audit report a combined audit and site assessment report?	No

In notifying NT EPA of this request to perform a Contaminated Land Audit, I state that:

- I am not aware of any conflict of interest, which would preclude me from issuing a Certificate or Statement of Environmental Audit for the above site.
- I have not had prior involvement in any assessment or clean-up works at the site, which would preclude me from issuing a Statement of Environmental Audit for the site.

Yours sincerely,

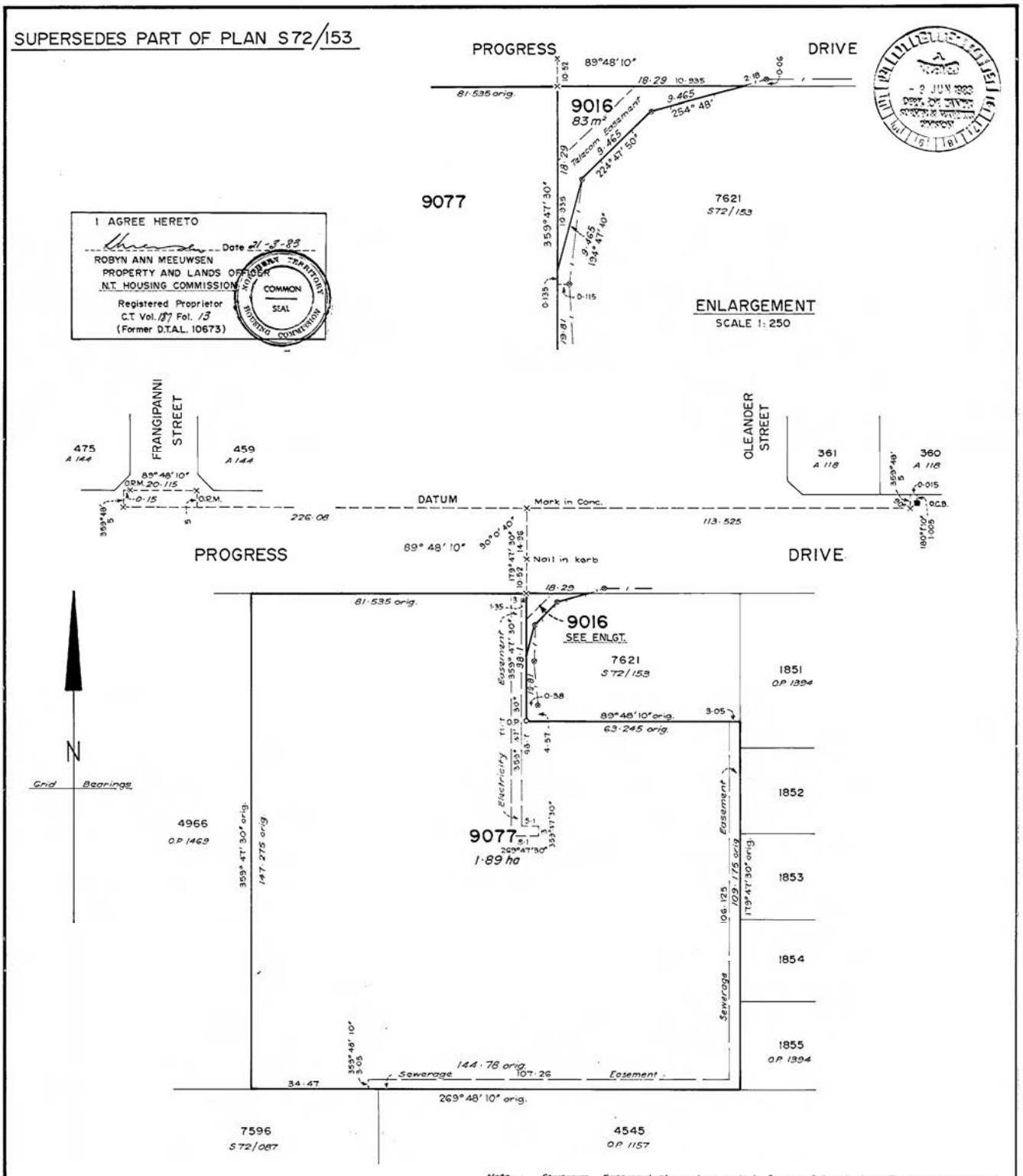
Signed: _____

Jean Paul PEARCE

ENVIRONMENTAL AUDITOR

(APPOINTED PURSUANT TO *THE ENVIRONMENT PROTECTION ACT 1970*)

[1] Longitude and latitude (decimal degrees) coordinates in the 1994 Geocentric Datum of Australia (GDA94) is required to six decimal places.



Note : Sewerage Easement shown hereon is in favour of the Northern Territory of Australia.
Electricity Easement shown hereon is in favour of the Northern Territory Electricity Commission.
Telecom Easement shown hereon is in favour of the Australian Telecommunications Commission.

METRES 20 0 20 40 60 80

No	REFERENCE	DETAILS	APPROVED	DATE
2	File LTO 83/10 folio 27	Telecom Easement added to Lot 9016		23/9/83
1	File LTO 83/10 folio 27	Electricity Easement added to Lot 9077		23/9/83

AMENDMENTS

SURVEYOR'S CERTIFICATE

I, COLIN JOHN JONES
hereby certify that the survey represented on this plan was carried out by me or under my immediate supervision and was completed on 2 February 1983 and that this survey has been executed in accordance with the Licensed Surveyors Act and the Regulations thereunder.

Licensed Surveyor 28/2/83 Date

File No L.T.O. 83/10
Field Book No L.T.O. 83/10
Drawn by S.M. Willshire 9-2-83
Charted on I.P. DARWIN 2500 SHEET 30-27
Examined by W Schneider 14-7-83
Charted on P.P. DARWIN 2500 SHEET 30-27

SURVEY MAPPING

SURVEY APPROVED

Surveyor-General 11·8·1983 Date

PASSED

CHIEF DRAFTSMAN (T) 11·8·83 Date

LOTS 9016 AND 9077
SUBDIVISION OF LOT 7622
TOWN OF NIGHTCLIFF

HUNDRED OF BAGOT COUNTY OF PALMERSTON

LEGEND
Concrete Block
Concrete Post
Wooden Post, Peg or Stake O
Reference Mark X
Lockspit
Fence Post

AZIMUTH
A Assumed from S72/153
B Observed at
Latitude Datum

SCALE
1 : 750

L.T.O. 83/10

COPY TO L.T.O. 12-8-83 AMENDED COPY TO LTO 30·9·83 N/N 2254

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+61 8 7918 7807
enquiries@agonenviro.com.au
A.B.N. 29 167 746 063

13 August 2021

Jean-Paul Pearce

Contaminated Sites Auditor

Australian Environmental Auditors

Dear Jean-Paul,

RE: Inspection of John Stokes Square Development Site, 12 August 2021

The following presents a photolog and notes collected during the Site Inspection of the John Stokes Square redevelopment, on 12 August 2021, undertaken on behalf of Australian Environmental Auditors.

The inspection focussed on the non-residential areas, comprising the Police Station, Road Reserve (Open Space), and Parking Area.

POLICE STATION

The Police Station development is 99% complete, with commissioning and connection of services, and Progress Drive frontage landscaping (external to the audit area) the only outstanding works.

The entire Site is sealed, with external concrete apron surrounding the entire building within the compound, with no internal landscaping features/ exposed soils.

Plate 1 **Police Station frontage along Progress Drive, with exposed soils for frontage landscaping (understood to be external to the audit area).**

Plate 2 **Police Station frontage along Progress Drive, with sealed concrete surfaces extending south through compound along western portion.**

Plate 3 **View looking west into Police Station compound, with sealed concrete surfaces along southern portion.**

ROAD RESERVE

Key observations:

- The majority of the underground infrastructure/ services (stormwater, electrical, etc.) have been installed, with most connection points still exposed pending connections, pit/ manhole install.
- The construction of road along the eastern portion is underway, with a large portion of the ground improvement works complete in the area, and spreading and compaction of imported aggregate base course underway. Appeared significant soil removal works had occurred along the road alignment to reach design levels (with levels below the adjacent landscaping area along the eastern strip).
- Ground works, comprising excavation to box out for landscaping, is still progressing along the western portion. Inspection of a boxed out area observed:
    - A fill layer of approximately 150mm.
    - No foreign materials observed within the in-situ fill excavation side profile of the boxed out area.
    - Inspection of the boxed out spoil however identified foreign inclusions including ceramic tile, concrete fragments, bitumen fragments, PVC, and terracotta pipe.
    - A area that was being excavated at the time of inspection, connected to and extending south from the inspected boxed out area, was subject of an unexpected find (occurred immediately prior to the inspection) with numerous large fragments of cement sheet exposed/ identified from the fill layer.

Plate 4 **View looking south from Progress Drive through the Road Reserve (showing boxing out for landscaping along western verge, and aggregate base course laying along the eastern verge).**

Plate 5 **View looking north, north-east across road construction zone, and spreading/ compaction of base course underway.**

Plate 6 **Boxing out works for landscaping along western portion of Road Reserve (view looking south). Note cordoned off area associated with asbestos unexpected find.**

Plate 7 **Soil profile of boxed out area (north-west portion of Road Reserve) with approx. 150mm surface fill layer.**

Plate 8 **Spoil from boxing out landscape area, with concrete, bitumen, ceramic tile, terracotta pipe, and PVC observed foreign inclusions.**

Plate 9 **Area of unexpected find, during excavation extending south from boxed out area. The find was numerous large fragments of cement sheet (refer to next Plate).**

Plate 10 **Unexpected find, numerous large fragments of cement sheet. Unexpected Find protocols implemented including stop works, cordoning off, awaiting assessment by engaged LAA.**

Plate 11 **Reworked soil profile along western boundary of Road Reserve and the western housing development block.**

PARKING AREA

The parking area has been boxed out in preparation for the install of a large stormwater retention tank. Majority of spoil was excess to Project needs and has been disposed offsite. Reportedly the fill across this zone had largely been removed prior to Head Works, with no unexpected finds encountered, evidenced by the soil profile observed which was natural.

Plate 12 **View looking west from southern portion of Road Reserve across the Parking Area that has been boxed out in prep for the stormwater retention tank install.**

GENERAL

Discussions with DIPL Site personnel revealed around 5 to 7 asbestos related unexpected finds had occurred within the subject sites (Police Station and Road Reserve) during redevelopment works. DIPL can provide the details upon request.

For any further information, please do not hesitate to contact the undersigned on 0408 018 788 or chris.gamble@agonenviro.com.au.

Yours Sincerely,

Chris Gamble

Agon NT Manager

AUSTRALIAN
ENVIRONMENTAL AUDITORS

Melbourne
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North Sydney NSW 2060
T 02 8644 0681

Certified System
Quality
ISO 9001
SAI GLOBAL

Certified System
Environment
ISO 14001
SAI GLOBAL

Certified System
Health & Safety
AS/NZS 4801
SAI GLOBAL