The majority of comparable inter-laboratory duplicate soil analyses had RPD values below the ASC NEPM recommended comparison criteria of 30%, apart from:

- Copper, zinc, and TRH C_{15} – C_{28} fraction between primary sample A2_TP01_0 and intra-laboratory duplicate QC01.
- Arsenic, lead, and TRH C_{15} – C_{28} fraction between primary sample A2_TP01_0 and inter-laboratory duplicate QC01A.

Where reported, the elevated RPDs calculated are attributable to one of the following causes:

- Relatively low metal analyte concentrations, which can exaggerate the calculated RPD with respect to small total concentration differences, and/ or
- The particulate nature of soils, which can cause uneven distribution of chemicals in soils and cause variation in RPDs.
- With respect to sample A2_TP01_0, the TRH / TPH present may be attributable to bitumen present in the fill, which are typically unevenly distributed within soils and can result in elevated RPDs.

Agon does not consider that the elevated RPDs would affect the integrity of the soil analytical results as the highest concentration has been adopted (as a conservative measure) as the representative result between primary and replicate soil samples with elevated RPDs.

4.7.3 Field Blanks

To establish whether cross-contamination may be occurring during soil sampling, equipment rinsate blank samples (RB01, RB02 and RB03) were collected and analysed. The rinsate blanks were collected from the stainless-steel hand trowel used to collect the samples. Laboratory trip blank samples (TB01 and TB02) (placed in esky prior to transportation of samples) were supplied to establish whether cross-contamination may occur during sample transport.

Concentrations of all requested analytes in rinsate and trip blank samples were reported below the LORs. This demonstrates that no cross contamination during the sample collection or sample travel has occurred.

4.7.4 Data Quality Conclusions

Field and laboratory QA/ QC results have been reviewed and verified for this phase of work. Agon considers the fieldwork undertaken and laboratory analysis are acceptable for the purposes of confirming the reliability and repeatability of the sampling and laboratory analysis procedures.

5.0 DISCUSSION

The soil conditions encountered indicates road base type material has been used for backfilling all three remediation areas, with the material logged as greyish brown silty gravelly sands with asphalt inclusions throughout. Depths of this fill domain generally corresponds to remediation excavation depths at all three areas, as reported by Greencap (2021 and 2023a).

Light brown to orange brown silty clayey sands were encountered underlying the emplaced road base type fill at all three remediation areas. This soil type is consistent to that logged by Greencap (2021) during post remediation validation sampling and indicates this domain is the top of pre-existing soils remaining in-situ post remediation actions.

Concentrations of TRH fractions above LOR were reported in the emplaced fill at all test locations and depths, apart from one in Area 1 (BH03 at 0.3 m bgl).

Greencap (2021 and 2023c) has reported residual diesel impacts remained in soils post remediation at all three remediation areas at concentrations ranging up to 27,000 (C_{10} - C_{16})(F2), 23,000 mg/kg (C_{16} - C_{34}) (F3), and 4,900 mg/kg (C_{34} – C_{40}) (F4), with the majority present in the F2 and F3 fractions typical of a diesel product signature. The TRH concentrations measured in the backfill material ranged up to 200 mg/kg C_{10} - C_{16} (F2), 1,100 mg/kg C_{16} - C_{34} (F3), and 3,800 mg/kg C_{34} – C_{40} (F4), with the majority present in the longer chain F4 fraction and typical of a bitumen based product.

Overall, the TRH present within the emplaced fill is likely attributed to the asphalt inclusions, supported by the TRH signature, no staining or odours encountered within the material during investigations, and with all PID readings below 1 ppm. Elevated concentrations of hydrocarbons are commonly present in asphalt material due to its bitumen content, with the hydrocarbons largely immobile with typically low bioavailability.

The backfill material in the three remediation areas is differentiated from the pre-existing underlying soils based on reported remedial excavation depths, soil type, and hydrocarbon concentrations and signatures.

Two concentrations of TRH in the backfill material at Area 3 were reported in excess of the ESL. The ESLs generally apply from the surface to 2 m depth below finished surface/ ground level, which corresponds to the root zone and habitation zone of many terrestrial species and are intended for the protection of these flora and fauna. The Area 3 location is part of a highly modified commercial site, being within the rail corridor of the freight terminal, with the shallow soils of the area having minimal ecological value with regard to terrestrial flora and fauna.

There was no evidence of additional chemicals/ contaminants of concern within the emplaced fill.

Though only three soil samples were collected from the maximum depth of the backfill, the type of backfill material was consistent throughout all remediation areas and sufficient samples have been collected and analysed to sufficiently characterise the chemical and physical qualities of the backfill material.

With regard to the objectives of the investigation, the source of the backfill material is likely to be recovered/ repurposed road base, with its chemical and physical qualities not considered to present an unacceptable risk to ecological or human health receptors in the context of the continued use of the site as a rail freight terminal.

6.0 CONCLUSIONS

Agon was engaged by Aurizon to undertake a soil investigation at a portion of the Berrimah Freight Terminal, Export Drive, Berrimah. The objective of the investigation was to assess the chemical and physical quality of material used to backfill three remediation areas where diesel impacted soil excavation occurred following a diesel spill in 2020. The suitability of the material for use as backfill of the remediation areas was identified as a data gap that required addressing at the request of Mr Graeme Miller of Senversa, the appointed independent Site Contamination Auditor.

The investigative scope comprised:

- An intrusive soil investigation, targeting remediated and backfilled areas and based on previously reported lateral and vertical remediation extents, with a total of 21 soil sampling points advanced through the backfill.
- The collection of soil samples as representative of the backfill material.
- The analysis of selected samples for chemicals of potential concern.

The soil conditions encountered suggests road base type material with asphalt inclusions has been used for backfilling all three remediation areas, with the backfill material differentiated from the pre-existing underlying soils comprising light brown to orange brown silty clayey sands.

Detectable concentrations of TRH were reported as widely distributed within the backfill at all three remediation areas, with concentrations at one investigation location within Area 3 above the adopted Tier 1 ecological screening level (ESL) that has been derived for the protection of terrestrial flora and fauna. The TRH within the backfill was largely present in the longer chain F4 fraction and likely attributed to the asphalt inclusions, with the presence of TRH in this media considered reflective of the nature of a bitumen based product and differentiated from diesel impacts by the TRH signature.

No other chemicals of concern were identified within the backfill material.

In conclusion, the source of the backfill material placed in all three site remediation areas is likely to be recovered/ repurposed road base, with its chemical and physical qualities considered to present a low risk to ecological and/ or human health receptors, given:

- Hydrocarbons are commonly present in asphalt material, and when present in this media, the hydrocarbons are largely immobile with typically low bioavailability.
- The remediation areas are part of a highly modified commercial site, being within the rail corridor of the Berrimah Freight Terminal, with the shallow soils of the area having minimal ecological value with regard to terrestrial flora and fauna.
- Concentrations of the tested chemicals are reported to be less than the adopted human health investigation and screening levels.

Therefore, the backfill material is considered suitable to remain onsite in the context of the continued use of the site as a rail freight terminal.

STATEMENT OF LIMITATIONS

All and any Services proposed by Agon to the Client were subject to the Terms and Conditions listed in Agon's **QFB-008 Consultancy Agreement.** Unless otherwise expressly agreed to in writing and signed by Agon, Agon does not agree to any alternative terms or variation of these terms if subsequently proposed by the Client. The Services were carried out in accordance with the current and relevant industry standards of testing, interpretation and analysis. The Services were carried out in accordance with Commonwealth, State, Territory or Government legislation, regulations and/or guidelines. The Client was deemed to have accepted these Terms when the Client signed the Proposal (where indicated) or when the Company commenced the Services at the request (written or otherwise) of the Client.

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APPENDIX A: SOIL BORE LOGS

ENVIRONMENTAL BORE HOLE A1_BH01

PROJECT NUMBER JC1580	**DRILL METHOD** Hand Auger	**TEST PIT LOCATION** AREA 1
PROJECT NAME Soil Investigation	**DIAMETER** 0.5 m	**DATE** 27/06/2024 & 10/07/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.5 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** Agon	**NORTHING**

COMMENTS Geofabric material encountered at 0.1 mbgl.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.2	BH01_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.1					BALLAST		
0.3	0.1	BH01_0.3			Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.		
0.4	0.3	BH01_0.4		NAT	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse natural rock throughout, light brown/orange brown.		
0.5					End of Borehole at 0.5 m.		

ENVIRONMENTAL BORE HOLE A1_BH02

PROJECT NUMBER JC1580	**DRILL METHOD** Hand Auger	**TEST PIT LOCATION** AREA 1
PROJECT NAME Soil Investigation	**DIAMETER** 0.5 m	**DATE** 27/06/2024 & 10/07/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.5 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** Agon	**NORTHING**

COMMENTS Geofabric material encountered at 0.1 mbgl.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.5	BH02_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.1					BALLAST		
0.3	0.2	BH02_0.3			Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.		
0.4	0.3	BH02_0.4		NAT	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse natural rock throughout, light brown/orange brown.		
0.5					End of Borehole at 0.5 m.		

ENVIRONMENTAL BORE HOLE A1_BH03

PROJECT NUMBER JC1580	**DRILL METHOD** Hand Auger	**TEST PIT LOCATION** AREA 1
PROJECT NAME Soil Investigation	**DIAMETER** 0.5 m	**DATE** 27/06/2024 & 10/07/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.5 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** Agon	**NORTHING**

COMMENTS Geofabric material encountered at 0.1 mbgl.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.4	BH03_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.1					BALLAST		
0.3	0.3	BH03_0.3			Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.		
0.4	0.3	BH03_0.4		NAT	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse natural rock throughout, light brown/orange brown.		
0.5					End of Borehole at 0.5 m.		

ENVIRONMENTAL BORE HOLE A1_BH04

PROJECT NUMBER JC1580	**DRILL METHOD** Hand Auger	**TEST PIT LOCATION** AREA 1
PROJECT NAME Soil Investigation	**DIAMETER** 0.5 m	**DATE** 27/06/2024 & 10/07/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.15 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** Agon	**NORTHING**

COMMENTS Geofabric material encountered at 0.1 mbgl.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.01	0.2	BH04_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.1					BALLAST		
0.15					End of Borehole at 0.15 m.		

ENVIRONMENTAL BORE HOLE A1_BH05

PROJECT NUMBER JC1580	**DRILL METHOD** Hand Auger	**TEST PIT LOCATION** AREA 1
PROJECT NAME Soil Investigation	**DIAMETER** 0.5 m	**DATE** 27/06/2024 & 10/07/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** Agon	**NORTHING**

COMMENTS

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02				FILL	BALLAST	D	
0.2	0.1	BH05_0.2			Gravelly SAND, fine to coarse grained sand, fine to coarse crushed rock throughout, grey/brown.		
0.3	0.2	BH05_0.3			Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, orange brown/brown.	S/M	
0.4					End of Borehole at 0.4 m.		

ENVIRONMENTAL TEST PIT A2_TP01

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 2
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 1.2 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS Ballast layer of `0.2m at surface. 0.05m geofabric material under ballast material.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.05				FILL	BALLAST LAYER		
0.1							
0.15							
0.2					GEOFABRIC LAYER		
0.25	0.5	A2_TP01_0			Silty SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, some fine to coarse bitumen, dark brown.	SM	QC01/QC01A
0.3							
0.35							
0.4							
0.45	0.6	A2_TP01_0.2			Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.		
0.5							
0.55							
0.6							
0.65							
0.7	0.2	A2_TP01_0.7					
0.75							
0.8							
0.85							
0.9							
0.95							
1	1	A2_TP01_1					
1.05							
1.1							
1.15							
1.2					End of Test Pit at 1.2 m.		
1.25							

ENVIRONMENTAL TEST PIT A2_TP02

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 2
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 1.8 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS Ballast layer of `0.2m at surface. 0.05m geofabric material under ballast material.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.1				FILL	BALLAST LAYER		
0.2					GEOFABRIC LAYER		
0.3	0.2	A2_TP02_0			Silty SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, some fine to coarse bitumen, dark brown.	D	
0.4							
0.5		A2_TP02_0.5					
0.6							
0.7							
0.8							
0.9							
1		A2_TP02_1				SM	
1.1							
1.2							
1.3							
1.4							
1.5		A2_TP02_1.5					
1.6							
1.7		A2_TP02_1.7			Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	M	
1.8					End of Test Pit at 1.8 m.		

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ENVIRONMENTAL TEST PIT A2_TP03

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 2
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 1.3 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS Ballast layer of `0.2m at surface. 0.05m geofabric material under ballast material.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.1				FILL	BALLAST LAYER		
0.2					GEOFABRIC LAYER		
0.3	0.2	A2_TP03_0			Silty SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, some fine to coarse bitumen, dark brown.	D	
0.4							
0.5	0.1	A2_TP03_0.5				SM	
0.6							
0.7							
0.8							
0.9							
1	0.2	A2_TP03_1					
1.1							
1.2					Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	M	
1.3					End of Test Pit at 1.3 m.		

ENVIRONMENTAL TEST PIT A2_TP04

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 2
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS Ballast layer of `0.2m at surface. 0.05m geofabric material under ballast material.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02				FILL	BALLAST LAYER		
0.04							
0.06							
0.08							
0.1							
0.12							
0.14							
0.16							
0.18							
0.2					GEOFABRIC LAYER		
0.22							
0.24							
0.26	0.2	A2_TP04_0			Silty SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, some fine to coarse bitumen, dark brown.	SM	
0.28							
0.3							
0.32							
0.34							
0.36							
0.38							
0.4					End of Test Pit at 0.4 m.		
0.42							
0.44							

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ENVIRONMENTAL TEST PIT A2_TP05

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 2
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS Ballast layer of `0.2m at surface. 0.05m geofabric material under ballast material.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02				FILL	BALLAST LAYER		
0.04							
0.06							
0.08							
0.1							
0.12							
0.14							
0.16							
0.18							
0.2					GEOFABRIC LAYER		
0.22							
0.24							
0.26	0.2	A2_TP05_0			Silty SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, some fine to coarse bitumen, dark brown.	SM	
0.28							
0.3					Silty Clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse sized crushed rock throughout, light brown / orange brown.		
0.32							
0.34							
0.36							
0.38							
0.4					End of Test Pit at 0.4 m.		
0.42							
0.44							

ENVIRONMENTAL TEST PIT A2_TP06

PROJECT NUMBER JC1580
PROJECT NAME Soil Investigation
CLIENT Aurizon
ADDRESS Berrimah Freight Terminal, NT

DRILL METHOD Mechanical Excavator
DIAMETER 0.45 m
TOTAL DEPTH 0.4 m
DRILL COMPANY McMahons Services
DRILL MODEL PCS5MR Komatso

TEST PIT LOCATION AREA 2
DATE 26/06/2024
EASTING
NORTHING

COMMENTS Ballast layer of `0.2m at surface. 0.05m geofabric material under ballast material.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02				FILL	BALLAST LAYER		
0.04							
0.06							
0.08							
0.1							
0.12							
0.14							
0.16							
0.18							
0.2					GEOFABRIC LAYER		
0.22							
0.24							
0.26	0.2	A2_TP06_0			Silty SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, some fine to coarse bitumen, dark brown.	SM	
0.28							
0.3					Silty Clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse sized crushed rock throughout, light brown / orange brown.		
0.32							
0.34							
0.36							
0.38							
0.4					End of Test Pit at 0.4 m.		
0.42							
0.44							

produced by ESlog.ESdat.net on 26 Oct 2024

ENVIRONMENTAL TEST PIT A2_TP07

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 2
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS Ballast layer of `0.2m at surface. 0.05m geofabric material under ballast material.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02				FILL	BALLAST LAYER		
0.04							
0.06							
0.08							
0.1							
0.12							
0.14							
0.16							
0.18							
0.2					GEOFABRIC LAYER		
0.22							
0.24							
0.26	0.1	A2_TP07_0			Silty SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, some fine to coarse bitumen, dark brown.	SM	
0.28							
0.3					Silty Clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse sized crushed rock throughout, light brown / orange brown.		
0.32							
0.34							
0.36							
0.38							
0.4					End of Test Pit at 0.4 m.		
0.42							
0.44							

ENVIRONMENTAL TEST PIT A2_TP08

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 2
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS Ballast layer of `0.2m at surface. 0.05m geofabric material under ballast material.

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02				FILL	BALLAST LAYER		
0.04							
0.06							
0.08							
0.1							
0.12							
0.14							
0.16							
0.18							
0.2					GEOFABRIC LAYER		
0.22							
0.24							
0.26	0.1	A2_TP08_0			Silty SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, some fine to coarse bitumen, dark brown.	SM	
0.28							
0.3					Silty Clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse sized crushed rock throughout, light brown / orange brown.		
0.32							
0.34							
0.36							
0.38							
0.4					End of Test Pit at 0.4 m.		
0.42							
0.44							

produced by ESlog.ESdat.net on 26 Oct 2024

ENVIRONMENTAL TEST PIT A3_TP01

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 3
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.2	A3_TP01_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.3	0.1			RWN	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	S/M	
0.4					End of Test Pit at 0.4 m.		
0.42							
0.44							

ENVIRONMENTAL TEST PIT A3_TP02

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 3
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.2	A3_TP02_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.3	0.2			RWN	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	S/M	
0.4					End of Test Pit at 0.4 m.		

ENVIRONMENTAL TEST PIT A3_TP03

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 3
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.2	A3_TP03_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.3	0.1			RWN	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	S/M	
0.4					End of Test Pit at 0.4 m.		
0.42							
0.44							

ENVIRONMENTAL TEST PIT A3_TP04

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 3
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.2	A3_TP04_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.3	0.3			RWN	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	S/M	
0.4					End of Test Pit at 0.4 m.		

ENVIRONMENTAL TEST PIT A3_TP05

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 3
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.2	A3_TP05_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.3	0.3			RWN	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	S/M	
0.4					End of Test Pit at 0.4 m.		

ENVIRONMENTAL TEST PIT A3_TP06

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 3
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.4 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.2	A3_TP06_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.3	0.1			RWN	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	S/M	
0.4					End of Test Pit at 0.4 m.		
0.42							
0.44							

ENVIRONMENTAL TEST PIT A3_TP07

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 3
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.5 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

COMMENTS

LOGGED BY VB
CHECKED BY CG

Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0.02	0.3	A3_TP07_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	QC02/QC02A - PFAS
0.4	0.1			RWN	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	S/M	
0.5					End of Test Pit at 0.5 m.		

ENVIRONMENTAL TEST PIT A3_TP08

PROJECT NUMBER JC1580	**DRILL METHOD** Mechanical Excavator	**TEST PIT LOCATION** AREA 3
PROJECT NAME Soil Investigation	**DIAMETER** 0.45 m	**DATE** 26/06/2024
CLIENT Aurizon	**TOTAL DEPTH** 0.6 m	**EASTING**
ADDRESS Berrimah Freight Terminal, NT	**DRILL COMPANY** McMahons Services	**NORTHING**
	DRILL MODEL PCS5MR Komatso	

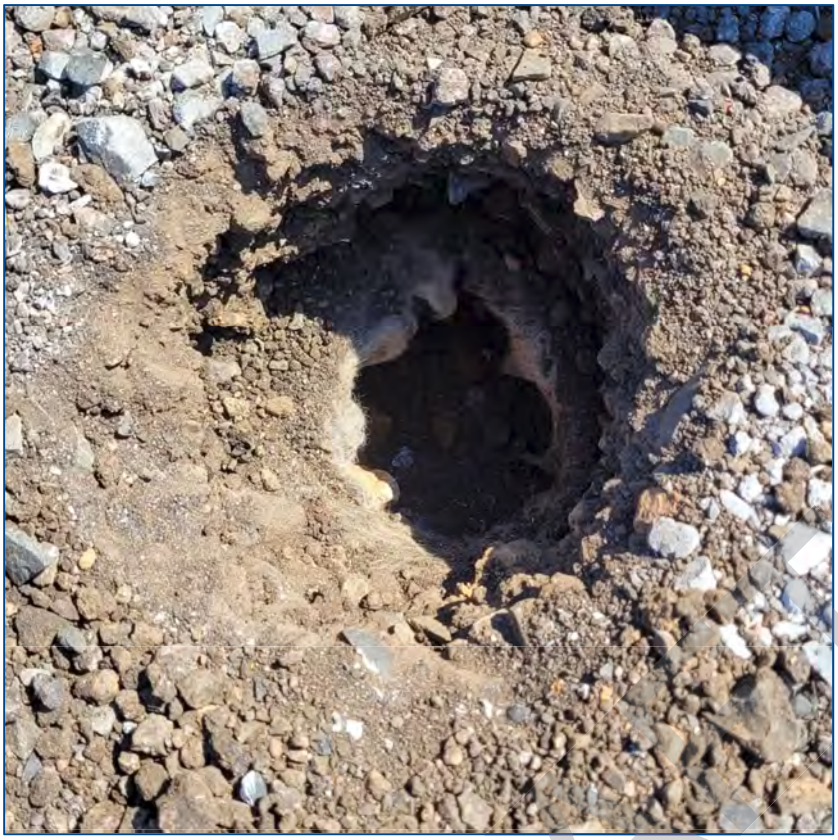
COMMENTS

LOGGED BY VB
CHECKED BY CG

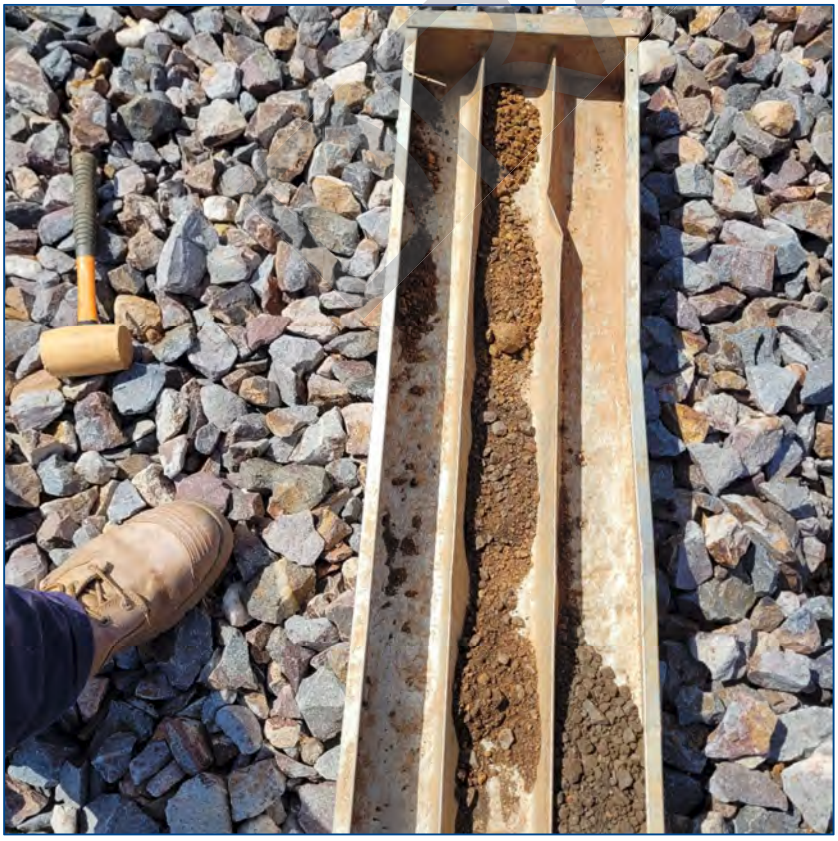
Depth (m)	PID	Samples	Graphic Log	Lith	Material Description	Moisture	Additional Observations
0	0.4	A3_TP08_0		FILL	Gravelly silty SAND, fine to coarse grained sand, low to medium plasticity, road base, some bitumen, grey/brown.	D	
0.5	0.2			RWN	Silty clayey SAND, fine to coarse grained sand, low to medium plasticity, fine to coarse crushed rock throughout, light brown/orange brown.	S/M	
0.6					End of Test Pit at 0.6 m.		

APPENDIX B: PHOTOGRAPH LOG

Area 1

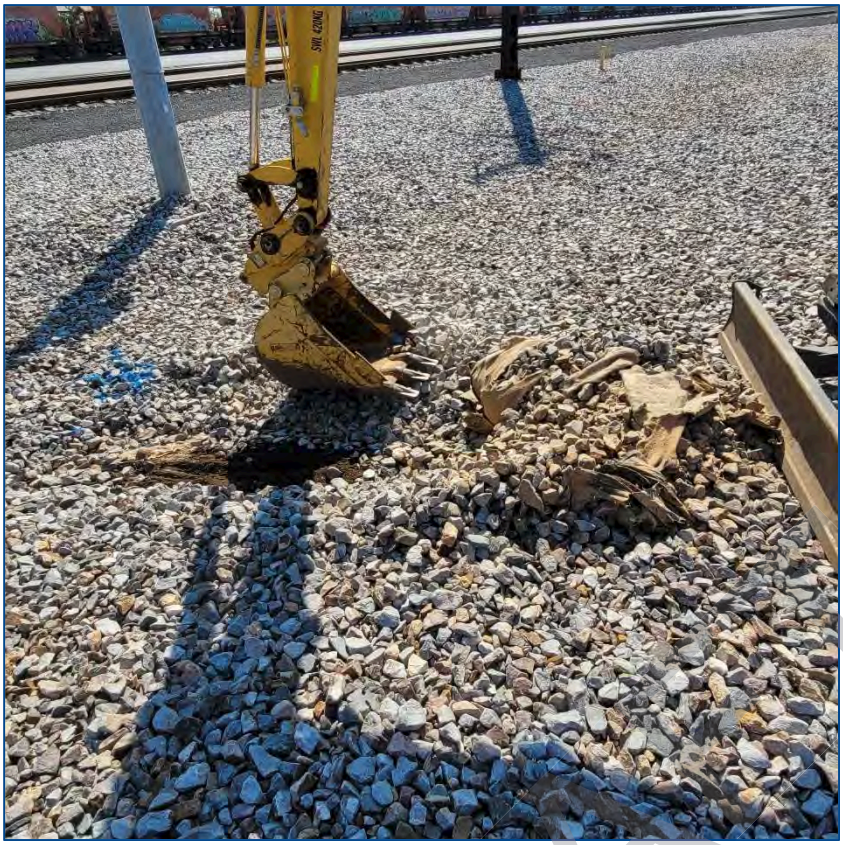


Photograph 1: View of borehole with ballast and geofabric material in Area 1

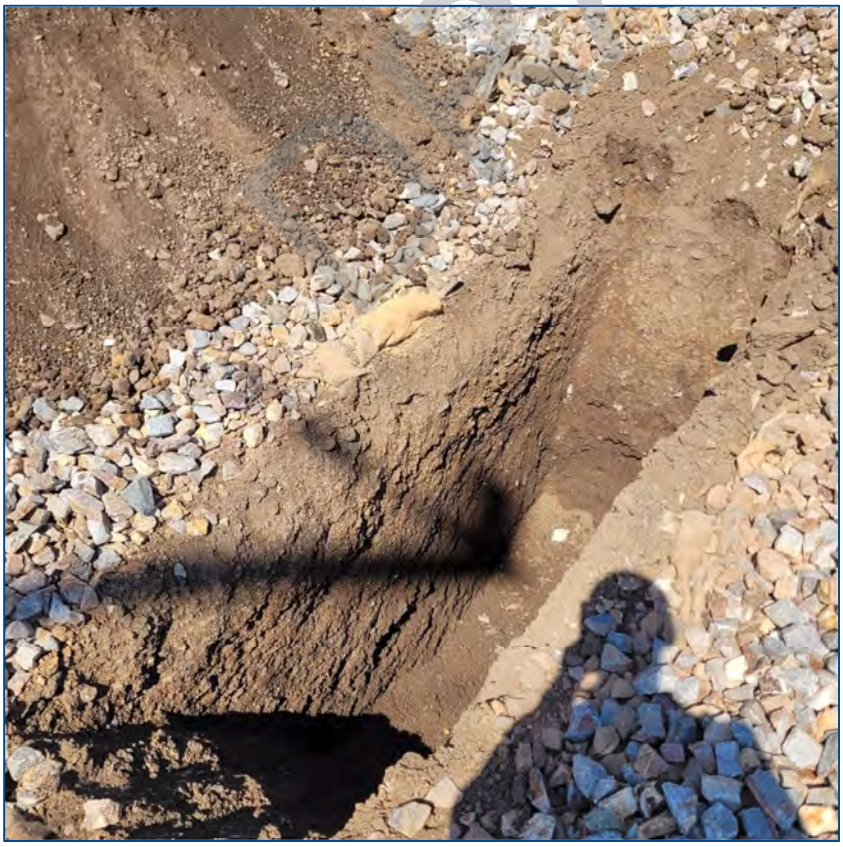


Photograph 2: View of silty clay sand material encountered in Area 1

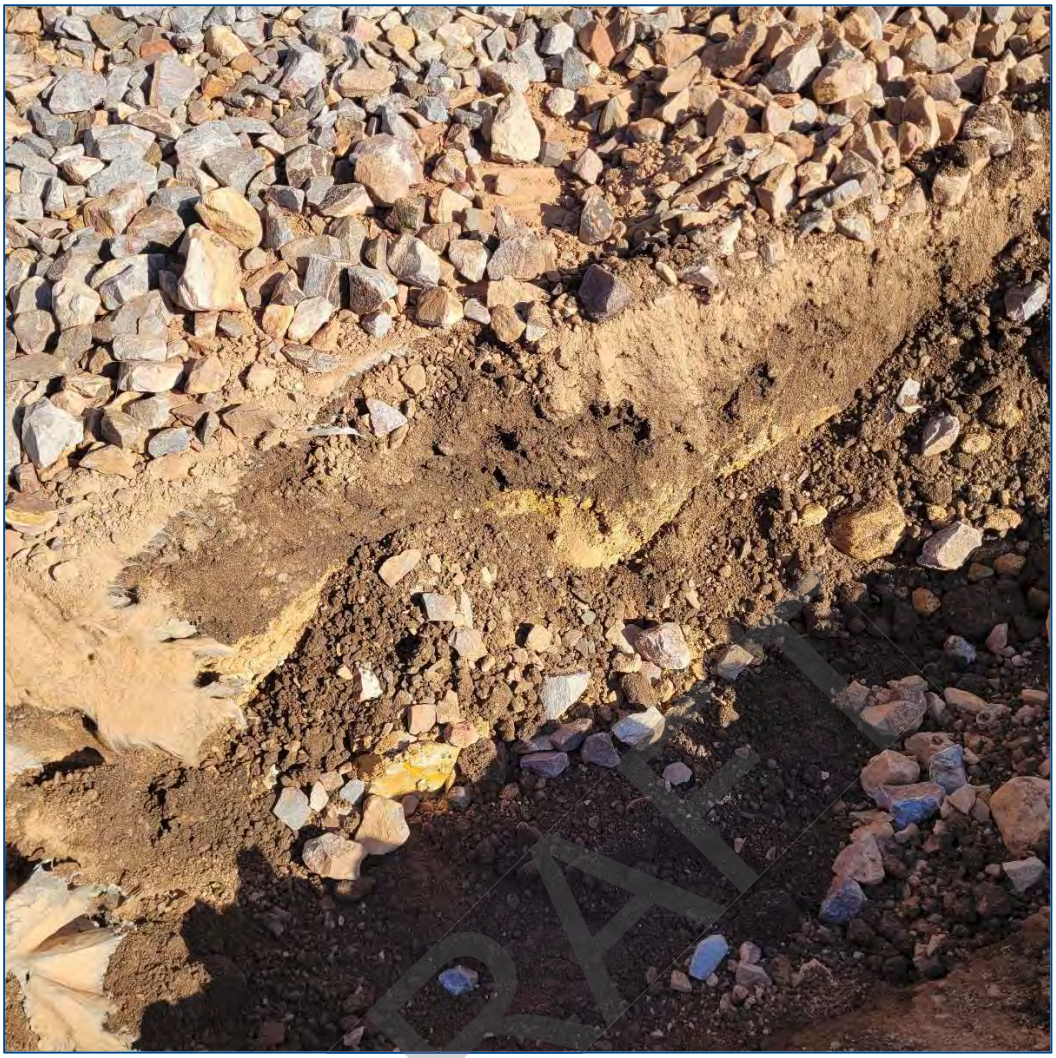
Area 2



Photograph 3: View of rail ballast surface at A2_TP01 in Area 2

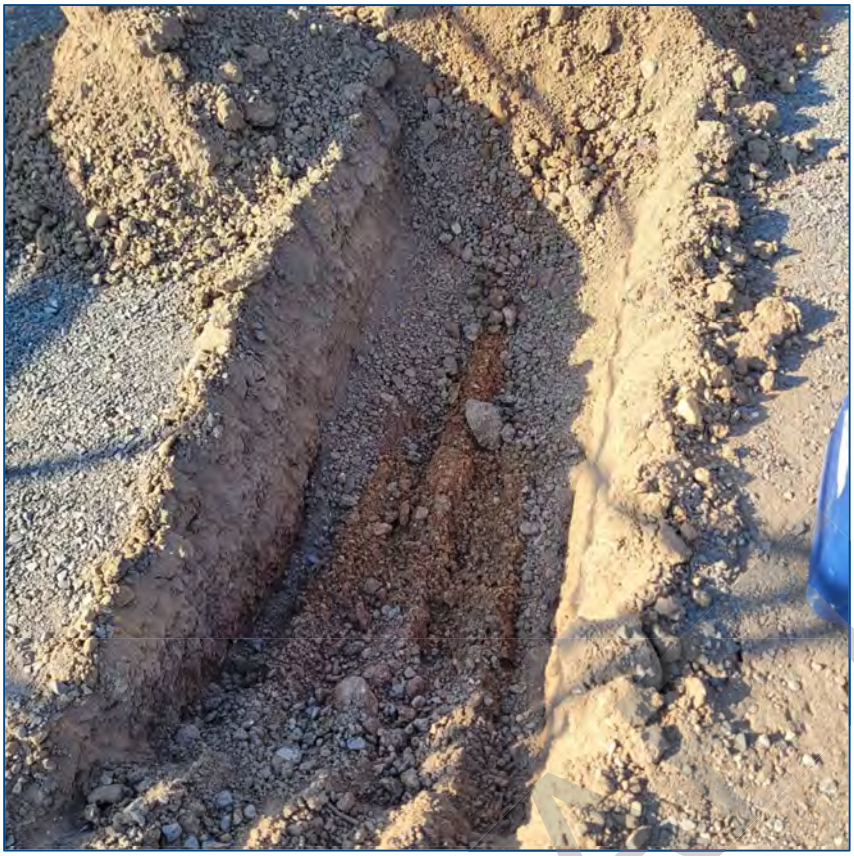


Photograph 4: View of A2_TP02 in Area 2

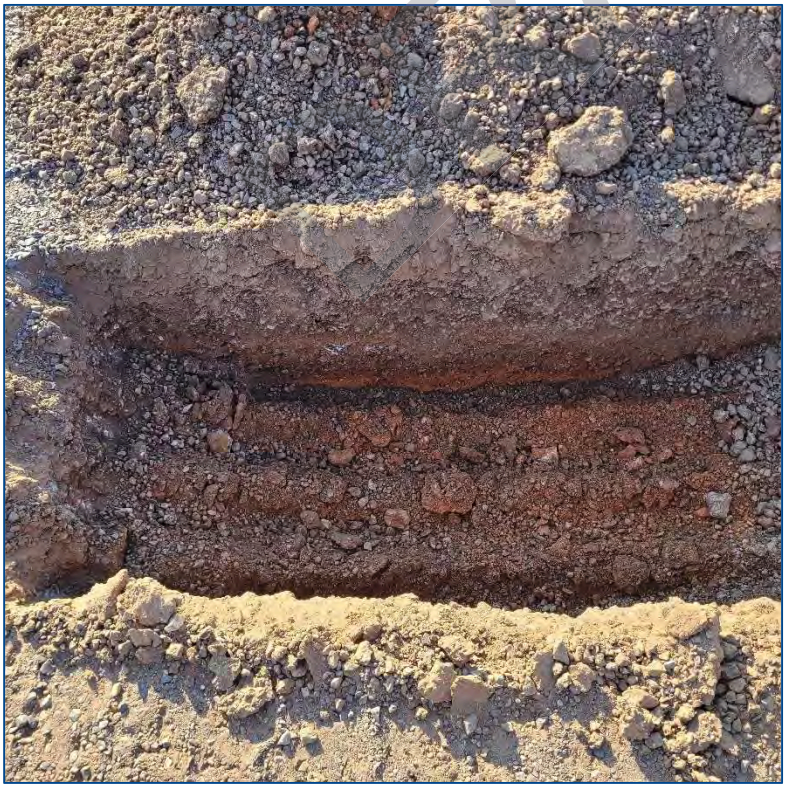


Photograph 5: View of light brown silty sand material underlying dark brown sands in Area 2

Area 3



Photograph 6: View of A3_TP01 in Area 3



Photograph 7: View of A3_TP04 in Area 3

APPENDIX C: PID CALIBRATION CERTIFICATE

PID Calibration Certificate

Instrument PhoCheck Tiger
Serial No. T-118548

Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
	Recharge OK?	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
Pump	Operation	✓	
	Filter	✓	
	Flow	✓	
	Valves, Diaphragm	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	PID	✓	10.6 ev
Alarms	Beeper	✓	Low: 50ppm; High: 100ppm; TWA: N/A; STEL: N/A
	Settings	✓	
Software	Version	✓	
Data logger	Operation	✓	
Download	Operation	✓	
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		100 PPM	NATA	SA057		100.9 ppm

Calibrated by: Trent Chase

Calibration date: 17/06/2024

Next calibration due: 15/09/2024

APPENDIX D: SOIL ANALYTICAL RESULTS TABLES

				PFOS/PFOA																																		
				Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorooctane sulfonamide (FOSA)	N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	Perfluorobutanesulfonic acid (PFBS)	Perfluorononanesulfonic acid (PFNS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentanesulfonic acid (PFPeS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluoroheptanesulfonic acid (PFHpS)	Perfluorooctanesulfonic acid (PFOS)	Perfluorodecanesulfonic acid (PFDS)	1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	Sum (PFHxS + PFOS)	Sum of US EPA PFAS (PFOS + PFOA)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)	Sum of WA DWER PFAS (n=10)	Sum of PFASs (n=30)
				µg/kg	µg/kg	µg/kg	µg/kg	mg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg	µg/kg	µg/kg	µg/kg	µg/kg
EQL				5	5	5	5	0.005	5	5	5	5	5	5	5	5	5	5	5	10	10	5	5	5	5	5	5	0.005	5	5	10	5	5	0.005	5	5	10	50
CRC Care HSL D Commercial / Industrial (Direct Contact)																																						
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)																																						
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m																																						
1-2m																																						
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)																																						
NEPM 2013 EIL Values for Commercial/ Industrial																																						
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																						
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																																						
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																						
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																						
PFAS NEMP 2020 Table 2 Health Industrial/Commercial								50																										20				
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses								10																				1										
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																												0.01										
AREA	Field ID	Lab Report No.	Date																																			
1	BH01_0	1113757	27 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	BH01_0.3	1116437	10 Jul 2024																																			
	BH01_0.4	1116437	10 Jul 2024																																			
	BH02_0	1113757	27 Jun 2024																																			
	BH02_0.3	1116437	10 Jul 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	BH03_0	1113757	27 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	BH03_0.3	1116437	10 Jul 2024																																			
	BH04_0	1113757	27 Jun 2024																																			
	BH05_0.2	1113757	27 Jun 2024																																			
2	A2_TP01_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024	<0.001	<0.0002	<0.0002	<0.0002	<0.0002														<0.0002				<0.0002		<0.0002		<0.005	<0.005	<0.005	<0.005	<0.0002			<0.0002	
	A2_TP02_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	A2_TP02_0.5	1113757	26 Jun 2024																																			
	A2_TP02_1.5	1113757	26 Jun 2024																																			
	A2_TP03_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	A2_TP03_0.5	1113757	26 Jun 2024																																			
	A2_TP03_1	1113757	26 Jun 2024																																			
	A2_TP04_0	1113757	26 Jun 2024																																			
	A2_TP05_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	A2_TP06_0	1113757	26 Jun 2024																																			
	A2_TP07_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	A2_TP08_0	1113757	26 Jun 2024																																			
3	A3_TP01_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	A3_TP03_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	A3_TP05_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	A3_TP07_0	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024	<5	<5	<5	<5	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<5	<5	<5	<5	<5	<0.005	<5	<5	<10	<5	<5	<0.005	<5	<5	<10	<50
	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024	<0.001	<0.0002	<0.0002	<0.0002	<0.0002														<0.0002				<0.0002		<0.0002		<0.005	<0.005	<0.005	<0.005	<0.0002			<0.0002	

AREA	Field ID	Lab Report No.	Date	Arsenic	Beryllium	Boron	Cobalt	Cadmium	Chromium (III+VI)	Manganese	Chromium (hexavalent)	Copper	Lead	Mercury	Nickel	Selenium	Zinc
				Metals													
				mg/kg	mg/kg	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	2	2	10	5	0.4	5	5	1	5	5	0.1	5	2	5
CRC Care HSL D Commercial / Industrial (Direct Contact)																	
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)																	
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m																	
1-2m																	
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)																	
NEPM 2013 EIL Values for Commercial/ Industrial				160					310			85	1,800		55		110
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				3,000	500	300,000	4,000	900		60,000	3,600	240,000	1,500	730	6,000	10,000	400,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																	
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																	
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																	
PFAS NEMP 2020 Table 2 Health Industrial/Commercial																	
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses																	
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																	
1	BH01_0	1113757	27 Jun 2024	<2	<2	<10	<5	<0.4		120	<1	<5	5.3	<0.1	<5	<2	6.8
1	BH01_0.3	1116437	10 Jul 2024	8.2	<2	<10	<5	<0.4		300	<1	13	28	<0.1	13	<2	26
1	BH01_0.4	1116437	10 Jul 2024														
1	BH02_0	1113757	27 Jun 2024	4.8	<2	<10	<5	<0.4	11	220	<1	8.1	<5	<0.1	7.2	<2	15
1	BH02_0.3	1116437	10 Jul 2024														
1	BH03_0	1113757	27 Jun 2024	4.3	<2	<10	<5	<0.4		360	<1	8.2	6.7	<0.1	5.8	<2	10.0
1	BH03_0.3	1116437	10 Jul 2024														
1	BH04_0	1113757	27 Jun 2024														
1	BH05_0.2	1113757	27 Jun 2024														
2	A2_TP01_0	1113757	26 Jun 2024	16	<2	<10	<5	<0.4		130	<1	12	22	<0.1	8.5	<2	26
2	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024	20				<0.4	76			8.2	20	<0.1	6.9		17
2	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024	8				<1	27			10	16	<0.1	8		24
2	A2_TP02_0	1113757	26 Jun 2024	13	<2	<10	<5	<0.4	68	120	<1	13	25	<0.1	9.8	<2	23
2	A2_TP02_0.5	1113757	26 Jun 2024														
2	A2_TP02_1.5	1113757	26 Jun 2024														
2	A2_TP03_0	1113757	26 Jun 2024	18	<2	<10	<5	<0.4		140	<1	14	24	<0.1	11	<2	**22**
2	A2_TP03_0.5	1113757	26 Jun 2024														
2	A2_TP03_1	1113757	26 Jun 2024	7.1	<2	<10	<5	<0.4		140	<1	9.1	9.6	<0.1	<5	<2	12
2	A2_TP04_0	1113757	26 Jun 2024														
2	A2_TP05_0	1113757	26 Jun 2024	5.5	<2	<10	<5	<0.4		130	<1	7.5	15	<0.1	7.9	<2	17
2	A2_TP06_0	1113757	26 Jun 2024														
2	A2_TP07_0	1113757	26 Jun 2024	17	<2	<10	6.2	<0.4		200	<1	16	30	<0.1	12	<2	**40**
2	A2_TP08_0	1113757	26 Jun 2024														
3	A3_TP01_0	1113757	26 Jun 2024	8.3	<2	<10	<5	<0.4		240	<1	7.4	14	<0.1	9.3	<2	**18**
3	A3_TP03_0	1113757	26 Jun 2024	12	<2	<10	<5	<0.4	55	140	<1	14	19	<0.1	22	<2	**19**
3	A3_TP05_0	1113757	26 Jun 2024	15	<2	<10	<5	<0.4		120	<1	9.1	16	<0.1	8.9	<2	**12**
3	A3_TP07_0	1113757	26 Jun 2024														
3	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024														
3	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024														

Field ID	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	Benzo(b+j)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene TEQ calc (Half)	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	PAHs (Sum of total)	Pyrene
	PAH																			
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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
CRC Care HSL D Commercial / Industrial (Direct Contact)																	11,000			
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)																				
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m																				
1-2m																				
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)																				
NEPM 2013 EIL Values for Commercial/ Industrial																	370			
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	40	40			40														4,000	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																				
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil										1.4										
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																				
PFAS NEMP 2020 Table 2 Health Industrial/Commercial																				
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses																				
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																				
BH01_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH01_0.3	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH01_0.4	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH02_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH02_0.3	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH03_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH03_0.3	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH04_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH05_0.2	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP01_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC01 (Duplicate of A2_TP01_0)	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC01A (Duplicate of A2_TP01_0)																				
A2_TP02_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP02_0.5	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP02_1.5	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP03_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP03_0.5	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP03_1	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP04_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP05_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP06_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP07_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A2_TP08_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A3_TP01_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A3_TP03_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A3_TP05_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A3_TP07_0	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC02 (Duplicate of A3_TP07_0)																				
QC02A (Duplicate of A3_TP07_0)																				

Field ID	Benzene	Ethylbenzene	Toluene	Naphthalene	Xylene (m & p)	Xylene (o)	Xylene Total	C6-C10 (F1)	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)
	BTEXN							TRH							TPH				
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	0.1	0.1	0.1	0.01	0.2	0.1	0.3	20	20	50	50	100	100	100	20	20	50	50	50
CRC Care HSL D Commercial / Industrial (Direct Contact)	430	27,000	99,000	11,000			81,000	26,000		20,000		27,000	38,000						
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)	1,100	85,000	120,000	29,000			130,000	82,000		62,000		85,000	120,000						
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m	3	NL	NL	NL			230	260		NL									
1-2m	3	NL	NL	NL			NL	370		NL									
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)	77																		
NEPM 2013 EIL Values for Commercial/ Industrial																			
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																			
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand	3 | 3 | 3 | 3						230		260 | 370 | 630										
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil	75	165	135	370			180		215		170	1,700	3,300						
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil								800		1,000		5,000	10,000						
PFAS NEMP 2020 Table 2 Health Industrial/Commercial																			
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses																			
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																			
BH01_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	200	380	580	<20	<20	79	200	279
BH01_0.3	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	520	750	1270	<20	<20	250	440	690
BH01_0.4	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	200	160	360	<20	<20	120	130	250
BH02_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	820	2,600	3,420	<20	110	64	1,300	1,474
BH02_0.3	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	750	1,300	2,050	<20	<20	310	710	1020
BH03_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	860	2,400	3,260	<20	<20	110	1,300	1,410
BH03_0.3	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50
BH04_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	410	1,700	2,110	<20	110	<50	760	870
BH05_0.2	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	64	64	580	2,100	2,744	<20	170	<50	990	1,160
A2_TP01_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	230	350	580	<20	<20	66	240	306
QC01 (Duplicate of A2_TP01_0)	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	290	370	660	<20	<20	110	280	390
QC01A (Duplicate of A2_TP01_0)	<0.2	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<10	<10	<50	<50	260	350	610	<10	<50	130	250	380
A2_TP02_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	640	1,900	2,540	<20	120	80	960	1,160
A2_TP02_0.5	<0.5	<0.5	<0.5	<2.5	<1	<0.5	<1.5	<100	<100	<50	<50	150	160	310	<100	<20	71	120	191
A2_TP02_1.5	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	1,100	2,600	3,700	<20	110	220	1,400	1,730
A2_TP03_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	1,100	2,400	3,500	<20	35	240	1,300	1,575
A2_TP03_0.5	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	930	2,400	3,330	<20	39	140	1,300	1,479
A2_TP03_1	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	160	390	550	<20	<20	<50	220	220
A2_TP04_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	930	2,500	3,430	<20	160	110	1,300	1,570
A2_TP05_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	640	1,800	2,440	<20	94	81	960	1,135
A2_TP06_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	61	61	820	2,400	3,281	<20	180	130	1,200	1,510
A2_TP07_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	300	580	880	<20	<20	72	360	432
A2_TP08_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	830	3,000	3,830	<20	<20	<50	1,400	1,400
A3_TP01_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	59	59	1,100	2,100	3,259	<20	170	570	1,000	1,740
A3_TP03_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	770	2,800	3,570	<20	<20	<50	1,300	1,300
A3_TP05_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	<50	<50	190	500	690	<20	<20	<50	260	260
A3_TP07_0	<0.1	<0.1	<0.1	<0.5	<0.2	<0.1	<0.3	<20	<20	200	200	1,000	3,800	5,000	<20	240	<50	1,800	2,040
QC02 (Duplicate of A3_TP07_0)																			
QC02A (Duplicate of A3_TP07_0)																			

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				Organochlorine Pesticides																							
				Aldrin + Dieldrin	Chlordane	Endrin ketone	Organochlorine pesticides EPAVic	Toxaphene	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin	d-BHC	b-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan II	Endosulfan I	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor epoxide	Methoxychlor	Heptachlor
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	0.1	0.05	0.1	0.5	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	0.05	0.05	0.05	0.05	0.05	0.05
CRC Care HSL D Commercial / Industrial (Direct Contact)																											
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)																											
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m																											
1-2m																											
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)																											
NEPM 2013 EIL Values for Commercial/ Industrial																640											
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				45	530			160									3,600					100				2,500	50
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																											
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																											
PFAS NEMP 2020 Table 2 Health Industrial/Commercial																				aspahlt throughout							
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses																											
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																											
AREA	Field ID	Lab Report No.	Date																								
1	BH01_0	1113757	27 Jun 2024																								
	BH01_0.3	1116437	10 Jul 2024																								
	BH01_0.4	1116437	10 Jul 2024																								
	BH02_0	1113757	27 Jun 2024	<0.05	<0.1			<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
	BH02_0.3	1116437	10 Jul 2024	<0.05	<0.1	<0.05	<0.1	<0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	BH03_0	1113757	27 Jun 2024																								
	BH03_0.3	1116437	10 Jul 2024																								
	BH04_0	1113757	27 Jun 2024	<0.05	<0.1	<0.05	<0.1	<0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	BH05_0.2	1113757	27 Jun 2024																								
2	A2_TP01_0	1113757	26 Jun 2024																								
	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024																								
	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024																								
	A2_TP02_0	1113757	26 Jun 2024	<0.05	<0.1			<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
	A2_TP02_0.5	1113757	26 Jun 2024	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	A2_TP02_1.5	1113757	26 Jun 2024	<0.05	<0.1	<0.05	<0.1	<0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	A2_TP03_0	1113757	26 Jun 2024																								
	A2_TP03_0.5	1113757	26 Jun 2024	<0.05	<0.1	<0.05	<0.1	<0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	A2_TP03_1	1113757	26 Jun 2024																								
	A2_TP04_0	1113757	26 Jun 2024	<0.05	<0.1	<0.05	<0.1	<0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	A2_TP05_0	1113757	26 Jun 2024																								
	A2_TP06_0	1113757	26 Jun 2024	<0.05	<0.1	<0.05	<0.1	<0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	A2_TP07_0	1113757	26 Jun 2024																								
	A2_TP08_0	1113757	26 Jun 2024	<0.05	<0.1	<0.05	<0.1	<0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
3	A3_TP01_0	1113757	26 Jun 2024																								
	A3_TP03_0	1113757	26 Jun 2024	<0.05	<0.1			<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
	A3_TP05_0	1113757	26 Jun 2024																								
	A3_TP07_0	1113757	26 Jun 2024	<0.05	<0.1	<0.05	<0.1	<0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024																								
	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024																								

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Organophosphorous Pesticides

AREA	Field ID	Lab Report No.	Date	Azinphos methyl	Bolstar (Sulprofos)	Chlorfenvinphos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton	EPN	Ethion	Ethoprop	Fenitrothion	Fensulfothion	Fenthion	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Pyrazophos	Ronnel	Terbufos	Tetrachlorvinphos	Tokuthion	Trichloronate	Chlorpyrifos
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2	0.2	2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CRC Care HSL D Commercial / Industrial (Direct Contact)																																			
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)																																			
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m																																			
1-2m																																			
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)																																			
NEPM 2013 EIL Values for Commercial/ Industrial																																			
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																			2,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																																			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																			
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																			
PFAS NEMP 2020 Table 2 Health Industrial/Commercial																																			
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses																																			
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																																			
1	BH01_0	1113757	27 Jun 2024																																
	BH01_0.3	1116437	10 Jul 2024																																
	BH01_0.4	1116437	10 Jul 2024																																
	BH02_0	1113757	27 Jun 2024																																<0.2
	BH02_0.3	1116437	10 Jul 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	BH03_0	1113757	27 Jun 2024																																
	BH03_0.3	1116437	10 Jul 2024																																
	BH04_0	1113757	27 Jun 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	BH05_0.2	1113757	27 Jun 2024																																
2	A2_TP01_0	1113757	26 Jun 2024																																
	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024																																
	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024																																
	A2_TP02_0	1113757	26 Jun 2024																																<0.2
	A2_TP02_0.5	1113757	26 Jun 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP02_1.5	1113757	26 Jun 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP03_0	1113757	26 Jun 2024																																
	A2_TP03_0.5	1113757	26 Jun 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP03_1	1113757	26 Jun 2024																																
	A2_TP04_0	1113757	26 Jun 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP05_0	1113757	26 Jun 2024																																
	A2_TP06_0	1113757	26 Jun 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP07_0	1113757	26 Jun 2024																																
	A2_TP08_0	1113757	26 Jun 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
3	A3_TP01_0	1113757	26 Jun 2024																																
	A3_TP03_0	1113757	26 Jun 2024																																<0.2
	A3_TP05_0	1113757	26 Jun 2024																																
	A3_TP07_0	1113757	26 Jun 2024	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024																																
	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024																																

Phenols

AREA	Field ID	Lab Report No.	Date	2,4,5-Trichlorophenol	3&4-Methylphenol (m&p-cresol)	2,4,6-Trichlorophenol	Phenols (Total Non Halogenated)	Cresol Total	Picloram	Phenols (Total Halogenated)	2,4-Dichlorophenol	2,4-Dinitrophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	Tetrachlorophenols	2-Chlorophenol	2-Methylphenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	2-Nitrophenol	4-chloro-3-methylphenol	4-Nitrophenol	Pentachlorophenol	Phenol
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	1	0.4	1	20	0.5	0.5	1	0.5	5	0.5	0.5	10	0.5	0.2	5	20	1	1	5	1	0.5
CRC Care HSL D Commercial / Industrial (Direct Contact)																								
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)																								
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m																								
1-2m																								
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)																								
NEPM 2013 EIL Values for Commercial/ Industrial																								
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil								25,000	35,000														660	240,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
PFAS NEMP 2020 Table 2 Health Industrial/Commercial																								
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses																								
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																								
1	BH01_0	1113757	27 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	BH01_0.3	1116437	10 Jul 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	BH01_0.4	1116437	10 Jul 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	BH02_0	1113757	27 Jun 2024		<0.4				<0.5								<0.2						<1	<0.5
	BH02_0.3	1116437	10 Jul 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	BH03_0	1113757	27 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	BH03_0.3	1116437	10 Jul 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	BH04_0	1113757	27 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	BH05_0.2	1113757	27 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
2	A2_TP01_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024																					
	A2_TP02_0	1113757	26 Jun 2024		<0.4				<0.5								<0.2						<1	<0.5
	A2_TP02_0.5	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP02_1.5	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP03_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP03_0.5	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP03_1	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP04_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP05_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP06_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP07_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A2_TP08_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
3	A3_TP01_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A3_TP03_0	1113757	26 Jun 2024		<0.4				<0.5								<0.2						<1	<0.5
	A3_TP05_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	A3_TP07_0	1113757	26 Jun 2024	<1	<0.4	<1	<20	<0.5		<1	<0.5	<5	<0.5	<0.5	<10	<0.5	<0.2	<5	<20	<1	<1	<5	<1	<0.5
	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024																					
	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024																					

AREA	Field ID	Lab Report No.	Date	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	Bromochloromethane	1,3-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorinated hydrocarbons EPAVic	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,3-dichloropropene	cis-1,2-dichloroethene	Dibromomethane	Dichloromethane	Other chlorinated hydrocarbons EPAVic	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl chloride
				Chlorinated Hydrocarbons																												
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CRC Care HSL D Commercial / Industrial (Direct Contact)																																
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)																																
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m																																
1-2m																																
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)																																
NEPM 2013 EIL Values for Commercial/ Industrial																																
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																																
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																
PFAS NEMP 2020 Table 2 Health Industrial/Commercial																																
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses																																
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																																
1	BH01_0	1113757	27 Jun 2024																													
	BH01_0.3	1116437	10 Jul 2024																													
	BH01_0.4	1116437	10 Jul 2024																													
	BH02_0	1113757	27 Jun 2024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	BH02_0.3	1116437	10 Jul 2024																													
	BH03_0	1113757	27 Jun 2024																													
	BH03_0.3	1116437	10 Jul 2024																													
	BH04_0	1113757	27 Jun 2024																													
	BH05_0.2	1113757	27 Jun 2024																													
2	A2_TP01_0	1113757	26 Jun 2024																													
	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024																													
	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024																													
	A2_TP02_0	1113757	26 Jun 2024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	A2_TP02_0.5	1113757	26 Jun 2024																													
	A2_TP02_1.5	1113757	26 Jun 2024																													
	A2_TP03_0	1113757	26 Jun 2024																													
	A2_TP03_0.5	1113757	26 Jun 2024																													
	A2_TP03_1	1113757	26 Jun 2024																													
	A2_TP04_0	1113757	26 Jun 2024																													
	A2_TP05_0	1113757	26 Jun 2024																													
	A2_TP06_0	1113757	26 Jun 2024																													
	A2_TP07_0	1113757	26 Jun 2024																													
	A2_TP08_0	1113757	26 Jun 2024																													
3	A3_TP01_0	1113757	26 Jun 2024																													
	A3_TP03_0	1113757	26 Jun 2024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	A3_TP05_0	1113757	26 Jun 2024																													
	A3_TP07_0	1113757	26 Jun 2024																													
	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024																													
	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024																													

AREA	Field ID	Lab Report No.	Date	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	4-chlorotoluene	Bromobenzene	Hexachlorobenzene	Chlorobenzene	Iodomethane	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Trichlorofluoromethane
				Halogenated Benzenes							Halogenated Hydrocarbons				
				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	0.05	0.5	0.5	0.5	0.5	0.5	0.5
CRC Care HSL D Commercial / Industrial (Direct Contact)															
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)															
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m															
1-2m															
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)															
NEPM 2013 EIL Values for Commercial/ Industrial															
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil									80						
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand															
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil															
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil															
PFAS NEMP 2020 Table 2 Health Industrial/Commercial															
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses															
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses															
1	BH01_0	1113757	27 Jun 2024												
	BH01_0.3	1116437	10 Jul 2024												
	BH01_0.4	1116437	10 Jul 2024												
	BH02_0	1113757	27 Jun 2024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	BH02_0.3	1116437	10 Jul 2024												
	BH03_0	1113757	27 Jun 2024												
	BH03_0.3	1116437	10 Jul 2024												
	BH04_0	1113757	27 Jun 2024						<0.05						
	BH05_0.2	1113757	27 Jun 2024												
2	A2_TP01_0	1113757	26 Jun 2024												
	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024												
	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024												
	A2_TP02_0	1113757	26 Jun 2024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	A2_TP02_0.5	1113757	26 Jun 2024						<0.1						
	A2_TP02_1.5	1113757	26 Jun 2024						<0.05						
	A2_TP03_0	1113757	26 Jun 2024												
	A2_TP03_0.5	1113757	26 Jun 2024						<0.05						
	A2_TP03_1	1113757	26 Jun 2024												
	A2_TP04_0	1113757	26 Jun 2024						<0.05						
	A2_TP05_0	1113757	26 Jun 2024												
	A2_TP06_0	1113757	26 Jun 2024						<0.05						
	A2_TP07_0	1113757	26 Jun 2024												
	A2_TP08_0	1113757	26 Jun 2024						<0.05						
3	A3_TP01_0	1113757	26 Jun 2024												
	A3_TP03_0	1113757	26 Jun 2024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	A3_TP05_0	1113757	26 Jun 2024												
	A3_TP07_0	1113757	26 Jun 2024						<0.05						
	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024												
	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024												

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AREA	Field ID	Lab Report No.	Date	Herbicides							MAH					PCBs							
				2,4,5-Trichlorophenoxy Acetic Acid	2-Methyl-4-Chlorophenoxy Butanoic Acid	2-Methyl-4-chlorophenoxyacetic acid	Atrazine	Hedonal	Mecoprop	Dinoseb	Total MAH	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	Styrene	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of 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	mg/kg
			EQL	0.5	0.5	0.5	0.2	0.5	0.5	20	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CRC Care HSL D Commercial / Industrial (Direct Contact)																							
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)																							
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m																							
1-2m																							
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)																							
NEPM 2013 EIL Values for Commercial/ Industrial																							
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				5,000	5,000	5,000	2,500	9,000	5,000														7
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																							
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																							
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																							
PFAS NEMP 2020 Table 2 Health Industrial/Commercial																							
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses																							
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses																							
1	BH01_0	1113757	27 Jun 2024							<20													
	BH01_0.3	1116437	10 Jul 2024																				
	BH01_0.4	1116437	10 Jul 2024																				
	BH02_0	1113757	27 Jun 2024	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	BH02_0.3	1116437	10 Jul 2024													<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	BH03_0	1113757	27 Jun 2024							<20													
	BH03_0.3	1116437	10 Jul 2024																				
	BH04_0	1113757	27 Jun 2024							<20						<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	BH05_0.2	1113757	27 Jun 2024							<20													
2	A2_TP01_0	1113757	26 Jun 2024							<20													
	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024							<20													
	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024																				
	A2_TP02_0	1113757	26 Jun 2024	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP02_0.5	1113757	26 Jun 2024							<20						<1	<1	<1	<1	<1	<1	<1	<1
	A2_TP02_1.5	1113757	26 Jun 2024							<20						<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP03_0	1113757	26 Jun 2024							<20													
	A2_TP03_0.5	1113757	26 Jun 2024							<20						<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP03_1	1113757	26 Jun 2024							<20													
	A2_TP04_0	1113757	26 Jun 2024							<20						<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP05_0	1113757	26 Jun 2024							<20													
	A2_TP06_0	1113757	26 Jun 2024							<20						<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A2_TP07_0	1113757	26 Jun 2024							<20													
	A2_TP08_0	1113757	26 Jun 2024							<20						<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
3	A3_TP01_0	1113757	26 Jun 2024							<20													
	A3_TP03_0	1113757	26 Jun 2024	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	A3_TP05_0	1113757	26 Jun 2024							<20													
	A3_TP07_0	1113757	26 Jun 2024							<20						<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024																				
	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024																				

AREA	Field ID	Lab Report No.	Date	Pesticides				Inorganics		Solvents				
				Bifenthrin	Parathion	Pirimiphos-methyl	Mirex	Cyanide (Free)	Moisture Content (dried @ 103°C)	4-Methyl-2-pentanone	Allyl chloride	Acetone	Carbon disulfide	Methyl Ethyl Ketone
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			EQL	0.05	0.2	0.2	0.05	5	1	0.5	0.5	0.5	0.5	0.5
CRC Care HSL D Commercial / Industrial (Direct Contact)														
CRC Care HSL Intrusive Maintenance Worker (Direct Contact)														
CRC Care HSLs for Vapour Intrusion, Commercial / Industrial (Sand) 0-1m														
1-2m														
CRC Care HSLs for Vapour Intrusion (Intrusive Maintenance Worker) Sand (0-<2m)														
NEPM 2013 EIL Values for Commercial/ Industrial														
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				4,500			100	1,500						
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand														
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil														
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil														
PFAS NEMP 2020 Table 2 Health Industrial/Commercial														
PFAS NEMP 2020 Table 3 Ecological direct exposure all land uses														
PFAS NEMP 2020 Table 3 Ecological indirect exposure all land uses														
1	BH01_0	1113757	27 Jun 2024						11					
	BH01_0.3	1116437	10 Jul 2024						8.2					
	BH01_0.4	1116437	10 Jul 2024						8.8					
	BH02_0	1113757	27 Jun 2024	<0.05			<0.05	<5	12	<0.5	<0.5	<0.5	<0.5	<0.5
	BH02_0.3	1116437	10 Jul 2024						3.1					
	BH03_0	1113757	27 Jun 2024						<1					
	BH03_0.3	1116437	10 Jul 2024						4.6					
	BH04_0	1113757	27 Jun 2024		<0.2	<0.2			<1					
	BH05_0.2	1113757	27 Jun 2024						3.6					
2	A2_TP01_0	1113757	26 Jun 2024						4.5					
	QC01 (Duplicate of A2_TP01_0)	1113757	26 Jun 2024						3.1					
	QC01A (Duplicate of A2_TP01_0)	ES2405809	26 Jun 2024											
	A2_TP02_0	1113757	26 Jun 2024	<0.05			<0.05	<5	3.7	<0.5	<0.5	<0.5	<0.5	<0.5
	A2_TP02_0.5	1113757	26 Jun 2024		<0.2	<0.2			3.9					
	A2_TP02_1.5	1113757	26 Jun 2024		<0.2	<0.2			6.0					
	A2_TP03_0	1113757	26 Jun 2024						3.7					
	A2_TP03_0.5	1113757	26 Jun 2024		<0.2	<0.2			5.4					
	A2_TP03_1	1113757	26 Jun 2024						8.1					
	A2_TP04_0	1113757	26 Jun 2024		<0.2	<0.2			2.8					
	A2_TP05_0	1113757	26 Jun 2024						3.4					
	A2_TP06_0	1113757	26 Jun 2024		<0.2	<0.2			4.6					
	A2_TP07_0	1113757	26 Jun 2024						3.6					
	A2_TP08_0	1113757	26 Jun 2024		<0.2	<0.2			3.2					
3	A3_TP01_0	1113757	26 Jun 2024						1.2					
	A3_TP03_0	1113757	26 Jun 2024	<0.05			<0.05	<5	2.5	<0.5	<0.5	<0.5	<0.5	<0.5
	A3_TP05_0	1113757	26 Jun 2024						2.0					
	A3_TP07_0	1113757	26 Jun 2024		<0.2	<0.2			1.8					
	QC02 (Duplicate of A3_TP07_0)	1113757	26 Jun 2024						<1					
	QC02A (Duplicate of A3_TP07_0)	ES421493	26 Jun 2024											

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Relative Duplicate Percentage Results Table

Agon Job Reference: JC1580

			Lab Report Number	1113757	1113757		1113757	1113757		1113757	ES2405809		1113757	ES2421493	
			Field ID	A2_TP01_0	QC01		A2_TP07_0	QC02		A2_TP01_0	QC01A		A2_TP07_0	QC02A	
			Matrix Type	Soil	Soil		Soil	Soil		Soil	Soil		Soil	Soil	
			Date	26/06/2024	26/06/2024	RPD	26/06/2024	26/06/2024	RPD	26/06/2024	26/06/2024	RPD	26/06/2024	26/06/2024	RPD
	Unit	EQL													
PFOS/PFOA															
PFBA	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.001	0	<5	<0.001	0	
PFPeA	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.0002	0	<5	<0.0002	0	
PFHxA	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.0002	0	<5	<0.0002	0	
PFHpA	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.0002	0	<5	<0.0002	0	
PFOA	mg/kg	0.005	<0.005	<0.005	0	<0.005	<0.005	0	<0.005	<0.0002	0	<0.005	<0.0002	0	
PFNA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFDA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFUnDA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFDoDA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFTrDA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFTeDA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
FOSA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
N-MeFOSA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
N-MeFOSE	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
N-EtFOSE	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
N-EtFOSA	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
N-EtFOSAA	µg/kg	10	<10	<10	0	<10	<10	0	<10			<10			
N-MeFOSAA	µg/kg	10	<10	<10	0	<10	<10	0	<10			<10			
PFBS	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.0002	0	<5	<0.0002	0	
PFNS	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFPrS	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFPeS	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFHxS	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.0002	0	<5	<0.0002	0	
PFHpS	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
PFOS	mg/kg	0.005	<0.005	<0.005	0	<0.005	<0.005	0	<0.005	<0.0002	0	<0.005	<0.0002	0	
PFDS	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
4:2 FTSA	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.0005	0	<5	<0.0005	0	
6:2 FTSA	µg/kg	10	<10	<10	0	<10	<10	0	<10	<0.0005	0	<10	<0.0005	0	
8:2 FTSA	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.0005	0	<5	<0.0005	0	
10:2 FTSA	µg/kg	5	<5	<5	0	<5	<5	0	<5	<0.0005	0	<5	<0.0005	0	
Sum (PFHxS + PFOS)	µg/kg	5	<0.005	<0.005	0	<0.005	<0.005	0	<0.005	<0.0002	0	<0.005	<0.0002	0	
Sum of US EPA PFAS (PFOS + PFOA)	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)	µg/kg	5	<5	<5	0	<5	<5	0	<5			<5			
Sum of WA DWER PFAS	µg/kg	10	<10	<10	0	<10	<10	0	<10	<0.0002	0	<10	<0.0002	0	
Sum of PFAS	µg/kg	50	<50	<50	0	<50	<50	0	<50			<50			
Metals															
Arsenic	mg/kg	2	16	20	22				16	8	67				
Beryllium	mg/kg	2	<2						<2						
Boron	mg/kg	10	<10						<10						
Cobalt	mg/kg	5	<5						<5						
Cadmium	mg/kg	0.4	<0.4	<0.4	0				<0.4	<1	0				
Chromium (III+VI)	mg/kg	5	76							27					
Manganese	mg/kg	5	130						130						
Chromium (hexavalent)	mg/kg	1	<1						<1						
Copper	mg/kg	5	12	8.2	38				12	10	18				
Lead	mg/kg	5	22	20	10				22	16	32				
Mercury	mg/kg	0.1	<0.1	<0.1	0				<0.1	<0.1	0				
Nickel	mg/kg	5	8.5	6.9	21				8.5	8	6				
Selenium	mg/kg	2	<2						<2						
Zinc	mg/kg	5	26	17	42				26	24	8				
BTEX															
Benzene	mg/kg	0.1	<0.1	<0.1	0				<0.1	<0.2	0				
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	0				<0.1	<0.5	0				
Toluene	mg/kg	0.1	<0.1	<0.1	0				<0.1	<0.5	0				
Naphthalene	mg/kg	0.01	<0.5	<0.5	0				<0.5	<1	0				
Xylene (m & p)	mg/kg	0.2	<0.2	<0.2	0				<0.2	<0.5	0				
Xylene (o)	mg/kg	0.1	<0.1	<0.1	0				<0.1	<0.5	0				
Xylene Total	mg/kg	0.3	<0.3	<0.3	0				<0.3	<0.5	0				
TRH															
C6-C10	mg/kg	20	<20	<20	0				<20	<10	0				
C6-C10 (F1 minus BTEX)	mg/kg	20	<20	<20	0				<20	<10	0				
C10-C16	mg/kg	50	<50	<50	0				<50	<50	0				
C10-C16 (F2 minus Naphthalene)	mg/kg	50	<50	<50	0				<50	<50	0				
C16-C34	mg/kg	100	230	290	23				230	260	12				
C34-C40	mg/kg	100	350	370	6				350	350	0				
C10-C40 (Sum of total)	mg/kg	100	580	660	13				580	610	5				
TPH															
C6-C9	mg/kg	50	<20	<20	0				<20	<10	0				
C10-C14	mg/kg	20	<20	<20	0				<20	<50	0				
C15-C28	mg/kg	50	66	110	50				66	130	65				
C29-C36	mg/kg	50	240	280	15				240	250	4				
+C10-C36 (Sum of total)	mg/kg	10	306	390	24				306	380	22				

			Lab Report Number	1113757	1113757	1116437	1113757	1116437
			Field ID	RB01	RB02	RB03	TB01	TB02
			Sampled_Date/Time	26/06/2024	27/06/2024	10/07/2024	27/06/2024	10/07/2024
			Sample Type	Rinsate	Rinsate	Rinsate	Trip_B	Trip_B
Chem_Group	**ChemName**	**Units**	**EQL**					
BTEX	Benzene	mg/L	0.001				<0.001	<0.001
	Ethylbenzene	mg/L	0.001				<0.001	<0.001
	Toluene	mg/L	0.001				<0.001	<0.001
	m&p-Xylenes	mg/L	0.002				<0.002	<0.002
	o-Xylenes	mg/L	0.001				<0.001	<0.001
	Xylenes Total	mg/L	0.003				<0.003	<0.003
Metals	Arsenic	mg/L	0.001	<0.001	<0.001	<0.001		
	Cadmium	mg/L	0.0002	<0.0002	<0.0002	<0.0002		
	Chromium	mg/L	0.001	<0.001	<0.001	<0.001		
	Copper	mg/L	0.001	<0.001	<0.001	<0.001		
	Lead	mg/L	0.001	<0.001	<0.001	<0.001		
	Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001		
	Nickel	mg/L	0.001	<0.001	<0.001	<0.001		
	Zinc	mg/L	0.005	<0.005	<0.005	<0.005		
TRH								
	C6-C9	mg/L	0.02				<0.02	
	C10-C14	mg/L	0.05				<0.05	
	C15-C28	mg/L	0.1				<0.1	
	C29-C36	mg/L	0.1				<0.1	
	C10-C36	mg/L	0.1				<0.1	
	C6-C10	mg/L	0.02				<0.02	<0.02
	C6-C10 less BTEX (F1)	mg/L	0.02				<0.02	
	C10-C16	mg/L	0.05				<0.05	
	C10-C16 less Naphthalene (F2)	mg/L	0.05				<0.05	
	C16-C34	mg/L	0.1				<0.1	
	C34-C40	mg/L	0.1				<0.1	
	C10-C40	mg/L	0.1				<0.1	

APPENDIX E: LABORATORY CERTIFICATES OF ANALYSIS

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

Company	Agon Environmental Pty Ltd - NT	Project №	JC1580	Project Manager	Varun Bhagwat	Sampler(s)	VB
Address	1/41 Jessop Cres Berrimah NT 0828	Project Name	Soil Investigation	EDD Format (ESdat, EQuIS etc)	Esdat	Handed over by	VB on 26-27/6/24
		Facility Code				Email for Invoice	finance@agonenviro.com.au
Contact Name	Varun Bhagwat					Email for Results	varun.bhagwat@agonenviro.com.au; agonenvironmental@esdat.com.au
Phone №	0422 636 277						
Special Directions							
Purchase Order							
Quote ID №							

Analyses: Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing.

Containers: Change container type & size if necessary.

Required Turnaround Time (TAT): Default will be 5 days if not ticked.

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	B4A: TRH/BTEXN/PAH/Phenols	M13: NEPM 2013 Metals	B15: OCP/OPP/PCB	PFAS Full Suite	R20: NEPM 2013 B1 Table 1A (1) HIL - Basic Suite	VOC	TRH (C6-C10)/BTEXN	M8: Metals	B7A: TRH/BTEXN/PAH/Phenols/8 Metals	500mL Plastic	60mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Sample Comments / Dangerous Goods Hazard Warning
1	BH01_0	27/06/24	Soil	X	X		X												2	
2	BH02_0	27/06/24	Soil					X	X										2	
3	BH03_0	27/06/24	Soil	X	X		X												2	
4	BH04_0	27/06/24	Soil	X		X													2	
5	BH05_0.2	27/06/24	Soil	X															2	
6	BH05_0.3	27/06/24	Soil																2	
7	A2_TP01_0	26/06/24	Soil	X	X		X												2	
	A2_TP01_0.2	26/06/24	Soil																2	
	A2_TP01_0.7	26/06/24	Soil																2	
	A2_TP01_1	26/06/24	Soil																2	
7	A2_TP02_0	26/06/24	Soil				X	X	X										2	
	A2_TP02_0.5	26/06/24	Soil	X		X													2	
	A2_TP02_1	26/06/24	Soil	X	X														2	
	A2_TP02_1.5	26/06/24	Soil	X		X													2	
	A2_TP02_1.7	26/06/24	Soil																2	
7	A2_TP03_0	26/06/24	Soil	X	X		X												2	
	A2_TP03_0.5	26/06/24	Soil	X		X													2	
	A2_TP03_1	26/06/24	Soil	X	X														2	
	A2_TP04_0	26/06/24	Soil	X		X													2	
	A2_TP05_0	26/06/24	Soil	X	X		X												2	
	A2_TP06_0	26/06/24	Soil	X		X													2	
	A2_TP07_0	26/06/24	Soil	X	X		X												2	
	A2_TP08_0	26/06/24	Soil	X		X													2	
	A3_TP01_0	26/06/24	Soil	X	X		X												2	
	A3_TP02_0	26/06/24	Soil																2	
	A3_TP03_0	26/06/24	Soil				X	X	X										2	
	A3_TP04_0	26/06/24	Soil																2	
	A3_TP05_0	26/06/24	Soil	X	X		X												2	
	A3_TP06_0	26/06/24	Soil																2	
	A3_TP07_0	26/06/24	Soil	X		X	X												2	
	A3_TP08_0	26/06/24	Soil																2	
	QC01	26/06/24	Soil				X					X							2	
	QC02	26/06/24	Soil				X												2	
	QC03	27/06/24	Soil																1	
	RB01	26/06/24	Water								X			1						
	RB02	27/06/24	Water								X			1						
	TB01	26/06/24	Water							X							2			
	Add Rows		Total Counts	19	10	8	13	3	3	1	2	1		2			2		67	

Method of Shipment	Courier (#)	Hand Delivered	Name		Signature		Date		Time
Laboratory Use Only	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	Time		Temperature
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	Time		Report №

eurofins | Environment Testing

www.eurofins.com.au EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Auckland (Focus)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Sample Receipt Advice

Company name: Agon Environmental Pty Ltd - NT
Contact name: Varun Bhagwat
Project name: Soil Investigation
Project ID: JC1580
Turnaround time: 5 Day
Date/Time received Jul 2, 2024 3:00 PM
Eurofins reference 1113757

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:

Savini Suduweli on phone : +61 3 8564 5051 or by email: SaviniSuduweli@eurofins.com

Results will be delivered electronically via email to Varun Bhagwat - Varun.Bhagwat@agonenviro.com.au.

Note: A copy of these results will also be delivered to the general Agon Environmental Pty Ltd - NT email address.

Agon Environmental Pty Ltd
3/224 Glen Osmond Road
Fullarton
SA 5063

Attention: **Varun Bhagwat**

Report **1113757-S**
Project name Soil Investigation
Project ID JC1580
Received Date Jul 02, 2024

Client Sample ID			**BH01_0**	**BH03_0**	**A2_TP01_0**	**A2_TP03_0**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M24-JI0005541**	**M24-JI0005542**	**M24-JI0005543**	**M24-JI0005544**
Date Sampled			**Jun 27, 2024**	**Jun 27, 2024**	**Jun 26, 2024**	**Jun 26, 2024**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	35
TRH C15-C28	50	mg/kg	79	110	66	240
TRH C29-C36	50	mg/kg	200	1300	240	1300
TRH C10-C36 (Total)	50	mg/kg	279	1410	306	1575
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	200	860	230	1100
TRH >C34-C40	100	mg/kg	380	2400	350	2400
TRH >C10-C40 (total)*	100	mg/kg	580	3260	580	3500
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	94	89	116	105
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			BH01_0	BH03_0	A2_TP01_0	A2_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005541	M24-JI0005542	M24-JI0005543	M24-JI0005544
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	102	86	84	111
p-Terphenyl-d14 (surr.)	1	%	79	93	98	68
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	79	61	44	49
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Heavy Metals						
Arsenic	2	mg/kg	< 2	4.3	16	18
Beryllium	2	mg/kg	< 2	< 2	< 2	< 2
Boron	10	mg/kg	< 10	< 10	< 10	< 10
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Cobalt	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	< 5	8.2	12	14
Lead	5	mg/kg	5.3	6.7	22	24
Manganese	5	mg/kg	120	360	130	140
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	5.8	8.5	11
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Zinc	5	mg/kg	6.8	10.0	26	22

Client Sample ID			BH01_0	BH03_0	A2_TP01_0	A2_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005541	M24-JI0005542	M24-JI0005543	M24-JI0005544
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	11	< 1	4.5	3.7
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	92	89	88	89
13C5-PFPeA (surr.)	1	%	97	97	95	97
13C5-PFHxA (surr.)	1	%	96	94	94	90
13C4-PFHpA (surr.)	1	%	96	96	92	91
13C8-PFOA (surr.)	1	%	104	98	97	96
13C5-PFNA (surr.)	1	%	97	96	91	95
13C6-PFDA (surr.)	1	%	78	76	69	73
13C2-PFUnDA (surr.)	1	%	113	106	103	109
13C2-PFDoDA (surr.)	1	%	95	95	99	98
13C2-PFTeDA (surr.)	1	%	70	66	78	88
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	76	83	78	83
D3-N-MeFOSA (surr.)	1	%	108	100	98	99
D5-N-EtFOSA (surr.)	1	%	116	116	111	112
D7-N-MeFOSE (surr.)	1	%	112	108	104	104
D9-N-EtFOSE (surr.)	1	%	93	82	76	74
D5-N-EtFOSAA (surr.)	1	%	161	145	156	145
D3-N-MeFOSAA (surr.)	1	%	91	94	94	81
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5

Client Sample ID			BH01_0	BH03_0	A2_TP01_0	A2_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005541	M24-JI0005542	M24-JI0005543	M24-JI0005544
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	88	85	84	85
18O2-PFHxS (surr.)	1	%	90	82	78	85
13C8-PFOS (surr.)	1	%	64	65	71	65
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	111	109	117	123
13C2-6:2 FTSA (surr.)	1	%	104	104	131	111
13C2-8:2 FTSA (surr.)	1	%	114	128	123	127
13C2-10:2 FTSA (surr.)	1	%	116	108	106	99
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			A2_TP05_0	A2_TP07_0	A3_TP01_0	A3_TP05_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005545	M24-JI0005546	M24-JI0005547	M24-JI0005548
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	94	< 20	170	< 20
TRH C15-C28	50	mg/kg	81	72	570	< 50
TRH C29-C36	50	mg/kg	960	360	1000	260
TRH C10-C36 (Total)	50	mg/kg	1135	432	1740	260
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	59	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	59	< 50
TRH >C16-C34	100	mg/kg	640	300	1100	190
TRH >C34-C40	100	mg/kg	1800	580	2100	500
TRH >C10-C40 (total)*	100	mg/kg	2440	880	3259	690
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	90	78	84	117

Client Sample ID			A2_TP05_0	A2_TP07_0	A3_TP01_0	A3_TP05_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005545	M24-JI0005546	M24-JI0005547	M24-JI0005548
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	80	91	87	70
p-Terphenyl-d14 (surr.)	1	%	113	147	136	77
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	63	50	89	61
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			A2_TP05_0	A2_TP07_0	A3_TP01_0	A3_TP05_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005545	M24-JI0005546	M24-JI0005547	M24-JI0005548
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	5.5	17	8.3	15
Beryllium	2	mg/kg	< 2	< 2	< 2	< 2
Boron	10	mg/kg	< 10	< 10	< 10	< 10
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Cobalt	5	mg/kg	< 5	6.2	< 5	< 5
Copper	5	mg/kg	7.5	16	7.4	9.1
Lead	5	mg/kg	15	30	14	16
Manganese	5	mg/kg	130	200	240	120
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	7.9	12	9.3	8.9
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Zinc	5	mg/kg	17	40	18	12
Sample Properties						
% Moisture	1	%	3.4	3.6	1.2	2.0
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	89	88	91	86
13C5-PFPeA (surr.)	1	%	97	95	98	91
13C5-PFHxA (surr.)	1	%	91	92	95	88
13C4-PFHpA (surr.)	1	%	92	90	93	86
13C8-PFOA (surr.)	1	%	95	96	99	92
13C5-PFNA (surr.)	1	%	93	95	95	93
13C6-PFDA (surr.)	1	%	78	74	76	73
13C2-PFUnDA (surr.)	1	%	108	106	108	98
13C2-PFDoDA (surr.)	1	%	101	102	104	98
13C2-PFTeDA (surr.)	1	%	98	107	105	96
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	82	85	86	79
D3-N-MeFOSA (surr.)	1	%	94	89	97	92

Client Sample ID			A2_TP05_0	A2_TP07_0	A3_TP01_0	A3_TP05_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005545	M24-JI0005546	M24-JI0005547	M24-JI0005548
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
D5-N-EtFOSA (surr.)	1	%	111	107	115	105
D7-N-MeFOSE (surr.)	1	%	99	97	100	98
D9-N-EtFOSE (surr.)	1	%	75	69	74	70
D5-N-EtFOSAA (surr.)	1	%	134	142	158	141
D3-N-MeFOSAA (surr.)	1	%	80	81	82	78
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	86	86	87	80
18O2-PFHxS (surr.)	1	%	78	84	89	83
13C8-PFOS (surr.)	1	%	70	73	69	66
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	114	114	113	114
13C2-6:2 FTSA (surr.)	1	%	116	114	126	103
13C2-8:2 FTSA (surr.)	1	%	135	133	145	132
13C2-10:2 FTSA (surr.)	1	%	108	107	116	103
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			BH02_0	BH05_0.2	A2_TP02_0	A3_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005549	M24-JI0005550	M24-JI0005551	M24-JI0005552
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	110	170	120	< 20
TRH C15-C28	50	mg/kg	64	< 50	80	< 50
TRH C29-C36	50	mg/kg	1300	990	960	1300
TRH C10-C36 (Total)	50	mg/kg	1474	1160	1160	1300
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			BH02_0	BH05_0.2	A2_TP02_0	A3_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005549	M24-JI0005550	M24-JI0005551	M24-JI0005552
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	64	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	64	< 50	< 50
TRH >C16-C34	100	mg/kg	820	580	640	770
TRH >C34-C40	100	mg/kg	2600	2100	1900	2800
TRH >C10-C40 (total)*	100	mg/kg	3420	2744	2540	3570
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	107	88	105	72
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	98	93	85	70
p-Terphenyl-d14 (surr.)	1	%	71	88	130	59
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	-	-
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	-
2.4.5-Trichlorophenol	1	mg/kg	-	< 1	-	-
2.4.6-Trichlorophenol	1	mg/kg	-	< 1	-	-
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	-
4-Chloro-3-methylphenol	1	mg/kg	-	< 1	-	-
Pentachlorophenol	1	mg/kg	-	< 1	-	-
Tetrachlorophenols - Total	10	mg/kg	-	< 10	-	-
Total Halogenated Phenol*	1	mg/kg	-	< 1	-	-

Client Sample ID			BH02_0	BH05_0.2	A2_TP02_0	A3_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005549	M24-JI0005550	M24-JI0005551	M24-JI0005552
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20	-	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5	-	-
2-Nitrophenol	1.0	mg/kg	-	< 1	-	-
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5	-	-
2.4-Dinitrophenol	5	mg/kg	-	< 5	-	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	-	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	-	-
Total cresols*	0.5	mg/kg	-	< 0.5	-	-
4-Nitrophenol	5	mg/kg	-	< 5	-	-
Dinoseb	20	mg/kg	-	< 20	-	-
Phenol	0.5	mg/kg	-	< 0.5	-	-
Phenol-d6 (surr.)	1	%	-	70	-	-
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	-	-
Chromium (hexavalent)	1	mg/kg	< 1	-	< 1	< 1
Cyanide (free)	5	mg/kg	< 5	-	< 5	< 5
Heavy Metals						
Arsenic	2	mg/kg	4.8	-	13	12
Beryllium	2	mg/kg	< 2	-	< 2	< 2
Boron	10	mg/kg	< 10	-	< 10	< 10
Cadmium	0.4	mg/kg	< 0.4	-	< 0.4	< 0.4
Chromium	5	mg/kg	11	-	68	55
Cobalt	5	mg/kg	< 5	-	< 5	< 5
Copper	5	mg/kg	8.1	-	13	14
Lead	5	mg/kg	< 5	-	25	19
Manganese	5	mg/kg	220	-	120	140
Mercury	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Nickel	5	mg/kg	7.2	-	9.8	22
Selenium	2	mg/kg	< 2	-	< 2	< 2
Zinc	5	mg/kg	15	-	23	19
Sample Properties						
% Moisture	1	%	12	3.6	3.7	2.5
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	-	-	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	-	-	< 5	< 5
13C4-PFBA (surr.)	1	%	-	-	87	88
13C5-PFPeA (surr.)	1	%	-	-	93	95
13C5-PFHxA (surr.)	1	%	-	-	80	90
13C4-PFHpA (surr.)	1	%	-	-	90	89
13C8-PFOA (surr.)	1	%	-	-	92	94

Client Sample ID			BH02_0	BH05_0.2	A2_TP02_0	A3_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005549	M24-JI0005550	M24-JI0005551	M24-JI0005552
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFNA (surr.)	1	%	-	-	93	95
13C6-PFDA (surr.)	1	%	-	-	68	74
13C2-PFUnDA (surr.)	1	%	-	-	106	107
13C2-PFDoDA (surr.)	1	%	-	-	102	98
13C2-PFTeDA (surr.)	1	%	-	-	114	111
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	-	-	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	-	-	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	-	-	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	5	ug/kg	-	-	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	5	ug/kg	-	-	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	-	-	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	-	-	< 10	< 10
13C8-FOSA (surr.)	1	%	-	-	78	85
D3-N-MeFOSA (surr.)	1	%	-	-	94	91
D5-N-EtFOSA (surr.)	1	%	-	-	107	112
D7-N-MeFOSE (surr.)	1	%	-	-	102	101
D9-N-EtFOSE (surr.)	1	%	-	-	73	72
D5-N-EtFOSAA (surr.)	1	%	-	-	145	138
D3-N-MeFOSAA (surr.)	1	%	-	-	83	83
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	-	-	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	-	-	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	-	-	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	-	-	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	-	-	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	-	-	< 5	< 5
13C3-PFBS (surr.)	1	%	-	-	77	81
18O2-PFHxS (surr.)	1	%	-	-	82	81
13C8-PFOS (surr.)	1	%	-	-	61	69
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	-	-	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	10	ug/kg	-	-	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	-	-	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	-	-	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	-	-	160	115
13C2-6:2 FTSA (surr.)	1	%	-	-	127	114
13C2-8:2 FTSA (surr.)	1	%	-	-	130	136
13C2-10:2 FTSA (surr.)	1	%	-	-	114	115

Client Sample ID			BH02_0	BH05_0.2	A2_TP02_0	A3_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005549	M24-JI0005550	M24-JI0005551	M24-JI0005552
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	-	-	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	-	-	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	-	-	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	-	-	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	-	-	< 50	< 50
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5

Client Sample ID			BH02_0	BH05_0.2	A2_TP02_0	A3_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005549	M24-JI0005550	M24-JI0005551	M24-JI0005552
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Volatile Organics						
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	-	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	107	-	105	72
Toluene-d8 (surr.)	1	%	96	-	87	67
Organochlorine Pesticides						
Bifenthrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Organophosphorus Pesticides						
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Polychlorinated Biphenyls						
Comments			G01		G01	G01
Aroclor-1016	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Aroclor-1221	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Aroclor-1232	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Aroclor-1242	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Aroclor-1248	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Aroclor-1254	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Aroclor-1260	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Total PCB*	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	84	-	94	148
Tetrachloro-m-xylene (surr.)	1	%	102	-	57	99
Triazines						
Atrazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
NEPM 2013 Acid Herbicides						
Picloram	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2.4-D	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2.4.5-T	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
MCPA	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
MCPB	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Warfarin (surr.)	1	%	91	-	96	120
NEPM 2013 Organochlorine Pesticides						
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Mirex	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1

Client Sample ID			BH02_0	BH05_0.2	A2_TP02_0	A3_TP03_0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005549	M24-JI0005550	M24-JI0005551	M24-JI0005552
Date Sampled			Jun 27, 2024	Jun 27, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
NEPM 2013 Organochlorine Pesticides						
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	84	-	94	148
Tetrachloro-m-xylene (surr.)	1	%	102	-	57	99
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
NEPM 2013 Phenols						
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	< 0.4	< 0.4
Pentachlorophenol	1	mg/kg	< 1	-	< 1	< 1
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	65	-	105	40

Client Sample ID			BH04_0	A2_TP02_0.5	A2_TP02_1.5	A2_TP03_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005553	M24-JI0005554	M24-JI0005555	M24-JI0005556
Date Sampled			Jun 27, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 100	< 20	< 20
TRH C10-C14	20	mg/kg	110	< 20	110	39
TRH C15-C28	50	mg/kg	< 50	71	220	140
TRH C29-C36	50	mg/kg	760	120	1400	1300
TRH C10-C36 (Total)	50	mg/kg	870	191	1730	1479
TRH C6-C10	20	mg/kg	< 20	< 100	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 100	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	410	150	1100	930
TRH >C34-C40	100	mg/kg	1700	160	2600	2400
TRH >C10-C40 (total)*	100	mg/kg	2110	310	3700	3330
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.5	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.5	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.5	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 1	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.5	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 1.5	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	96	94	85	92
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 2.5	< 0.5	< 0.5

Client Sample ID			BH04_0	A2_TP02_0.5	A2_TP02_1.5	A2_TP03_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005553	M24-JI0005554	M24-JI0005555	M24-JI0005556
Date Sampled			Jun 27, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	95	119	98	88
p-Terphenyl-d14 (surr.)	1	%	117	147	81	127
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	71	75	76	111
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Sample Properties						
% Moisture	1	%	< 1	3.9	6.0	5.4

Client Sample ID			BH04_0	A2_TP02_0.5	A2_TP02_1.5	A2_TP03_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005553	M24-JI0005554	M24-JI0005555	M24-JI0005556
Date Sampled			Jun 27, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 1	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	83	146	87	72
Tetrachloro-m-xylene (surr.)	1	%	117	134	103	96
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			BH04_0	A2_TP02_0.5	A2_TP02_1.5	A2_TP03_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005553	M24-JI0005554	M24-JI0005555	M24-JI0005556
Date Sampled			Jun 27, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	143	138	66	93
Polychlorinated Biphenyls						
Comments			G01	G01		G01
Aroclor-1016	0.1	mg/kg	< 0.2	< 1	< 0.2	< 0.2
Aroclor-1221	0.1	mg/kg	< 0.2	< 1	< 0.2	< 0.2
Aroclor-1232	0.1	mg/kg	< 0.2	< 1	< 0.2	< 0.2
Aroclor-1242	0.1	mg/kg	< 0.2	< 1	< 0.2	< 0.2
Aroclor-1248	0.1	mg/kg	< 0.2	< 1	< 0.2	< 0.2
Aroclor-1254	0.1	mg/kg	< 0.2	< 1	< 0.2	< 0.2
Aroclor-1260	0.1	mg/kg	< 0.2	< 1	< 0.2	< 0.2
Total PCB*	0.1	mg/kg	< 0.2	< 1	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	83	146	87	72
Tetrachloro-m-xylene (surr.)	1	%	117	134	103	96

Client Sample ID			A2_TP04_0	A2_TP06_0	A2_TP08_0	A2_TP03_1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005557	M24-JI0005558	M24-JI0005559	M24-JI0005561
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	160	180	< 20	< 20
TRH C15-C28	50	mg/kg	110	130	< 50	< 50
TRH C29-C36	50	mg/kg	1300	1200	1400	220
TRH C10-C36 (Total)	50	mg/kg	1570	1510	1400	220
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	61	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	61	< 50	< 50
TRH >C16-C34	100	mg/kg	930	820	830	160
TRH >C34-C40	100	mg/kg	2500	2400	3000	390
TRH >C10-C40 (total)*	100	mg/kg	3430	3281	3830	550

Client Sample ID			A2_TP04_0	A2_TP06_0	A2_TP08_0	A2_TP03_1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005557	M24-JI0005558	M24-JI0005559	M24-JI0005561
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	95	92	82	88
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	95	96	86	82
p-Terphenyl-d14 (surr.)	1	%	63	69	80	78
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			A2_TP04_0	A2_TP06_0	A2_TP08_0	A2_TP03_1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005557	M24-JI0005558	M24-JI0005559	M24-JI0005561
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	59	68	54	77
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	-	-	-	< 1
Heavy Metals						
Arsenic	2	mg/kg	-	-	-	7.1
Beryllium	2	mg/kg	-	-	-	< 2
Boron	10	mg/kg	-	-	-	< 10
Cadmium	0.4	mg/kg	-	-	-	< 0.4
Cobalt	5	mg/kg	-	-	-	< 5
Copper	5	mg/kg	-	-	-	9.1
Lead	5	mg/kg	-	-	-	9.6
Manganese	5	mg/kg	-	-	-	140
Mercury	0.1	mg/kg	-	-	-	< 0.1
Nickel	5	mg/kg	-	-	-	< 5
Selenium	2	mg/kg	-	-	-	< 2
Zinc	5	mg/kg	-	-	-	12
Sample Properties						
% Moisture	1	%	2.8	4.6	3.2	8.1
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-

Client Sample ID			A2_TP04_0	A2_TP06_0	A2_TP08_0	A2_TP03_1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005557	M24-JI0005558	M24-JI0005559	M24-JI0005561
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Dibutylchlorendate (surr.)	1	%	104	60	103	-
Tetrachloro-m-xylene (surr.)	1	%	84	85	78	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Coumaphos	2	mg/kg	< 2	< 2	< 2	-
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Monocrotophos	2	mg/kg	< 2	< 2	< 2	-
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Omethoate	2	mg/kg	< 2	< 2	< 2	-
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Triphenylphosphate (surr.)	1	%	65	61	95	-
Polychlorinated Biphenyls						
Comments			G01	G01	G01	
Aroclor-1016	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Aroclor-1221	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Aroclor-1232	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Aroclor-1242	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Aroclor-1248	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Aroclor-1254	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Aroclor-1260	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Total PCB*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-

Client Sample ID			A2_TP04_0	A2_TP06_0	A2_TP08_0	A2_TP03_1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005557	M24-JI0005558	M24-JI0005559	M24-JI0005561
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Dibutylchlorendate (surr.)	1	%	104	60	103	-
Tetrachloro-m-xylene (surr.)	1	%	84	85	78	-

Client Sample ID			A3_TP07_0	QC01	QC02
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005562	M24-JI0005563	M24-JI0005564
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons					
TRH C6-C9	20	mg/kg	< 20	< 20	-
TRH C10-C14	20	mg/kg	240	< 20	-
TRH C15-C28	50	mg/kg	< 50	280	-
TRH C29-C36	50	mg/kg	1800	2600	-
TRH C10-C36 (Total)	50	mg/kg	2040	2880	-
TRH C6-C10	20	mg/kg	< 20	< 20	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	-
TRH >C10-C16	50	mg/kg	200	< 50	-
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	200	< 50	-
TRH >C16-C34	100	mg/kg	1000	1800	-
TRH >C34-C40	100	mg/kg	3800	4800	-
TRH >C10-C40 (total)*	100	mg/kg	5000	6600	-
BTEX					
Benzene	0.1	mg/kg	< 0.1	< 0.1	-
Toluene	0.1	mg/kg	< 0.1	< 0.1	-
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	-
4-Bromofluorobenzene (surr.)	1	%	82	102	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	-
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	-
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	-

Client Sample ID			A3_TP07_0	QC01	QC02
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005562	M24-JI0005563	M24-JI0005564
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	-
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	< 0.5	-
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	103	75	-
p-Terphenyl-d14 (surr.)	1	%	82	74	-
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	-
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	-
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	-
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	-
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	-
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	-
Pentachlorophenol	1	mg/kg	< 1	< 1	-
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	-
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	-
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	-
2-Nitrophenol	1.0	mg/kg	< 1	< 1	-
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	-
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	-
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	-
4-Nitrophenol	5	mg/kg	< 5	< 5	-
Dinoseb	20	mg/kg	< 20	< 20	-
Phenol	0.5	mg/kg	< 0.5	< 0.5	-
Phenol-d6 (surr.)	1	%	62	47	-
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	-
Heavy Metals					
Arsenic	2	mg/kg	-	20	-
Cadmium	0.4	mg/kg	-	< 0.4	-
Chromium	5	mg/kg	-	76	-
Copper	5	mg/kg	-	8.2	-
Lead	5	mg/kg	-	20	-
Mercury	0.1	mg/kg	-	< 0.1	-
Nickel	5	mg/kg	-	6.9	-
Zinc	5	mg/kg	-	17	-
Sample Properties					
% Moisture	1	%	1.8	3.1	< 1
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5

Client Sample ID			A3_TP07_0	QC01	QC02
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005562	M24-JI0005563	M24-JI0005564
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit			
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	86	89	91
13C5-PFPeA (surr.)	1	%	92	96	95
13C5-PFHxA (surr.)	1	%	91	90	94
13C4-PFHpA (surr.)	1	%	92	89	94
13C8-PFOA (surr.)	1	%	94	93	94
13C5-PFNA (surr.)	1	%	90	92	94
13C6-PFDA (surr.)	1	%	71	69	77
13C2-PFUnDA (surr.)	1	%	105	102	103
13C2-PFDoDA (surr.)	1	%	98	101	102
13C2-PFTeDA (surr.)	1	%	105	104	111
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	80	76	87
D3-N-MeFOSA (surr.)	1	%	95	94	101
D5-N-EtFOSA (surr.)	1	%	110	108	116
D7-N-MeFOSE (surr.)	1	%	92	91	105
D9-N-EtFOSE (surr.)	1	%	77	71	79
D5-N-EtFOSAA (surr.)	1	%	133	144	137
D3-N-MeFOSAA (surr.)	1	%	77	88	82
Perfluoroalkyl sulfonic acids (PFSAs)					
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	90	85	81
18O2-PFHxS (surr.)	1	%	84	84	88
13C8-PFOS (surr.)	1	%	66	61	69

Client Sample ID			A3_TP07_0	QC01	QC02
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005562	M24-JI0005563	M24-JI0005564
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	116	112	109
13C2-6:2 FTSA (surr.)	1	%	133	115	120
13C2-8:2 FTSA (surr.)	1	%	130	125	133
13C2-10:2 FTSA (surr.)	1	%	106	115	97
PFASs Summations					
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50
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-HCH	0.05	mg/kg	< 0.05	-	-
Aldrin	0.05	mg/kg	< 0.05	-	-
b-HCH	0.05	mg/kg	< 0.05	-	-
d-HCH	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	-	-
Endrin	0.05	mg/kg	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	-
Endrin ketone	0.05	mg/kg	< 0.05	-	-
g-HCH (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	0.5	mg/kg	< 0.5	-	-
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	%	121	-	-
Tetrachloro-m-xylene (surr.)	1	%	98	-	-

Client Sample ID			A3_TP07_0	QC01	QC02
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M24-JI0005562	M24-JI0005563	M24-JI0005564
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit			
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	-	-
Trichloronate	0.2	mg/kg	< 0.2	-	-
Triphenylphosphate (surr.)	1	%	90	-	-
Polychlorinated Biphenyls					
Comments			G01		
Aroclor-1016	0.1	mg/kg	< 0.2	-	-
Aroclor-1221	0.1	mg/kg	< 0.2	-	-
Aroclor-1232	0.1	mg/kg	< 0.2	-	-
Aroclor-1242	0.1	mg/kg	< 0.2	-	-
Aroclor-1248	0.1	mg/kg	< 0.2	-	-
Aroclor-1254	0.1	mg/kg	< 0.2	-	-
Aroclor-1260	0.1	mg/kg	< 0.2	-	-
Total PCB*	0.1	mg/kg	< 0.2	-	-
Dibutylchlorendate (surr.)	1	%	121	-	-
Tetrachloro-m-xylene (surr.)	1	%	98	-	-

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

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 B4A			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Polycyclic Aromatic Hydrocarbons	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
NEPM Screen Table 1(A) HIL's for Soil Contaminants - Basic Suite - Excluding Methyl Mercury/PBDE			
Chromium (hexavalent)	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection			
Cyanide (free)	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
NEPM 2013 Metals : Metals M12	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)			
Heavy Metals	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Organochlorine Pesticides	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Organophosphorus Pesticides	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Triazines	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2210 Triazine Herbicides in Soil and Water by GC-MS/MS			
NEPM 2013 Acid Herbicides	Melbourne	Jul 03, 2024	14 Days
- Method: MGT 530			
NEPM 2013 Organochlorine Pesticides	Melbourne	Jul 03, 2024	14 Days
- Method: USEPA 8081 Organochlorine Pesticides			
NEPM 2013 Phenols	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Eurofins Suite B7A			
Metals M8	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Jul 02, 2024	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Jul 03, 2024	28 Days

Description	Testing Site	Extracted	Holding Time
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Jul 02, 2024	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Volatile Organics	Melbourne	Jul 03, 2024	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			

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Address: 3/224 Glen Osmond Road
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Project Name: Soil Investigation
Project ID: JC1580

Order No.: JC
Report #: 1113757
Phone: 08 8338 1009
Fax:

Received: Jul 2, 2024 3:00 PM
Due: Jul 9, 2024
Priority: 5 Day
Contact Name: Varun Bhagwat

Eurofins Analytical Services Manager : Savini Suduweli

Sample Detail						HOLD	Metals M8	Eurofins Suite B15	NEPM 2013 Metals : Metals M13	BTEX and Naphthalene	Volatile Organics	Moisture Set	NEPM Screen Table 1(A) HIL's for Soil Contaminants - Basic Suite - Excluding	Total Recoverable Hydrocarbons	Eurofins Suite B7A	Eurofins Suite B4A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X	X	X	X	X	X
External Laboratory																	
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**												
1	BH01_0	Jun 27, 2024		Soil	M24-JI0005541				X			X				X	X
2	BH03_0	Jun 27, 2024		Soil	M24-JI0005542				X			X				X	X
3	A2_TP01_0	Jun 26, 2024		Soil	M24-JI0005543				X			X				X	X
4	A2_TP03_0	Jun 26, 2024		Soil	M24-JI0005544				X			X				X	X
5	A2_TP05_0	Jun 26, 2024		Soil	M24-JI0005545				X			X				X	X
6	A2_TP07_0	Jun 26, 2024		Soil	M24-JI0005546				X			X				X	X
7	A3_TP01_0	Jun 26, 2024		Soil	M24-JI0005547				X			X				X	X
8	A3_TP05_0	Jun 26, 2024		Soil	M24-JI0005548				X			X				X	X
9	BH02_0	Jun 27, 2024		Soil	M24-JI0005549						X	X	X				
10	BH05_0.2	Jun 27, 2024		Soil	M24-JI0005550							X				X	
11	A2_TP02_0	Jun 26, 2024		Soil	M24-JI0005551						X	X	X				X
12	A3_TP03_0	Jun 26, 2024		Soil	M24-JI0005552						X	X	X				X
13	BH04_0	Jun 27, 2024		Soil	M24-JI0005553			X				X				X	
14	A2_TP02_0.5	Jun 26, 2024		Soil	M24-JI0005554			X				X				X	

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Sample Detail						HOLD	Metals M8	Eurofins Suite B15	NEPM 2013 Metals : Metals M13	BTEX and Naphthalene	Volatile Organics	Moisture Set	NEPM Screen Table 1(A) HIL's for Soil Contaminants - Basic Suite - Excluding	Total Recoverable Hydrocarbons	Eurofins Suite B7A	Eurofins Suite B4A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X	X	X	X	X	X
15	A2_TP02_1.5	Jun 26, 2024		Soil	M24-JI0005555			X				X				X	
16	A2_TP03_0.5	Jun 26, 2024		Soil	M24-JI0005556			X				X				X	
17	A2_TP04_0	Jun 26, 2024		Soil	M24-JI0005557			X				X				X	
18	A2_TP06_0	Jun 26, 2024		Soil	M24-JI0005558			X				X				X	
19	A2_TP08_0	Jun 26, 2024		Soil	M24-JI0005559			X				X				X	
20	A2_TP03_1	Jun 26, 2024		Soil	M24-JI0005561				X			X				X	
21	A3_TP07_0	Jun 26, 2024		Soil	M24-JI0005562			X				X				X	X
22	QC01	Jun 26, 2024		Soil	M24-JI0005563							X			X		X
23	QC02	Jun 26, 2024		Soil	M24-JI0005564							X					X
24	RB01	Jun 26, 2024		Water	M24-JI0005565		X										
25	RB02	Jun 27, 2024		Water	M24-JI0005566		X										
26	TB01	Jun 27, 2024		Water	M24-JI0005567					X				X			
27	BH05_0.3	Jun 27, 2024		Soil	M24-JI0005568	X											
28	A2_TP01_0.2	Jun 26, 2024		Soil	M24-JI0005569	X											
29	A2_TP01_0.7	Jun 26, 2024		Soil	M24-JI0005570	X											
30	A2_TP01_1	Jun 26, 2024		Soil	M24-JI0005571	X											
31	A2_TP02_1.7	Jun 26, 2024		Soil	M24-JI0005572	X											

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X	X	X	X	X	X
32	A3_TP02_0	Jun 26, 2024		Soil	M24-Jl0005573	X											
33	A3_TP04_0	Jun 26, 2024		Soil	M24-Jl0005574	X											
34	A3_TP06_0	Jun 26, 2024		Soil	M24-Jl0005575	X											
35	A3_TP08_0	Jun 26, 2024		Soil	M24-Jl0005576	X											
36	QC03	Jun 27, 2024		Soil	M24-Jl0005577	X											
Test Counts						10	2	8	9	1	3	23	3	1	1	18	13

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the '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 before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - 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.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

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%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as 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 are not data from your samples.
3. 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.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. 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							
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	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							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Beryllium	mg/kg	< 2			2	Pass	
Boron	mg/kg	< 10			10	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Cobalt	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Manganese	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Method Blank							
Heavy Metals							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chromium	mg/kg	< 5			5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
NEPM 2013 Acid Herbicides							
Picloram	mg/kg	< 0.5			0.5	Pass	
2.4-D	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.5-T	mg/kg	< 0.5			0.5	Pass	
MCPA	mg/kg	< 0.5			0.5	Pass	
MCPB	mg/kg	< 0.5			0.5	Pass	
Mecoprop	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C6-C10	mg/kg	< 20			20	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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Bifenthrin	mg/kg	< 0.05			0.05	Pass	
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-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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-HCH (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	< 0.5			0.5	Pass	
Method Blank							
Organophosphorus Pesticides							
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
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-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
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							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Triazines							
Atrazine	mg/kg	< 0.2			0.2	Pass	
Method Blank							
NEPM 2013 Organochlorine Pesticides							
Mirex	mg/kg	< 0.05			0.05	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C10-C14	%	79			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH >C10-C16	%	74			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	104			80-120	Pass	
Beryllium	%	111			80-120	Pass	
Boron	%	113			80-120	Pass	
Cadmium	%	118			80-120	Pass	
Chromium	%	112			80-120	Pass	
Cobalt	%	112			80-120	Pass	
Copper	%	103			80-120	Pass	
Lead	%	115			80-120	Pass	
Manganese	%	109			80-120	Pass	
Mercury	%	108			80-120	Pass	
Nickel	%	101			80-120	Pass	
Selenium	%	103			80-120	Pass	
Zinc	%	101			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	88			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	98			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	101			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	88			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	85			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	86			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	90			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	92			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	87			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	110			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	91			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	95			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	96			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	92			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	97			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	80			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	88			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	87			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	87			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	117			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	94			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	83			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	86			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	75			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	86			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	119			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	84			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	83			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	85			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	93			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Phenols (non-Halogenated)							
2.4-Dinitrophenol	%	30			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	127			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Chromium	%	111			80-120	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	106			70-130	Pass	
1.2-Dichlorobenzene	%	105			70-130	Pass	
1.2-Dichloroethane	%	100			70-130	Pass	
Trichloroethene	%	119			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
4.4'-DDD	%	71			70-130	Pass	
LCS - % Recovery							
NEPM 2013 Acid Herbicides							
Picloram	%	72			70-130	Pass	
2.4-D	%	85			70-130	Pass	
2.4.5-T	%	75			70-130	Pass	
MCPA	%	73			70-130	Pass	
MCPB	%	71			70-130	Pass	
Mecoprop	%	75			70-130	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	89			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	100			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	102			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	89			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	86			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	84			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	90			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	93			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	90			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	93			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	92			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	94			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	90			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	88			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	96			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	83			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	93			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	92			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	91			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	115			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	98			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	83			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	88			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoroheptanesulfonic acid (PFHpS)	%	81			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	87			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	122			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	93			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	86			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	88			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	83			50-150	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	108			70-130	Pass	
TRH C6-C10	%	103			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	93			70-130	Pass	
Toluene	%	98			70-130	Pass	
Ethylbenzene	%	100			70-130	Pass	
m&p-Xylenes	%	99			70-130	Pass	
Xylenes - Total*	%	102			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	88			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	77			70-130	Pass	
Acenaphthylene	%	82			70-130	Pass	
Anthracene	%	76			70-130	Pass	
Benz(a)anthracene	%	74			70-130	Pass	
Benzo(a)pyrene	%	75			70-130	Pass	
Benzo(b&j)fluoranthene	%	98			70-130	Pass	
Benzo(g.h.i)perylene	%	99			70-130	Pass	
Benzo(k)fluoranthene	%	105			70-130	Pass	
Chrysene	%	79			70-130	Pass	
Dibenz(a.h)anthracene	%	84			70-130	Pass	
Fluoranthene	%	81			70-130	Pass	
Fluorene	%	81			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	76			70-130	Pass	
Naphthalene	%	77			70-130	Pass	
Phenanthrene	%	75			70-130	Pass	
Pyrene	%	73			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	85			25-140	Pass	
2.4-Dichlorophenol	%	86			25-140	Pass	
2.4.5-Trichlorophenol	%	82			25-140	Pass	
2.4.6-Trichlorophenol	%	78			25-140	Pass	
2.6-Dichlorophenol	%	74			25-140	Pass	
4-Chloro-3-methylphenol	%	87			25-140	Pass	
Pentachlorophenol	%	59			25-140	Pass	
Tetrachlorophenols - Total	%	65			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	44			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Methyl-4.6-dinitrophenol	%	54			25-140	Pass	
2-Nitrophenol	%	75			25-140	Pass	
2.4-Dimethylphenol	%	58			25-140	Pass	
2-Methylphenol (o-Cresol)	%	97			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	91			25-140	Pass	
4-Nitrophenol	%	82			25-140	Pass	
Dinoseb	%	76			25-140	Pass	
Phenol	%	103			25-140	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Bifenthrin	%	88			70-130	Pass	
Chlordanes - Total	%	96			70-130	Pass	
4.4'-DDE	%	89			70-130	Pass	
4.4'-DDT	%	86			70-130	Pass	
a-HCH	%	76			70-130	Pass	
Aldrin	%	81			70-130	Pass	
b-HCH	%	96			70-130	Pass	
d-HCH	%	85			70-130	Pass	
Dieldrin	%	108			70-130	Pass	
Endosulfan I	%	86			70-130	Pass	
Endosulfan II	%	84			70-130	Pass	
Endosulfan sulphate	%	79			70-130	Pass	
Endrin	%	100			70-130	Pass	
Endrin aldehyde	%	108			70-130	Pass	
Endrin ketone	%	105			70-130	Pass	
g-HCH (Lindane)	%	73			70-130	Pass	
Heptachlor	%	96			70-130	Pass	
Heptachlor epoxide	%	112			70-130	Pass	
Hexachlorobenzene	%	98			70-130	Pass	
Methoxychlor	%	87			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	84			70-130	Pass	
Dimethoate	%	101			70-130	Pass	
Ethion	%	73			70-130	Pass	
Fenitrothion	%	80			70-130	Pass	
Methyl parathion	%	99			70-130	Pass	
Mevinphos	%	76			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	101			70-130	Pass	
LCS - % Recovery							
NEPM 2013 Organochlorine Pesticides							
Mirex	%	84			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	123			70-130	Pass	
Acenaphthylene	%	102			70-130	Pass	
Anthracene	%	105			70-130	Pass	
Benz(a)anthracene	%	109			70-130	Pass	
Benzo(a)pyrene	%	104			70-130	Pass	
Benzo(b&j)fluoranthene	%	110			70-130	Pass	
Benzo(g.h.i)perylene	%	97			70-130	Pass	
Benzo(k)fluoranthene	%	95			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chrysene	%	108			70-130	Pass	
Dibenz(a.h)anthracene	%	99			70-130	Pass	
Fluoranthene	%	109			70-130	Pass	
Fluorene	%	106			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	103			70-130	Pass	
Naphthalene	%	108			70-130	Pass	
Phenanthrene	%	95			70-130	Pass	
Pyrene	%	122			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	107			25-140	Pass	
2.4-Dichlorophenol	%	55			25-140	Pass	
2.4.5-Trichlorophenol	%	61			25-140	Pass	
2.4.6-Trichlorophenol	%	102			25-140	Pass	
2.6-Dichlorophenol	%	79			25-140	Pass	
4-Chloro-3-methylphenol	%	120			25-140	Pass	
Pentachlorophenol	%	50			25-140	Pass	
Tetrachlorophenols - Total	%	89			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	39			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	41			25-140	Pass	
2-Nitrophenol	%	106			25-140	Pass	
2.4-Dimethylphenol	%	61			25-140	Pass	
2-Methylphenol (o-Cresol)	%	112			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	128			25-140	Pass	
4-Nitrophenol	%	66			25-140	Pass	
Dinoseb	%	61			25-140	Pass	
Phenol	%	103			25-140	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	M24-JI0012576	NCP	%	75			70-130	Pass	
TRH >C10-C16	M24-JI0012576	NCP	%	71			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M24-JI0008369	NCP	%	92			70-130	Pass	
Acenaphthylene	M24-JI0008369	NCP	%	80			70-130	Pass	
Anthracene	M24-JI0008369	NCP	%	77			70-130	Pass	
Benz(a)anthracene	M24-JI0008369	NCP	%	114			70-130	Pass	
Benzo(a)pyrene	M24-JI0008369	NCP	%	99			70-130	Pass	
Benzo(b&j)fluoranthene	M24-JI0008369	NCP	%	99			70-130	Pass	
Benzo(g.h.i)perylene	M24-JI0008369	NCP	%	97			70-130	Pass	
Benzo(k)fluoranthene	M24-JI0008369	NCP	%	90			70-130	Pass	
Chrysene	M24-JI0008369	NCP	%	100			70-130	Pass	
Dibenz(a.h)anthracene	M24-JI0008369	NCP	%	84			70-130	Pass	
Fluoranthene	M24-JI0008369	NCP	%	100			70-130	Pass	
Fluorene	M24-JI0008369	NCP	%	96			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M24-JI0008369	NCP	%	84			70-130	Pass	
Naphthalene	M24-JI0008369	NCP	%	95			70-130	Pass	
Phenanthrene	M24-JI0008369	NCP	%	91			70-130	Pass	
Pyrene	M24-JI0008369	NCP	%	97			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Chlorophenol	M24-JI0008369	NCP	%	86			30-130	Pass	
2.4-Dichlorophenol	M24-JI0008369	NCP	%	59			30-130	Pass	
2.4.5-Trichlorophenol	M24-JI0008369	NCP	%	100			30-130	Pass	
2.4.6-Trichlorophenol	M24-JI0008369	NCP	%	101			30-130	Pass	
2.6-Dichlorophenol	M24-JI0008369	NCP	%	80			30-130	Pass	
4-Chloro-3-methylphenol	M24-JI0008369	NCP	%	104			30-130	Pass	
Pentachlorophenol	M24-JI0008369	NCP	%	110			30-130	Pass	
Tetrachlorophenols - Total	M24-JI0008369	NCP	%	96			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M24-JI0008369	NCP	%	119			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M24-JI0008369	NCP	%	129			30-130	Pass	
2-Nitrophenol	M24-JI0008369	NCP	%	96			30-130	Pass	
2.4-Dimethylphenol	M24-JI0008369	NCP	%	55			30-130	Pass	
2.4-Dinitrophenol	M24-JI0008369	NCP	%	50			30-130	Pass	
2-Methylphenol (o-Cresol)	M24-JI0008369	NCP	%	57			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M24-JI0008369	NCP	%	63			30-130	Pass	
4-Nitrophenol	M24-JI0008369	NCP	%	112			30-130	Pass	
Dinoseb	M24-JI0008369	NCP	%	102			30-130	Pass	
Phenol	M24-JI0008369	NCP	%	78			30-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M24-JI0006074	NCP	%	71			70-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M24-JI0004252	NCP	%	101			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M24-JI0004252	NCP	%	119			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M24-JI0004252	NCP	%	115			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M24-JI0004252	NCP	%	97			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M24-JI0004252	NCP	%	95			50-150	Pass	
Perfluorononanoic acid (PFNA)	M24-JI0004252	NCP	%	96			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M24-JI0004252	NCP	%	104			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M24-JI0004252	NCP	%	99			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M24-JI0004252	NCP	%	102			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M24-JI0004252	NCP	%	103			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M24-JI0004252	NCP	%	103			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M24-JI0004252	NCP	%	96			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M24-JI0004252	NCP	%	99			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M24-JI0004252	NCP	%	96			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	M24-JI0004252	NCP	%	104			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	M24-JI0004252	NCP	%	92			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M24-JI0004252	NCP	%	97			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M24-JI0004252	NCP	%	95			50-150	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M24-JI0004252	NCP	%	98			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M24-JI0004252	NCP	%	119			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M24-JI0004252	NCP	%	106			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M24-JI0004252	NCP	%	87			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M24-JI0004252	NCP	%	106			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M24-JI0004252	NCP	%	88			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M24-JI0004252	NCP	%	99			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M24-JI0004252	NCP	%	123			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M24-JI0004252	NCP	%	96			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	M24-JI0004252	NCP	%	104			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M24-JI0004252	NCP	%	94			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M24-JI0004252	NCP	%	92			50-150	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M24-JI0008004	NCP	%	88			70-130	Pass	
1.2-Dichlorobenzene	M24-JI0008004	NCP	%	98			70-130	Pass	
1.2-Dichloroethane	M24-JI0008004	NCP	%	106			70-130	Pass	
Trichloroethene	M24-JI0008004	NCP	%	109			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Bifenthrin	M24-JI0006280	NCP	%	91			70-130	Pass	
Chlordanes - Total	M24-JI0006280	NCP	%	121			70-130	Pass	
4.4'-DDD	M24-JI0006280	NCP	%	127			70-130	Pass	
4.4'-DDE	M24-JI0006280	NCP	%	113			70-130	Pass	
4.4'-DDT	M24-JI0006280	NCP	%	120			70-130	Pass	
Aldrin	M24-JI0006280	NCP	%	125			70-130	Pass	
Dieldrin	M24-JI0006280	NCP	%	95			70-130	Pass	
Endosulfan I	M24-JI0006280	NCP	%	97			70-130	Pass	
Endosulfan II	M24-JI0006280	NCP	%	110			70-130	Pass	
Endosulfan sulphate	M24-JI0006280	NCP	%	111			70-130	Pass	
Endrin	M24-JI0006280	NCP	%	99			70-130	Pass	
Heptachlor	M24-JI0006280	NCP	%	107			70-130	Pass	
Hexachlorobenzene	M24-JI0006280	NCP	%	112			70-130	Pass	
Methoxychlor	M24-JI0006280	NCP	%	104			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M24-Jn0072275	NCP	%	86			70-130	Pass	
Aroclor-1260	M24-Jn0072275	NCP	%	117			70-130	Pass	
Spike - % Recovery									
NEPM 2013 Acid Herbicides				Result 1					
Picloram	M24-JI0008027	NCP	%	107			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-D	M24-JI0008027	NCP	%	113			70-130	Pass	
MCPA	M24-JI0008027	NCP	%	99			70-130	Pass	
MCPB	M24-JI0008027	NCP	%	114			70-130	Pass	
Spike - % Recovery									
NEPM 2013 Organochlorine Pesticides				Result 1					
Mirex	M24-JI0006280	NCP	%	110			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M24-JI0005551	CP	%	100			75-125	Pass	
Beryllium	M24-JI0005551	CP	%	103			75-125	Pass	
Boron	M24-JI0005551	CP	%	107			75-125	Pass	
Cadmium	M24-JI0005551	CP	%	116			75-125	Pass	
Chromium	M24-JI0005551	CP	%	73			75-125	Fail	Q08
Cobalt	M24-JI0005551	CP	%	111			75-125	Pass	
Copper	M24-JI0005551	CP	%	98			75-125	Pass	
Lead	M24-JI0005551	CP	%	109			75-125	Pass	
Manganese	M24-JI0005551	CP	%	103			75-125	Pass	
Mercury	M24-JI0005551	CP	%	104			75-125	Pass	
Nickel	M24-JI0005551	CP	%	99			75-125	Pass	
Selenium	M24-JI0005551	CP	%	98			75-125	Pass	
Zinc	M24-JI0005551	CP	%	107			75-125	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
a-HCH	M24-JI0004579	NCP	%	91			70-130	Pass	
b-HCH	M24-JI0004579	NCP	%	108			70-130	Pass	
d-HCH	M24-JI0004579	NCP	%	92			70-130	Pass	
Endrin aldehyde	M24-JI0004579	NCP	%	119			70-130	Pass	
Endrin ketone	M24-JI0004579	NCP	%	72			70-130	Pass	
g-HCH (Lindane)	M24-JI0004579	NCP	%	88			70-130	Pass	
Heptachlor epoxide	M24-JI0004579	NCP	%	110			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	M24-JI0007880	NCP	%	98			70-130	Pass	
Dimethoate	M24-JI0007880	NCP	%	78			70-130	Pass	
Ethion	M24-JI0007880	NCP	%	88			70-130	Pass	
Fenitrothion	M24-JI0007880	NCP	%	84			70-130	Pass	
Methyl parathion	M24-JI0007880	NCP	%	83			70-130	Pass	
Mevinphos	M24-JI0007880	NCP	%	76			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M24-JI0005555	CP	%	110			70-130	Pass	
TRH C6-C10	M24-JI0005555	CP	%	108			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M24-JI0005555	CP	%	93			70-130	Pass	
Toluene	M24-JI0005555	CP	%	98			70-130	Pass	
Ethylbenzene	M24-JI0005555	CP	%	99			70-130	Pass	
m&p-Xylenes	M24-JI0005555	CP	%	99			70-130	Pass	
o-Xylene	M24-JI0005555	CP	%	108			70-130	Pass	
Xylenes - Total*	M24-JI0005555	CP	%	102			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	M24-JI0005555	CP	%	93			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M24-JI0008033	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M24-JI0005542	CP	mg/kg	4.3	4.4	1.0	30%	Pass	
Beryllium	M24-JI0005542	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Boron	M24-JI0005542	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Cadmium	M24-JI0005542	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M24-JI0005542	CP	mg/kg	17	18	1.7	30%	Pass	
Cobalt	M24-JI0005542	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	M24-JI0005542	CP	mg/kg	8.2	7.4	9.5	30%	Pass	
Lead	M24-JI0005542	CP	mg/kg	6.7	6.8	2.5	30%	Pass	
Mercury	M24-JI0005542	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	M24-JI0005542	CP	mg/kg	5.8	7.7	27	30%	Pass	
Selenium	M24-JI0005542	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Zinc	M24-JI0005542	CP	mg/kg	10.0	13	27	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M24-JI0005543	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10	M24-JI0005543	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M24-JI0005543	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	M24-JI0005543	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	M24-JI0005543	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	M24-JI0005543	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	M24-JI0005543	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	M24-JI0005543	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M24-JI0005543	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M24-JI0005548	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M24-JI0005548	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M24-JI0005548	CP	mg/kg	260	320	19	30%	Pass	
TRH >C10-C16	M24-JI0005548	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M24-JI0005548	CP	mg/kg	190	240	25	30%	Pass	
TRH >C34-C40	M24-JI0005548	CP	mg/kg	500	580	16	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Indeno(1.2.3-cd)pyrene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dichlorophenol	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4.5-Trichlorophenol	M24-JI0005548	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.4.6-Trichlorophenol	M24-JI0005548	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.6-Dichlorophenol	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M24-JI0005548	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M24-JI0005548	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M24-JI0005548	CP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4.6-dinitrophenol	M24-JI0005548	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4.6-dinitrophenol	M24-JI0005548	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M24-JI0005548	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.4-Dimethylphenol	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dinitrophenol	M24-JI0005548	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M24-JI0005548	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M24-JI0005548	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M24-JI0005548	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M24-JI0005548	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M24-JI0005548	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1.1-Dichloroethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1-Dichloroethene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.1-Trichloroethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.1.2-Tetrachloroethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.2-Trichloroethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.2.2-Tetrachloroethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dibromoethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichlorobenzene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloroethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloropropane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.3-Trichloropropane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.4-Trimethylbenzene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichlorobenzene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichloropropane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3.5-Trimethylbenzene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.4-Dichlorobenzene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Butanone (MEK)	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromobenzene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Carbon disulfide	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M24-JI0008030	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
NEPM 2013 Acid Herbicides				Result 1	Result 2	RPD			
Picloram	M24-JI0008007	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-D	M24-JI0008007	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-T	M24-JI0008007	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
MCPA	M24-JI0008007	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
MCPB	M24-JI0008007	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Mecoprop	M24-JI0008007	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M24-JI0005551	CP	mg/kg	13	13	1.0	30%	Pass	
Beryllium	M24-JI0005551	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Boron	M24-JI0005551	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Cadmium	M24-JI0005551	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M24-JI0005551	CP	mg/kg	68	68	<1	30%	Pass	
Cobalt	M24-JI0005551	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	M24-JI0005551	CP	mg/kg	13	13	<1	30%	Pass	
Lead	M24-JI0005551	CP	mg/kg	25	24	1.3	30%	Pass	
Manganese	M24-JI0005551	CP	mg/kg	120	130	2.0	30%	Pass	
Mercury	M24-JI0005551	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	M24-JI0005551	CP	mg/kg	9.8	9.8	<1	30%	Pass	
Selenium	M24-JI0005551	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Zinc	M24-JI0005551	CP	mg/kg	23	23	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M24-JI0005552	CP	mg/kg	< 20	47	86	30%	Fail	Q15
TRH C15-C28	M24-JI0005552	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M24-JI0005552	CP	mg/kg	1300	1200	9.4	30%	Pass	
TRH >C10-C16	M24-JI0005552	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M24-JI0005552	CP	mg/kg	770	660	15	30%	Pass	
TRH >C34-C40	M24-JI0005552	CP	mg/kg	2800	2600	4.6	30%	Pass	

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M24-JI0005552	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M24-JI0005552	CP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	M24-JI0005552	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M24-JI0005552	CP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M24-JI0005553	CP	mg/kg	110	98	12	30%	Pass	
TRH C15-C28	M24-JI0005553	CP	mg/kg	< 50	55	170	30%	Fail	Q15
TRH C29-C36	M24-JI0005553	CP	mg/kg	760	860	12	30%	Pass	
TRH >C10-C16	M24-JI0005553	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M24-JI0005553	CP	mg/kg	410	520	23	30%	Pass	
TRH >C34-C40	M24-JI0005553	CP	mg/kg	1700	1800	9.2	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M24-JI0005553	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M24-JI0005553	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M24-JI0005553	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M24-JI0005553	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M24-JI0005553	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M24-JI0005553	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M24-JI0005553	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M24-JI0005553	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M24-JI0005553	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M24-JI0005553	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M24-JI0005553	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M24-JI0005553	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M24-JI0005553	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Bifenthrin	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlordanes - Total	M24-JI0005553	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Aldrin	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Chlorpyrifos	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Azinphos-methyl	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	M24-JI0005553	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	M24-JI0005553	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	M24-JI0005553	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Triazines				Result 1	Result 2	RPD			
Atrazine	M24-JI0005553	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
NEPM 2013 Organochlorine Pesticides				Result 1	Result 2	RPD			
Mirex	M24-JI0005553	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	M24-JI0005556	CP	%	5.4	5.0	7.1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M24-JI0005557	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M24-JI0005557	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M24-JI0005557	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M24-JI0005557	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M24-JI0005557	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M24-JI0005557	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M24-JI0005557	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M24-JI0005557	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M24-JI0005557	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M24-JI0005557	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M24-JI0005557	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M24-JI0005557	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Bifenthrin	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlordanes - Total	M24-JI0005557	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
d-HCH	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M24-JI0005557	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Chlorpyrifos	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Azinphos-methyl	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	M24-JI0005557	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	M24-JI0005557	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	M24-JI0005557	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Aroclor-1221	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Aroclor-1232	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Aroclor-1242	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Aroclor-1248	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Aroclor-1254	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Aroclor-1260	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Total PCB*	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Triazines				Result 1	Result 2	RPD			
Atrazine	M24-JI0005557	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
NEPM 2013 Organochlorine Pesticides				Result 1	Result 2	RPD			
Mirex	M24-JI0005557	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M24-JI0005561	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M24-JI0005561	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M24-JI0005561	CP	mg/kg	< 50	81	1.2	30%	Pass	
TRH C29-C36	M24-JI0005561	CP	mg/kg	220	350	9.5	30%	Pass	
TRH C6-C10	M24-JI0005561	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M24-JI0005561	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M24-JI0005561	CP	mg/kg	160	300	5.2	30%	Pass	
TRH >C34-C40	M24-JI0005561	CP	mg/kg	390	550	14	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M24-JI0005561	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	M24-JI0005561	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	M24-JI0005561	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	M24-JI0005561	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	M24-JI0005561	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	M24-JI0005561	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M24-JI0005561	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M24-JI0005561	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M24-JI0005561	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M24-JI0005561	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M24-JI0005561	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M24-JI0005561	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M24-JI0005561	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M24-JI0005561	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M24-JI0005561	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M24-JI0005561	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M24-JI0005561	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M24-JI0005561	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M24-JI0005561	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M24-JI0005561	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

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
G01	The LORs have been raised due to matrix interference
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.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
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:

Savini Suduweli	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Inorganic
Carroll Lee	Senior Analyst-Organic
Edward Lee	Senior Analyst-Organic
Emily Rosenberg	Senior Analyst-Metal
Harry Bacalis	Senior Analyst-Volatile
Joseph Edouard	Senior Analyst-Organic
Joseph Edouard	Senior Analyst-PFAS
Joseph Edouard	Senior Analyst-Volatile
Mary Makarios	Senior Analyst-Metal
Mary Makarios	Senior Analyst-Sample Properties

Glenn Jackson
Managing Director

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.

Agon Environmental Pty Ltd
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Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Varun Bhagwat**

Report **1113757-W**
Project name Soil Investigation
Project ID JC1580
Received Date Jul 02, 2024

Client Sample ID			**RB01**	**RB02**	**TB01**
Sample Matrix			**Water**	**Water**	**Water**
Eurofins Sample No.			**M24-JI0005565**	**M24-JI0005566**	**M24-JI0005567**
Date Sampled			**Jun 26, 2024**	**Jun 27, 2024**	**Jun 27, 2024**
Test/Reference	LOR	Unit			
Heavy Metals					
Arsenic	0.001	mg/L	< 0.001	< 0.001	-
Cadmium	0.0002	mg/L	< 0.0002	< 0.0002	-
Chromium	0.001	mg/L	< 0.001	< 0.001	-
Copper	0.001	mg/L	< 0.001	< 0.001	-
Lead	0.001	mg/L	< 0.001	< 0.001	-
Mercury	0.0001	mg/L	< 0.0001	< 0.0001	-
Nickel	0.001	mg/L	< 0.001	< 0.001	-
Zinc	0.005	mg/L	< 0.005	< 0.005	-
Total Recoverable Hydrocarbons					
TRH C6-C9	0.02	mg/L	-	-	< 0.02
TRH C10-C14	0.05	mg/L	-	-	< 0.05
TRH C15-C28	0.1	mg/L	-	-	< 0.1
TRH C29-C36	0.1	mg/L	-	-	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	-	-	< 0.1
TRH C6-C10	0.02	mg/L	-	-	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	-	-	< 0.02
TRH >C10-C16	0.05	mg/L	-	-	< 0.05
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	-	-	< 0.05
TRH >C16-C34	0.1	mg/L	-	-	< 0.1
TRH >C34-C40	0.1	mg/L	-	-	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	-	-	< 0.1
BTEX					
Benzene	0.001	mg/L	-	-	< 0.001
Toluene	0.001	mg/L	-	-	< 0.001
Ethylbenzene	0.001	mg/L	-	-	< 0.001
m&p-Xylenes	0.002	mg/L	-	-	< 0.002
o-Xylene	0.001	mg/L	-	-	< 0.001
Xylenes - Total*	0.003	mg/L	-	-	< 0.003
4-Bromofluorobenzene (surr.)	1	%	-	-	100
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.01	mg/L	-	-	< 0.01

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

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 B7A			
Metals M8	Melbourne	Jul 03, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B4A			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Jul 03, 2024	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jul 03, 2024	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jul 03, 2024	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Jul 03, 2024	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			

eurofins

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Company Name: Agon Environmental Pty Ltd - NT
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: Soil Investigation
Project ID: JC1580

Order No.: JC
Report #: 1113757
Phone: 08 8338 1009
Fax:

Received: Jul 2, 2024 3:00 PM
Due: Jul 9, 2024
Priority: 5 Day
Contact Name: Varun Bhagwat

Eurofins Analytical Services Manager : Savini Suduweli

Sample Detail						HOLD	Metals M8	Eurofins Suite B15	NEPM 2013 Metals : Metals M13	BTEX and Naphthalene	Volatile Organics	Moisture Set	NEPM Screen Table 1(A) HIL's for Soil Contaminants - Basic Suite - Excluding	Total Recoverable Hydrocarbons	Eurofins Suite B7A	Eurofins Suite B4A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X	X	X	X	X	X
External Laboratory																	
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**												
1	BH01_0	Jun 27, 2024		Soil	M24-JI0005541				X			X				X	X
2	BH03_0	Jun 27, 2024		Soil	M24-JI0005542				X			X				X	X
3	A2_TP01_0	Jun 26, 2024		Soil	M24-JI0005543				X			X				X	X
4	A2_TP03_0	Jun 26, 2024		Soil	M24-JI0005544				X			X				X	X
5	A2_TP05_0	Jun 26, 2024		Soil	M24-JI0005545				X			X				X	X
6	A2_TP07_0	Jun 26, 2024		Soil	M24-JI0005546				X			X				X	X
7	A3_TP01_0	Jun 26, 2024		Soil	M24-JI0005547				X			X				X	X
8	A3_TP05_0	Jun 26, 2024		Soil	M24-JI0005548				X			X				X	X
9	BH02_0	Jun 27, 2024		Soil	M24-JI0005549						X	X	X				
10	BH05_0.2	Jun 27, 2024		Soil	M24-JI0005550							X				X	
11	A2_TP02_0	Jun 26, 2024		Soil	M24-JI0005551						X	X	X				X
12	A3_TP03_0	Jun 26, 2024		Soil	M24-JI0005552						X	X	X				X
13	BH04_0	Jun 27, 2024		Soil	M24-JI0005553			X				X				X	
14	A2_TP02_0.5	Jun 26, 2024		Soil	M24-JI0005554			X				X				X	

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Eurofins Environment Testing Australia Pty Ltd
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Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
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+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Agon Environmental Pty Ltd - NT
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: Soil Investigation
Project ID: JC1580

Order No.: JC
Report #: 1113757
Phone: 08 8338 1009
Fax:

Received: Jul 2, 2024 3:00 PM
Due: Jul 9, 2024
Priority: 5 Day
Contact Name: Varun Bhagwat

Eurofins Analytical Services Manager : Savini Suduweli

Sample Detail						HOLD	Metals M8	Eurofins Suite B15	NEPM 2013 Metals : Metals M13	BTEX and Naphthalene	Volatile Organics	Moisture Set	NEPM Screen Table 1(A) HIL's for Soil Contaminants - Basic Suite - Excluding	Total Recoverable Hydrocarbons	Eurofins Suite B7A	Eurofins Suite B4A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X	X	X	X	X	X
15	A2_TP02_1.5	Jun 26, 2024		Soil	M24-JI0005555			X				X				X	
16	A2_TP03_0.5	Jun 26, 2024		Soil	M24-JI0005556			X				X				X	
17	A2_TP04_0	Jun 26, 2024		Soil	M24-JI0005557			X				X				X	
18	A2_TP06_0	Jun 26, 2024		Soil	M24-JI0005558			X				X				X	
19	A2_TP08_0	Jun 26, 2024		Soil	M24-JI0005559			X				X				X	
20	A2_TP03_1	Jun 26, 2024		Soil	M24-JI0005561				X			X				X	
21	A3_TP07_0	Jun 26, 2024		Soil	M24-JI0005562			X				X				X	X
22	QC01	Jun 26, 2024		Soil	M24-JI0005563							X			X		X
23	QC02	Jun 26, 2024		Soil	M24-JI0005564							X					X
24	RB01	Jun 26, 2024		Water	M24-JI0005565		X										
25	RB02	Jun 27, 2024		Water	M24-JI0005566		X										
26	TB01	Jun 27, 2024		Water	M24-JI0005567					X				X			
27	BH05_0.3	Jun 27, 2024		Soil	M24-JI0005568	X											
28	A2_TP01_0.2	Jun 26, 2024		Soil	M24-JI0005569	X											
29	A2_TP01_0.7	Jun 26, 2024		Soil	M24-JI0005570	X											
30	A2_TP01_1	Jun 26, 2024		Soil	M24-JI0005571	X											
31	A2_TP02_1.7	Jun 26, 2024		Soil	M24-JI0005572	X											

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X	X	X	X	X	X
32	A3_TP02_0	Jun 26, 2024		Soil	M24-Jl0005573	X											
33	A3_TP04_0	Jun 26, 2024		Soil	M24-Jl0005574	X											
34	A3_TP06_0	Jun 26, 2024		Soil	M24-Jl0005575	X											
35	A3_TP08_0	Jun 26, 2024		Soil	M24-Jl0005576	X											
36	QC03	Jun 27, 2024		Soil	M24-Jl0005577	X											
Test Counts						10	2	8	9	1	3	23	3	1	1	18	13

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the '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 before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - 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.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

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%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as 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 are not data from your samples.
3. 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.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. 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							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	105			80-120	Pass	
Cadmium	%	107			80-120	Pass	
Chromium	%	107			80-120	Pass	
Copper	%	105			80-120	Pass	
Lead	%	105			80-120	Pass	
Mercury	%	105			80-120	Pass	
Nickel	%	109			80-120	Pass	
Zinc	%	106			80-120	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	104			70-130	Pass	
TRH C10-C14	%	118			70-130	Pass	
TRH C6-C10	%	108			70-130	Pass	
TRH >C10-C16	%	117			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	80			70-130	Pass	
Toluene	%	80			70-130	Pass	
Ethylbenzene	%	84			70-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes			%	83			70-130	Pass	
Xylenes - Total*			%	85			70-130	Pass	
LCS - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions									
Naphthalene			%	113			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M24-JI0003369	NCP	%	99			75-125	Pass	
Cadmium	M24-JI0003369	NCP	%	93			75-125	Pass	
Chromium	M24-JI0003369	NCP	%	96			75-125	Pass	
Copper	M24-JI0003369	NCP	%	91			75-125	Pass	
Lead	M24-JI0003369	NCP	%	92			75-125	Pass	
Mercury	M24-JI0003369	NCP	%	90			75-125	Pass	
Nickel	M24-JI0003369	NCP	%	92			75-125	Pass	
Zinc	M24-JI0003369	NCP	%	92			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	M24-Jn0074438	NCP	%	120			70-130	Pass	
TRH >C10-C16	M24-Jn0074438	NCP	%	118			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M24-JI0003369	NCP	mg/L	0.003	0.003	6.2	30%	Pass	
Cadmium	M24-JI0003369	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium	M24-JI0003369	NCP	mg/L	0.002	0.002	1.5	30%	Pass	
Copper	M24-JI0003369	NCP	mg/L	0.004	0.004	1.1	30%	Pass	
Lead	M24-JI0003369	NCP	mg/L	0.001	0.001	3.1	30%	Pass	
Mercury	M24-JI0003369	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	M24-JI0003369	NCP	mg/L	0.009	0.009	2.4	30%	Pass	
Zinc	M24-JI0003369	NCP	mg/L	0.012	0.012	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M24-JI0000561	NCP	mg/L	2.5	2.5	1.6	30%	Pass	
TRH C10-C14	M24-JI0003003	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	M24-JI0003003	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	M24-JI0003003	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C6-C10	M24-JI0000561	NCP	mg/L	2.5	2.5	1.6	30%	Pass	
TRH >C10-C16	M24-JI0003003	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	M24-JI0003003	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	M24-JI0003003	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M24-JI0000561	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	M24-JI0000561	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	M24-JI0000561	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	M24-JI0000561	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	M24-JI0000561	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	M24-JI0000561	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M24-JI0000561	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	

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.

Authorised by:

Savini Suduweli	Analytical Services Manager
Edward Lee	Senior Analyst-Organic
Emily Rosenberg	Senior Analyst-Metal
Joseph Edouard	Senior Analyst-Volatile

Glenn Jackson
Managing Director

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.

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

Company	Agon Environmental Pty Ltd - NT	Project №	JC1580	Project Manager	Varun Bhagwat	Sampler(s)	VB
Address	1/41 Jessop Cres Berrimah NT 0828	Project Name	Soil Investigation	EDD Format (ESdat, EQuIS etc)	Esdat	Handed over by	VB on 10/7/24
				Facility Code		Email for Invoice	finance@agonenviro.com.au
Contact Name	Varun Bhagwat					Email for Results	varun.bhagwat@agonenviro.com.au; agonenvironmental@esdat.com.au
Phone №	0422 636 277					Required Turnaround Time (TAT) Default will be 5 days if not ticked.	
Special Directions							
Purchase Order							
Quote ID №							

Analyses: Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing.

Containers: Change container type & size if necessary.

№	Client Sample ID	Sampled Date/Time (dd/mm/yy hh:mm)	Matrix (Solid (S) Water (W))	B4A: TRH/BTEXN/PAH/Phenols	M13: NEPM 2013 Metals	B15: OCP/OPP/PCB	PFAS Full Suite	TRH (C6-C10)/BTEXN	M8: Metals	500mL Plastic	60mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Sample Comments / Dangerous Goods Hazard Warning
1	A1_BH01_0.3	10/07/24	Soil	X	X											1	
2	A1_BH01_0.4	10/07/24	Soil	X												1	
3	A1_BH02_0.3	10/07/24	Soil	X		X	X									2	
4	A1_BH03_0.3	10/07/24	Soil	X												1	
	RB03	10/07/24	Water						X		1						
	TB02	10/07/24	Water					X						2			
	Add Rows		Total Counts	4	1	1	1	1	1		1			2		5	

Method of Shipment	Courier (#)	Hand Delivered	Name		Signature		Date		Time
Laboratory Use Only	Received By	NK	SYD | BNE | MEL | PER | ADL | NTL | DRW	Date	10/07/24	Time	3:00 PM	Temperature	29
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Date		Time		Report №	1116437

DRAFT

eurofins | Environment Testing

www.eurofins.com.au EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd

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6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
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VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Sample Receipt Advice

Company name: Agon Environmental Pty Ltd - NT
Contact name: Varun Bhagwat
Project name: Soil Investigation
Project ID: JC1580
Turnaround time: 5 Day
Date/Time received Jul 10, 2024 1:30 PM
Eurofins reference 1116437

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:

Savini Suduweli on phone : +61 3 8564 5051 or by email: SaviniSuduweli@eurofins.com

Results will be delivered electronically via email to Varun Bhagwat - Varun.Bhagwat@agonenviro.com.au.

Note: A copy of these results will also be delivered to the general Agon Environmental Pty Ltd - NT email address.

Agon Environmental Pty Ltd
3/224 Glen Osmond Road
Fullarton
SA 5063

Attention: **Varun Bhagwat**

Report **1116437-S**
Project name Soil Investigation
Project ID JC1580
Received Date Jul 10, 2024

Client Sample ID			**A1_BH01_0.3**	**A1_BH01_0.4**	**A1_BH02_0.3**	**A1_BH03_0.3**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M24-JI0025409**	**M24-JI0025410**	**M24-JI0025411**	**M24-JI0025412**
Date Sampled			**Jul 10, 2024**	**Jul 10, 2024**	**Jul 10, 2024**	**Jul 10, 2024**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	250	120	310	< 50
TRH C29-C36	50	mg/kg	440	130	710	< 50
TRH C10-C36 (Total)	50	mg/kg	690	250	1020	< 50
TRH C6-C10*	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16*	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)*[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34*	100	mg/kg	520	200	750	< 100
TRH >C34-C40	100	mg/kg	750	160	1300	< 100
TRH >C10-C40 (total)*	100	mg/kg	1270	360	2050	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	91	110	94	105
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			A1_BH01_0.3	A1_BH01_0.4	A1_BH02_0.3	A1_BH03_0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0025409	M24-JI0025410	M24-JI0025411	M24-JI0025412
Date Sampled			Jul 10, 2024	Jul 10, 2024	Jul 10, 2024	Jul 10, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	80	72	76	79
p-Terphenyl-d14 (surr.)	1	%	73	85	80	80
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	94	90	70	103
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	-	-	-
Heavy Metals						
Arsenic	2	mg/kg	8.2	-	-	-
Beryllium	2	mg/kg	< 2	-	-	-
Boron	10	mg/kg	< 10	-	-	-
Cadmium	0.4	mg/kg	< 0.4	-	-	-
Cobalt	5	mg/kg	< 5	-	-	-
Copper	5	mg/kg	13	-	-	-
Lead	5	mg/kg	28	-	-	-
Manganese	5	mg/kg	300	-	-	-
Mercury	0.1	mg/kg	< 0.1	-	-	-
Nickel	5	mg/kg	13	-	-	-
Selenium	2	mg/kg	< 2	-	-	-
Zinc	5	mg/kg	26	-	-	-

Client Sample ID			A1_BH01_0.3	A1_BH01_0.4	A1_BH02_0.3	A1_BH03_0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0025409	M24-JI0025410	M24-JI0025411	M24-JI0025412
Date Sampled			Jul 10, 2024	Jul 10, 2024	Jul 10, 2024	Jul 10, 2024
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	8.2	8.8	3.1	4.6
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-HCH	0.05	mg/kg	-	-	< 0.05	-
Aldrin	0.05	mg/kg	-	-	< 0.05	-
b-HCH	0.05	mg/kg	-	-	< 0.05	-
d-HCH	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	-
Endrin	0.05	mg/kg	-	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	-	-	< 0.05	-
Endrin ketone	0.05	mg/kg	-	-	< 0.05	-
g-HCH (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	0.5	mg/kg	-	-	< 0.5	-
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	%	-	-	67	-
Tetrachloro-m-xylene (surr.)	1	%	-	-	55	-
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	-

Client Sample ID			A1_BH01_0.3	A1_BH01_0.4	A1_BH02_0.3	A1_BH03_0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0025409	M24-JI0025410	M24-JI0025411	M24-JI0025412
Date Sampled			Jul 10, 2024	Jul 10, 2024	Jul 10, 2024	Jul 10, 2024
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
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	-
Trichloronate	0.2	mg/kg	-	-	< 0.2	-
Triphenylphosphate (surr.)	1	%	-	-	71	-
Polychlorinated Biphenyls						
Comments					G01	
Aroclor-1016	0.1	mg/kg	-	-	< 0.2	-
Aroclor-1221	0.1	mg/kg	-	-	< 0.2	-
Aroclor-1232	0.1	mg/kg	-	-	< 0.2	-
Aroclor-1242	0.1	mg/kg	-	-	< 0.2	-
Aroclor-1248	0.1	mg/kg	-	-	< 0.2	-
Aroclor-1254	0.1	mg/kg	-	-	< 0.2	-
Aroclor-1260	0.1	mg/kg	-	-	< 0.2	-
Total PCB*	0.1	mg/kg	-	-	< 0.2	-
Dibutylchlorendate (surr.)	1	%	-	-	67	-
Tetrachloro-m-xylene (surr.)	1	%	-	-	55	-
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	-	-	< 5	-
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	-	-	< 5	-
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	-	-	< 5	-
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	-	-	< 5	-
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	-	-	< 5	-
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	-	-	< 5	-
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	-	-	< 5	-
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	-	-	< 5	-
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	-	-	< 5	-
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	-	-	< 5	-
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	-	-	< 5	-
13C4-PFBA (surr.)	1	%	-	-	112	-
13C5-PFPeA (surr.)	1	%	-	-	110	-
13C5-PFHxA (surr.)	1	%	-	-	97	-
13C4-PFHpA (surr.)	1	%	-	-	96	-
13C8-PFOA (surr.)	1	%	-	-	101	-
13C5-PFNA (surr.)	1	%	-	-	90	-
13C6-PFDA (surr.)	1	%	-	-	81	-
13C2-PFUnDA (surr.)	1	%	-	-	79	-
13C2-PFDoDA (surr.)	1	%	-	-	81	-
13C2-PFTeDA (surr.)	1	%	-	-	95	-

Client Sample ID			A1_BH01_0.3	A1_BH01_0.4	A1_BH02_0.3	A1_BH03_0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M24-JI0025409	M24-JI0025410	M24-JI0025411	M24-JI0025412
Date Sampled			Jul 10, 2024	Jul 10, 2024	Jul 10, 2024	Jul 10, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	-	-	< 5	-
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	-	-	< 5	-
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	-	-	< 5	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	5	ug/kg	-	-	< 5	-
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	5	ug/kg	-	-	< 5	-
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	-	-	< 10	-
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	-	-	< 10	-
13C8-FOSA (surr.)	1	%	-	-	94	-
D3-N-MeFOSA (surr.)	1	%	-	-	97	-
D5-N-EtFOSA (surr.)	1	%	-	-	97	-
D7-N-MeFOSE (surr.)	1	%	-	-	86	-
D9-N-EtFOSE (surr.)	1	%	-	-	87	-
D5-N-EtFOSAA (surr.)	1	%	-	-	56	-
D3-N-MeFOSAA (surr.)	1	%	-	-	48	-
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	-	-	< 5	-
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	-	-	< 5	-
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	-	-	< 5	-
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	-	-	< 5	-
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	-	-	< 5	-
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	-	-	< 5	-
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	-	-	< 5	-
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	-	-	< 5	-
13C3-PFBS (surr.)	1	%	-	-	103	-
18O2-PFHxS (surr.)	1	%	-	-	87	-
13C8-PFOS (surr.)	1	%	-	-	100	-
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	-	-	< 5	-
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	10	ug/kg	-	-	< 10	-
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	-	-	< 5	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	-	-	< 5	-
13C2-4:2 FTSA (surr.)	1	%	-	-	37	-
13C2-6:2 FTSA (surr.)	1	%	-	-	53	-
13C2-8:2 FTSA (surr.)	1	%	-	-	60	-
13C2-10:2 FTSA (surr.)	1	%	-	-	39	-
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	-	-	< 5	-
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	-	-	< 5	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	-	-	< 5	-
Sum of WA DWER PFAS (n=10)*	10	ug/kg	-	-	< 10	-
Sum of PFASs (n=30)*	50	ug/kg	-	-	< 50	-

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

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 B4A			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Polycyclic Aromatic Hydrocarbons	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Jul 11, 2024	28 Days
- Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection			
Heavy Metals	Melbourne	Jul 11, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Jul 10, 2024	14 Days
- Method: LTM-GEN-7080 Moisture			
Eurofins Suite B15			
Organochlorine Pesticides	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Organophosphorus Pesticides	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Jul 11, 2024	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Jul 11, 2024	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Jul 11, 2024	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Jul 11, 2024	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Jul 11, 2024	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Jul 10, 2024	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

eurofins

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Eurofins Environment Testing Australia Pty Ltd
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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Company Name: Agon Environmental Pty Ltd - NT
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: Soil Investigation
Project ID: JC1580

Order No.:
Report #: 1116437
Phone: 08 8338 1009
Fax:

Received: Jul 10, 2024 1:30 PM
Due: Jul 17, 2024
Priority: 5 Day
Contact Name: Varun Bhagwat

Eurofins Analytical Services Manager : Savini Suduweli

Sample Detail						TRH C6-C10*	Metals M8	Eurofins Suite B15	NEPM 2013 Metals : Metals M13	BTEX and Naphthalene	Moisture Set	Eurofins Suite B4A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X	X
External Laboratory													
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
1	A1_BH01_0.3	Jul 10, 2024		Soil	M24-JI0025409				X		X	X	
2	A1_BH01_0.4	Jul 10, 2024		Soil	M24-JI0025410						X	X	
3	A1_BH02_0.3	Jul 10, 2024		Soil	M24-JI0025411			X			X	X	X
4	A1_BH03_0.3	Jul 10, 2024		Soil	M24-JI0025412						X	X	
5	RB03	Jul 10, 2024		Water	M24-JI0025413		X						
6	TB02	Jul 10, 2024		Water	M24-JI0025414	X				X			
Test Counts						1	1	1	1	1	4	4	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the '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 before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - 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.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

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%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as 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 are not data from your samples.
3. 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.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. 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							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C6-C10*	mg/kg	< 20			20	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	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Beryllium	mg/kg	< 2			2	Pass	
Boron	mg/kg	< 10			10	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Cobalt	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Manganese	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C6-C10*	mg/kg	< 20			20	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	
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-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	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-HCH (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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	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	
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							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	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	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	100			70-130	Pass	
TRH C10-C14	%	92			70-130	Pass	
TRH C6-C10*	%	97			70-130	Pass	
TRH >C10-C16*	%	115			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	86			70-130	Pass	
Toluene	%	95			70-130	Pass	
Ethylbenzene	%	75			70-130	Pass	
m&p-Xylenes	%	103			70-130	Pass	
Xylenes - Total*	%	103			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	94			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	94			70-130	Pass	
Acenaphthylene	%	104			70-130	Pass	
Anthracene	%	79			70-130	Pass	
Benz(a)anthracene	%	100			70-130	Pass	
Benzo(a)pyrene	%	103			70-130	Pass	
Benzo(b&j)fluoranthene	%	107			70-130	Pass	
Benzo(g.h.i)perylene	%	120			70-130	Pass	
Benzo(k)fluoranthene	%	105			70-130	Pass	
Chrysene	%	107			70-130	Pass	
Dibenz(a.h)anthracene	%	76			70-130	Pass	
Fluoranthene	%	76			70-130	Pass	
Fluorene	%	101			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	111			70-130	Pass	
Naphthalene	%	103			70-130	Pass	
Phenanthrene	%	128			70-130	Pass	
Pyrene	%	81			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	92			25-140	Pass	
2.4-Dichlorophenol	%	112			25-140	Pass	
2.4.5-Trichlorophenol	%	87			25-140	Pass	
2.4.6-Trichlorophenol	%	69			25-140	Pass	
2.6-Dichlorophenol	%	89			25-140	Pass	
4-Chloro-3-methylphenol	%	77			25-140	Pass	
Pentachlorophenol	%	46			25-140	Pass	
Tetrachlorophenols - Total	%	92			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	41			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	34			25-140	Pass	
2-Nitrophenol	%	114			25-140	Pass	
2.4-Dimethylphenol	%	41			25-140	Pass	
2.4-Dinitrophenol	%	39			25-140	Pass	
2-Methylphenol (o-Cresol)	%	78			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	87			25-140	Pass	
4-Nitrophenol	%	72			25-140	Pass	
Dinoseb	%	60			25-140	Pass	
Phenol	%	96			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	100			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	86			80-120	Pass	
Beryllium	%	80			80-120	Pass	
Boron	%	86			80-120	Pass	
Cadmium	%	105			80-120	Pass	
Cobalt	%	86			80-120	Pass	
Copper	%	84			80-120	Pass	
Lead	%	82			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Manganese	%	88			80-120	Pass	
Mercury	%	102			80-120	Pass	
Nickel	%	85			80-120	Pass	
Selenium	%	85			80-120	Pass	
Zinc	%	82			80-120	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	83			70-130	Pass	
4.4'-DDD	%	115			70-130	Pass	
4.4'-DDE	%	77			70-130	Pass	
4.4'-DDT	%	78			70-130	Pass	
a-HCH	%	86			70-130	Pass	
Aldrin	%	79			70-130	Pass	
b-HCH	%	87			70-130	Pass	
d-HCH	%	86			70-130	Pass	
Dieldrin	%	74			70-130	Pass	
Endosulfan I	%	73			70-130	Pass	
Endosulfan II	%	93			70-130	Pass	
Endosulfan sulphate	%	78			70-130	Pass	
Endrin	%	106			70-130	Pass	
Endrin aldehyde	%	83			70-130	Pass	
Endrin ketone	%	79			70-130	Pass	
g-HCH (Lindane)	%	80			70-130	Pass	
Heptachlor	%	120			70-130	Pass	
Heptachlor epoxide	%	108			70-130	Pass	
Hexachlorobenzene	%	83			70-130	Pass	
Methoxychlor	%	126			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	74			70-130	Pass	
Dimethoate	%	73			70-130	Pass	
Ethion	%	102			70-130	Pass	
Fenitrothion	%	81			70-130	Pass	
Methyl parathion	%	71			70-130	Pass	
Mevinphos	%	77			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	110			70-130	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	94			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	88			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	90			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	94			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	96			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	98			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	104			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	107			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	100			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	107			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	109			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	98			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	107			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	91			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	113			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	111			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	92			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	100			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	84			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	89			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	104			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	90			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	94			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	90			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	89			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	91			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	77			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	93			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	94			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M24-JI0028935	NCP	%	101			70-130	Pass	
TRH C10-C14	M24-JI0028756	NCP	%	91			70-130	Pass	
TRH C6-C10*	M24-JI0028935	NCP	%	104			70-130	Pass	
TRH >C10-C16*	M24-JI0028756	NCP	%	83			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M24-JI0028935	NCP	%	87			70-130	Pass	
Toluene	M24-JI0028935	NCP	%	88			70-130	Pass	
Ethylbenzene	M24-JI0028935	NCP	%	95			70-130	Pass	
m&p-Xylenes	M24-JI0028935	NCP	%	95			70-130	Pass	
o-Xylene	M24-JI0028935	NCP	%	97			70-130	Pass	
Xylenes - Total*	M24-JI0028935	NCP	%	96			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	M24-JI0028935	NCP	%	86			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M24-JI0031207	NCP	%	77			70-130	Pass	
Acenaphthylene	M24-JI0031207	NCP	%	85			70-130	Pass	
Anthracene	M24-JI0031207	NCP	%	75			70-130	Pass	
Benz(a)anthracene	M24-JI0031207	NCP	%	85			70-130	Pass	
Benzo(a)pyrene	M24-JI0031207	NCP	%	95			70-130	Pass	
Benzo(b&j)fluoranthene	M24-JI0031207	NCP	%	97			70-130	Pass	
Benzo(g.h.i)perylene	M24-JI0031207	NCP	%	88			70-130	Pass	
Benzo(k)fluoranthene	M24-JI0031207	NCP	%	93			70-130	Pass	
Chrysene	M24-JI0031207	NCP	%	120			70-130	Pass	
Dibenz(a.h)anthracene	M24-JI0031207	NCP	%	77			70-130	Pass	
Fluoranthene	M24-JI0031207	NCP	%	92			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Fluorene	M24-JI0031207	NCP	%	91			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M24-JI0031207	NCP	%	80			70-130	Pass	
Naphthalene	M24-JI0031207	NCP	%	85			70-130	Pass	
Phenanthrene	M24-JI0031207	NCP	%	76			70-130	Pass	
Pyrene	M24-JI0031207	NCP	%	113			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M24-JI0025836	NCP	%	77			30-130	Pass	
2.4-Dichlorophenol	M24-JI0025836	NCP	%	43			30-130	Pass	
2.4.5-Trichlorophenol	M24-JI0025836	NCP	%	52			30-130	Pass	
2.4.6-Trichlorophenol	M24-JI0025836	NCP	%	41			30-130	Pass	
2.6-Dichlorophenol	M24-JI0025836	NCP	%	33			30-130	Pass	
4-Chloro-3-methylphenol	M24-JI0025836	NCP	%	57			30-130	Pass	
Tetrachlorophenols - Total	M24-JI0025836	NCP	%	36			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Nitrophenol	M24-JI0025836	NCP	%	93			30-130	Pass	
2.4-Dimethylphenol	M24-JI0025836	NCP	%	35			30-130	Pass	
2-Methylphenol (o-Cresol)	M24-JI0025836	NCP	%	73			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M24-JI0025836	NCP	%	73			30-130	Pass	
Phenol	M24-JI0025836	NCP	%	81			30-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M24-JI0026356	NCP	%	117			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M24-JI0031065	NCP	%	89			75-125	Pass	
Beryllium	M24-JI0031065	NCP	%	83			75-125	Pass	
Boron	M24-JI0031065	NCP	%	87			75-125	Pass	
Cadmium	M24-JI0028129	NCP	%	100			75-125	Pass	
Cobalt	M24-JI0028129	NCP	%	84			75-125	Pass	
Copper	M24-JI0028129	NCP	%	83			75-125	Pass	
Lead	M24-JI0026316	NCP	%	102			75-125	Pass	
Manganese	M24-JI0028129	NCP	%	81			75-125	Pass	
Mercury	M24-JI0028129	NCP	%	106			75-125	Pass	
Nickel	M24-JI0028129	NCP	%	82			75-125	Pass	
Selenium	M24-JI0031065	NCP	%	85			75-125	Pass	
Zinc	M24-JI0028129	NCP	%	76			75-125	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
Pentachlorophenol	M24-JI0016338	NCP	%	42			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M24-JI0016338	NCP	%	50			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M24-JI0016338	NCP	%	60			30-130	Pass	
2.4-Dinitrophenol	M24-JI0016338	NCP	%	52			30-130	Pass	
4-Nitrophenol	M24-JI0016338	NCP	%	73			30-130	Pass	
Dinoseb	M24-JI0016338	NCP	%	64			30-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M24-JI0025411	CP	%	89			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M24-JI0025411	CP	%	88			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M24-JI0025411	CP	%	93			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M24-JI0025411	CP	%	93			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorooctanoic acid (PFOA)	M24-JI0025411	CP	%	94			50-150	Pass	
Perfluorononanoic acid (PFNA)	M24-JI0025411	CP	%	99			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M24-JI0025411	CP	%	97			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M24-JI0025411	CP	%	103			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M24-JI0025411	CP	%	107			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M24-JI0025411	CP	%	122			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M24-JI0025411	CP	%	105			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M24-JI0025411	CP	%	98			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M24-JI0025411	CP	%	100			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M24-JI0025411	CP	%	91			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	M24-JI0025411	CP	%	91			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	M24-JI0025411	CP	%	105			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M24-JI0025411	CP	%	89			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M24-JI0025411	CP	%	93			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M24-JI0025411	CP	%	86			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M24-JI0025411	CP	%	73			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M24-JI0025411	CP	%	107			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M24-JI0025411	CP	%	92			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M24-JI0025411	CP	%	94			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M24-JI0025411	CP	%	92			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M24-JI0025411	CP	%	96			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M24-JI0025411	CP	%	101			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M24-JI0025411	CP	%	82			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	M24-JI0025411	CP	%	106			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M24-JI0025411	CP	%	83			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M24-JI0025411	CP	%	90			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M24-JI0029024	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M24-JI0028757	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M24-JI0028757	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M24-JI0028757	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C6-C10*	M24-JI0029024	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16*	M24-JI0028757	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34*	M24-JI0028757	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M24-JI0028757	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M24-JI0029024	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	M24-JI0029024	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	M24-JI0029024	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	M24-JI0029024	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	M24-JI0029024	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	M24-JI0029024	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M24-JI0029024	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M24-JI0026314	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M24-JI0026314	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M24-JI0026314	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M24-JI0026314	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M24-JI0026314	NCP	mg/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M24-JI0026314	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M24-JI0026314	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M24-JI0026314	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M24-JI0026314	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M24-JI0026314	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M24-JI0026314	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M24-JI0026314	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M24-JI0026314	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M24-JI0026314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M24-JI0023686	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M24-JI0026301	NCP	mg/kg	4.4	5.6	24	30%	Pass	
Beryllium	M24-JI0026301	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Boron	M24-JI0026301	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Cadmium	M24-JI0026301	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Cobalt	M24-JI0026301	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	M24-JI0026301	NCP	mg/kg	8.1	9.3	14	30%	Pass	
Lead	M24-JI0026301	NCP	mg/kg	8.3	9.1	9.6	30%	Pass	
Manganese	M24-JI0026301	NCP	mg/kg	83	110	26	30%	Pass	
Mercury	M24-JI0026301	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	M24-JI0026301	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Selenium	M24-JI0026301	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Zinc	M24-JI0026301	NCP	mg/kg	19	20	6.4	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	M24-JI0026265	NCP	%	20	18	13	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M24-JI0023246	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M24-JI0023246	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	M24-JI0023246	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	M24-JI0023246	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	M24-JI0023246	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	M24-JI0023246	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M24-JI0023246	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluoroundecanoic acid (PFUnDA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M24-JI0029714	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M24-JI0029714	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	M24-JI0029714	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M24-JI0029714	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

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
G01	The LORs have been raised due to matrix interference
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.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

Catherine Wilson	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Inorganic
Carroll Lee	Senior Analyst-Organic
Carroll Lee	Senior Analyst-PFAS
Edward Lee	Senior Analyst-Organic
Emily Rosenberg	Senior Analyst-Metal
Joseph Edouard	Senior Analyst-Organic
Joseph Edouard	Senior Analyst-Volatile
Mary Makarios	Senior Analyst-Sample Properties

Glenn Jackson
Managing Director

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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Certificate of Analysis

Agon Environmental Pty Ltd
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Varun Bhagwat**

Report **1116437-W**
Project name Soil Investigation
Project ID JC1580
Received Date Jul 10, 2024

Client Sample ID			**RB03**	**TB02**
Sample Matrix			**Water**	**Water**
Eurofins Sample No.			**M24-JI0025413**	**M24-JI0025414**
Date Sampled			**Jul 10, 2024**	**Jul 10, 2024**
Test/Reference	LOR	Unit		
Heavy Metals				
Arsenic	0.001	mg/L	< 0.001	-
Cadmium	0.0002	mg/L	< 0.0002	-
Chromium	0.001	mg/L	< 0.001	-
Copper	0.001	mg/L	< 0.001	-
Lead	0.001	mg/L	< 0.001	-
Mercury	0.0001	mg/L	< 0.0001	-
Nickel	0.001	mg/L	< 0.001	-
Zinc	0.005	mg/L	< 0.005	-
BTEX				
Benzene	0.001	mg/L	-	< 0.001
Toluene	0.001	mg/L	-	< 0.001
Ethylbenzene	0.001	mg/L	-	< 0.001
m&p-Xylenes	0.002	mg/L	-	< 0.002
o-Xylene	0.001	mg/L	-	< 0.001
Xylenes - Total*	0.003	mg/L	-	< 0.003
4-Bromofluorobenzene (surr.)	1	%	-	98
Volatile Organics				
Naphthalene[N02]	0.01	mg/L	-	< 0.01
Total Recoverable Hydrocarbons				
TRH C6-C10*	0.02	mg/L	-	< 0.02

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Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

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
Metals M8	Melbourne	Jul 11, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Total Recoverable Hydrocarbons	Melbourne	Jul 11, 2024	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Eurofins Suite B4A			
BTEX	Melbourne	Jul 11, 2024	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			

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Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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NATA# 2561
Site# 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
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+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Agon Environmental Pty Ltd - NT
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: Soil Investigation
Project ID: JC1580

Order No.:
Report #: 1116437
Phone: 08 8338 1009
Fax:

Received: Jul 10, 2024 1:30 PM
Due: Jul 17, 2024
Priority: 5 Day
Contact Name: Varun Bhagwat

Eurofins Analytical Services Manager : Savini Suduweli

Sample Detail						TRH C6-C10*	Metals M8	Eurofins Suite B15	NEPM 2013 Metals : Metals M13	BTEX and Naphthalene	Moisture Set	Eurofins Suite B4A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X	X
External Laboratory													
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
1	A1_BH01_0.3	Jul 10, 2024		Soil	M24-JI0025409				X		X	X	
2	A1_BH01_0.4	Jul 10, 2024		Soil	M24-JI0025410						X	X	
3	A1_BH02_0.3	Jul 10, 2024		Soil	M24-JI0025411			X			X	X	X
4	A1_BH03_0.3	Jul 10, 2024		Soil	M24-JI0025412						X	X	
5	RB03	Jul 10, 2024		Water	M24-JI0025413		X						
6	TB02	Jul 10, 2024		Water	M24-JI0025414	X				X			
Test Counts						1	1	1	1	1	4	4	1

eurofins | Environment Testing

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the '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 before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - 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.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

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%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as 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 are not data from your samples.
3. 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.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. 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							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Volatile Organics							
Naphthalene	mg/L	< 0.01			0.01	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C10*	mg/L	< 0.02			0.02	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	93			80-120	Pass	
Cadmium	%	94			80-120	Pass	
Chromium	%	93			80-120	Pass	
Copper	%	93			80-120	Pass	
Lead	%	93			80-120	Pass	
Mercury	%	91			80-120	Pass	
Nickel	%	94			80-120	Pass	
Zinc	%	94			80-120	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	86			70-130	Pass	
Toluene	%	87			70-130	Pass	
Ethylbenzene	%	76			70-130	Pass	
m&p-Xylenes	%	75			70-130	Pass	
Xylenes - Total*	%	76			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
Naphthalene	%	92			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C10*	%	80			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M24-JI0028843	NCP	%	99			75-125	Pass	
Cadmium	M24-JI0028843	NCP	%	102			75-125	Pass	
Chromium	M24-JI0028843	NCP	%	99			75-125	Pass	
Copper	M24-JI0028843	NCP	%	94			75-125	Pass	
Lead	M24-JI0028843	NCP	%	97			75-125	Pass	
Mercury	M24-JI0028843	NCP	%	104			75-125	Pass	
Nickel	M24-JI0028843	NCP	%	99			75-125	Pass	
Zinc	M24-JI0028843	NCP	%	86			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M24-JI0028843	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium	M24-JI0028843	NCP	mg/L	0.0003	0.0003	<1	30%	Pass	
Chromium	M24-JI0028843	NCP	mg/L	0.003	0.003	1.3	30%	Pass	
Copper	M24-JI0028843	NCP	mg/L	0.047	0.048	2.4	30%	Pass	
Lead	M24-JI0028843	NCP	mg/L	0.002	0.002	2.8	30%	Pass	
Mercury	M24-JI0028843	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	M24-JI0028843	NCP	mg/L	0.003	0.003	5.3	30%	Pass	
Zinc	M24-JI0028843	NCP	mg/L	0.12	0.13	4.3	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M24-JI0025135	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	M24-JI0025135	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	M24-JI0025135	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	M24-JI0025135	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	M24-JI0025135	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	M24-JI0025135	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Naphthalene	M24-JI0025135	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C10*	M24-JI0025135	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	

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
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.

Authorised by:

Catherine Wilson	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Metal
Joseph Edouard	Senior Analyst-Volatile

Glenn Jackson
Managing Director

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.

Mandatory Fields

CHAIN OF CUSTODY

Page ___of___

CLIENT CODE:		*PROJECT MANAGER:	Varun Bhagwat	SAMPLER:	VB
*CLIENT:	AGON	*PM MOBILE:	422636277	SAMPLER MOBILE:	422636277
OFFICE: (Invoiced Office)		ALS QUOTE # (Client PL if blank)		PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	JC1580 - Soil Investigation			SITE:	Berrimah Freight Terminal

CoC #: (if applicable)

*INVOICE TO: (client default if nil) finance@agonenviro.com.au ☐ CC Invoice to PM

BIOSECURITY

*EMAIL REPORTS TO: (default to PM if blank) varun.bhagwat@agonenviro.com.au; agonenvironmental@esdat.com.au

Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS** (Please check box. → Standard Storage time from receipt of samples: Waters - 3 weeks, Soils - 2 months)

- X Standard Storage
- ☐ Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** (Please check box. → (Not all tests can be expedited, contact Client Services for more information))

- X 5+ days (no surcharge)
- ☐ 3 day (+15%)
- ☐ 2 day (+30%)
- ☐ 1 day (+50%)

***ANALYSIS REQUIRED**

(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Environmental Division Sydney
Work Order Reference
ES2421493

Telephone : +61-2-8784 8555

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Soil(S), Water(W), Sediments (SD), Dust(D), Prospect (P), Biota (B), Biosolid (BS)	5-27: TRH/BTEXN/PAH/Phenols/B Metals	PFAS - Short Suite										Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
	QC01A		6/26/2024	2	S	X	X										☐	☐	
	QC02A		6/26/2024	2	S		X										☐	☐	
	QC03A		6/27/2024	1	S												☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	

Receipt Detail (Lab Use ONLY) Chilling Method: Ice: Frozen / Melted Ice Bricks: Frozen / Thawed None

Sample Temp at Receipt °C °C °C

Security Seal Intact (circle) Yes / No / NA(None)

Carrier Details ☐ Courier/Post ☐ Client

Con Note #

Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other

Count # # #

Relinquished by:	Varun Bhagwat	Signature:	Date/Time:	5/31/2024	Received by: Signature: Date/Time:
Relinquished by:		Signature:	Date/Time:		Received by: Signature: Date/Time:

QUALITY CONTROL REPORT

Work Order	: **ES2421493**	Page	: 1 of 10
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: Mr. Varun Bhagwat	Contact	: Josh Alexander
Address	: UNIT 1/41 JESSOP CRES BERRIMAH 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: JC1580 - Soil Investigation	Date Samples Received	: 02-Jul-2024
Order number	:	Date Analysis Commenced	: 04-Jul-2024
C-O-C number	: ----	Issue Date	: 10-Jul-2024
Sampler	: Varun Bhagwat		
Site	: Berrimah Freight Terminal		
Quote number	: EN/222		
No. of samples received	: 3		
No. of samples analysed	: 2		

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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Evie Sidarta	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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.

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
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

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: 5902974)									
ES2421423-009	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	10	11	11.2	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	14	16	14.5	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	16	19	18.5	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	7	8	0.0	No Limit
ES2421498-005	Anonymous	EG005T: Cadmium	7440-43-9	1 (2)*	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2 (4)*	mg/kg	9	9	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	5	54.3	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	21	19	10.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	45	67	39.1	0% - 50%
		EG005T: Zinc	7440-66-6	5	mg/kg	18	16	10.8	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 5902988)									
ES2421423-018	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	16.4	15.7	4.3	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 5909082)									
ES2420895-004	Anonymous	EA055: Moisture Content	----	0.1	%	13.9	13.7	1.0	0% - 20%
ES2422311-019	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	5.9	5.8	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 5902973)									
ES2421423-009	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	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 (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 5902973) - continued									
ES2421498-005	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP075(SIM)A: Phenolic Compounds (QC Lot: 5898766)									
ES2421493-001	QC01A	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5898766)									
ES2421493-001	QC01A	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
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5898767)									
ES2421493-001	QC01A	EP071: C15 - C28 Fraction	---	100	mg/kg	130	150	16.4	No Limit
		EP071: C29 - C36 Fraction	---	100	mg/kg	250	270	9.3	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5898767) - continued									
ES2421493-001	QC01A	EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5904639)									
ES2421493-001	QC01A	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2421762-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5898767)									
ES2421493-001	QC01A	EP071: >C16 - C34 Fraction	----	100	mg/kg	260	310	16.5	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	350	380	7.8	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: 5904639)									
ES2421493-001	QC01A	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2421762-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 5904639)									
ES2421493-001	QC01A	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
ES2421762-001	Anonymous	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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 5904345)									
ES2421423-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0004	0.0003	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0014	0.0013	10.0	No Limit
ES2421493-002	QC02A	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 5904345)									
ES2421423-001	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	0.0003	0.0002	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 (%)*
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 5904345) - continued									
ES2421423-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0003	0.0002	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2421493-002	QC02A	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 5904345)									
ES2421423-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2421493-002	QC02A	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	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: 5902974)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	94.4	88.0	113
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	19.6 mg/kg	120	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	103	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	98.6	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	100	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	97.0	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 5902973)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	95.4	70.0	125
EP075(SIM)A: Phenolic Compounds (QCLot: 5898766)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	6 mg/kg	99.9	71.0	125
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	6 mg/kg	101	72.0	124
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	6 mg/kg	107	71.0	123
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	12 mg/kg	111	67.0	127
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	6 mg/kg	93.9	54.0	114
EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	6 mg/kg	84.0	68.0	126
EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	6 mg/kg	91.7	66.0	120
EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	6 mg/kg	96.0	70.0	120
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	6 mg/kg	93.6	70.0	116
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	6 mg/kg	84.8	54.0	114
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	6 mg/kg	89.0	60.0	114
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	12 mg/kg	55.3	10.0	80.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5898766)								
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	98.0	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	98.9	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	98.5	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	104	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	104	73.0	127

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5898766) - continued								
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	97.3	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	101	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	101	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	96.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	94.8	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	94.0	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 5898767)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	103	75.0	129
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	99.8	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 5904639)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	82.3	72.2	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5898767)								
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	101	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	102	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5904639)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	80.9	72.4	133
EP080: BTEXN (QCLot: 5904639)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	90.7	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	100	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	83.0	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	93.8	78.2	121
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	87.3	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	89.5	78.8	122
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 5904345)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.1	72.0	128
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.6	67.0	130
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.8	68.0	136
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 5904345)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 5904345) - continued								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	74.0	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	79.2	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.0	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.3	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.9	69.0	133
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 5904345)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	87.0	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	80.9	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	87.7	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	86.3	69.2	143

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	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5902974)							
ES2421423-009	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	94.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.4	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	103	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	96.5	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	99.1	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	98.8	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	101	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 5902973)							
ES2421423-009	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	71.3	70.0	130
EP075(SIM)A: Phenolic Compounds (QCLot: 5898766)							
ES2421493-001	QC01A	EP075(SIM): Phenol	108-95-2	10 mg/kg	95.4	70.0	130
		EP075(SIM): 2-Chlorophenol	95-57-8	10 mg/kg	98.1	70.0	130
		EP075(SIM): 2-Nitrophenol	88-75-5	10 mg/kg	86.0	60.0	130
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	87.5	70.0	130
		EP075(SIM): Pentachlorophenol	87-86-5	10 mg/kg	81.8	20.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5898766)							
ES2421493-001	QC01A	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	93.4	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5898766) - continued							
ES2421493-001	QC01A	EP075(SIM): Pyrene	129-00-0	10 mg/kg	99.1	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 5898767)							
ES2421493-001	QC01A	EP071: C10 - C14 Fraction	----	480 mg/kg	107	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	112	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	108	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 5904639)							
ES2421493-001	QC01A	EP080: C6 - C9 Fraction	----	32.5 mg/kg	78.5	60.4	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5898767)							
ES2421493-001	QC01A	EP071: >C10 - C16 Fraction	----	860 mg/kg	95.4	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	111	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	114	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5904639)							
ES2421493-001	QC01A	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	76.5	61.1	142
EP080: BTEXN (QCLot: 5904639)							
ES2421493-001	QC01A	EP080: Benzene	71-43-2	2.5 mg/kg	77.8	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	90.4	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	75.2	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	79.9	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	79.2	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	78.3	61.1	115
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 5904345)							
ES2421423-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	89.2	72.0	128
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	81.0	67.0	130
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	92.8	68.0	136
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 5904345)							
ES2421423-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	89.2	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	95.0	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	101	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	97.9	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	91.8	69.0	133
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 5904345)							
ES2421423-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	91.8	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	109	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	96.9	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	75.3	69.2	143

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2421493**	Page	: 1 of 6
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: Mr. Varun Bhagwat	Telephone	: +61-2-8784 8555
Project	: JC1580 - Soil Investigation	Date Samples Received	: 02-Jul-2024
Site	: Berrimah Freight Terminal	Issue Date	: 10-Jul-2024
Sampler	: Varun Bhagwat	No. of samples received	: 3
Order number	:	No. of samples analysed	: 2

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, where applicable to the methodology, 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
Analytical Methods	Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)						
Moisture Content	EA055	3	31	9.68	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) QC01A	26-Jun-2024	----	----	----	04-Jul-2024	10-Jul-2024	✓
Soil Glass Jar - Unpreserved (EA055) QC02A	26-Jun-2024	----	----	----	08-Jul-2024	10-Jul-2024	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) QC01A	26-Jun-2024	04-Jul-2024	23-Dec-2024	✓	05-Jul-2024	23-Dec-2024	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) QC01A	26-Jun-2024	04-Jul-2024	24-Jul-2024	✓	08-Jul-2024	24-Jul-2024	✓
EP075(SIM)A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075(SIM)) QC01A	26-Jun-2024	04-Jul-2024	10-Jul-2024	✓	06-Jul-2024	13-Aug-2024	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM)) QC01A	26-Jun-2024	04-Jul-2024	10-Jul-2024	✓	06-Jul-2024	13-Aug-2024	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071) QC01A	26-Jun-2024	04-Jul-2024	10-Jul-2024	✓	08-Jul-2024	13-Aug-2024	✓
Soil Glass Jar - Unpreserved (EP080) QC01A	26-Jun-2024	05-Jul-2024	10-Jul-2024	✓	06-Jul-2024	10-Jul-2024	✓

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 (EP071) QC01A	**26-Jun-2024**	**04-Jul-2024**	10-Jul-2024	✓	**08-Jul-2024**	13-Aug-2024	✓
Soil Glass Jar - Unpreserved (EP080) QC01A	**26-Jun-2024**	**05-Jul-2024**	10-Jul-2024	✓	**06-Jul-2024**	10-Jul-2024	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080) QC01A	**26-Jun-2024**	**05-Jul-2024**	10-Jul-2024	✓	**06-Jul-2024**	10-Jul-2024	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) QC01A, QC02A	**26-Jun-2024**	**09-Jul-2024**	23-Dec-2024	✓	**10-Jul-2024**	18-Aug-2024	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) QC01A, QC02A	**26-Jun-2024**	**09-Jul-2024**	23-Dec-2024	✓	**10-Jul-2024**	18-Aug-2024	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) QC01A, QC02A	**26-Jun-2024**	**09-Jul-2024**	23-Dec-2024	✓	**10-Jul-2024**	18-Aug-2024	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) QC01A, QC02A	**26-Jun-2024**	**09-Jul-2024**	23-Dec-2024	✓	**10-Jul-2024**	18-Aug-2024	✓

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	31	**9.68**	**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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	11	**18.18**	**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	2	19	**10.53**	**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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	11	**9.09**	**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	19	**5.26**	**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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	11	**9.09**	**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	19	**5.26**	**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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	11	**9.09**	**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	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
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 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)
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.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by LC-Electrospray-MS-MS, Negative Mode using MRM using internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to a portion of soil which is then extracted with MTBE and an ion pairing reagent. A portion of extract is exchanged into the analytical solvent mixture, combined with an equal volume reagent water and filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.4, table B-15 requirements.

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.

Preparation Methods	Method	Matrix	Method Descriptions
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

CERTIFICATE OF ANALYSIS

Work Order	: **ES2421493**	Page	: 1 of 7
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: Mr. Varun Bhagwat	Contact	: Josh Alexander
Address	: UNIT 1/41 JESSOP CRES BERRIMAH 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: JC1580 - Soil Investigation	Date Samples Received	: 02-Jul-2024 08:30
Order number	:	Date Analysis Commenced	: 04-Jul-2024
C-O-C number	: ----	Issue Date	: 10-Jul-2024 13:50
Sampler	: Varun Bhagwat		
Site	: Berrimah Freight Terminal		
Quote number	: EN/222		
No. of samples received	: 3		
No. of samples analysed	: 2		

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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Evie Sidarta	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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 Contract 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.
- 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 ES2421498-#005. Confirmed by redigestion and reanalysis.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration or as per USEPA 1633 limits where LISTED. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS and also conform to QSM 5.4 (US DoD) requirements.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	QC01A	QC02A	----	----	----
				Sampling date / time	26-Jun-2024 00:00	26-Jun-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2421493-001	ES2421493-002	--------	--------	--------
					Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**----**	**5.0**	----	----	----
Moisture Content	----	1.0	%		**4.4**	----	----	----	----
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		**27**	----	----	----	----
Copper	7440-50-8	5	mg/kg		**10**	----	----	----	----
Lead	7439-92-1	5	mg/kg		**16**	----	----	----	----
Nickel	7440-02-0	2	mg/kg		**8**	----	----	----	----
Zinc	7440-66-6	5	mg/kg		**24**	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		**<0.1**	----	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		**<0.5**	----	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		**<0.5**	----	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		**<0.5**	----	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	----	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	----	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	----	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	QC01A	QC02A	----	----	----
				Sampling date / time	26-Jun-2024 00:00	26-Jun-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2421493-001	ES2421493-002	--------	--------	--------
					Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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		**130**	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		**250**	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		**380**	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	QC01A	QC02A	----	----	----
				Sampling date / time	26-Jun-2024 00:00	26-Jun-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2421493-001	ES2421493-002	--------	--------	--------
					Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **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		**260**	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		**350**	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		**610**	----	----	----	----
^ **>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	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	QC01A	QC02A	----	----	----
				Sampling date / time	26-Jun-2024 00:00	26-Jun-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2421493-001	ES2421493-002	--------	--------	--------
					Result	Result	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**79.9**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**76.7**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**60.5**	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**72.8**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**83.8**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**80.5**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**84.7**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%		**79.8**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**83.5**	----	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**104**	**96.6**	----	----	----
13C8-PFOA	----	0.0002	%		**95.2**	**93.4**	----	----	----

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
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	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

ASBESTOS IN SOIL IDENTIFICATION RESULTS

Date:	30 July 2024	**Agon Job No:**	JL5586-68
Client:	Agon Environmental	**Reference/PO:**	JC1580
Attention:	Varun Bhagwat	**Client contact:**	varun.bhagwat@agonenviro.com.au
Site Location:	Berrimah Freight Terminal	**Received Date:**	15 July 2024
Sampled By:	Varun Bhagwat	**Sampling Date:**	26 June 2024
Identification Date:	**30 July 2024**	**Location of Analysis:**	Darwin

The practicable limit of detection for standard polarised-light microscopy (PLM) and dispersion staining analysis of asbestos in soil, as defined by AS4964-2004 is in the range 0.1% to 0.01% (0.1g/kg) weight for weight (w/w). Trace Asbestos Detected means the results can be interpreted as containing detectable 'respirable' asbestos fibres as per AS 4964-2004 (LOR 5 fibres).

Section 9.1 (AS4964-2004) states for the test report, factual descriptions are required when asbestos materials are present, therefore all asbestos fines must be recorded. Identified asbestos fines must be described, but the description is not a reflection of the actual sample result. Under the terms of NATA accreditation and in accordance with asbestos analysis by AS4964-2004, reporting of concentrations below the detection limit for the method of 0.1g/kg (0.01% w/w) is not covered by NATA. Asbestos fines that fall below the AS4964-2004 method's limit of detection will be recorded as non-NATA.

Asbestos weights and percentages are not covered under the Scope of NATA Accreditation therefore 'NATA accreditation does not cover the performance of this service'. Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present). Percentages for Asbestos content in ACM and soil density are based on the NEPM 2013 default values. All numerical results under this method are approximate and should be used as a guide only. LOR for asbestos quantification for AF and FA (NEPM) is 0.001% (Non-NATA).

Terminology; NF-No Fines, AF-Asbestos Fines/FA-Fibrous Asbestos

QUALITATIVE RESULTS (NATA)					QUANTITATIVE RESULTS (NON-NATA)				
AS4964(2004) IDENTIFICATION OF ASBESTOS IN BULK SAMPLES AND INHOUSE LP-004 PROCEDURE ASBESTOS IDENTIFICATION MANUAL					NATIONAL ENVIRONMENT PROTECTION (ASSESSMENT OF SITE CONTAMINATION) MEASURE (2013)				
					(<7mm >2mm)		(<2mm)		
SAMPLE ID	SAMPLE LOCATION	DESCRIPTION	TOTAL DRY SAMPLE WEIGHT (g)	ANALYSIS RESULT	ASBESTOS AF/FA FINDINGS	WEIGHT OF AF/FA (g)	ASBESTOS AF/FA FINDINGS	WEIGHT OF AF/FA (g)	TOTAL % W/W
JL5586-68_1	A2_TP05_0	Soil with inclusion of rocks and organic fibre	732.03	No asbestos detected at the reporting limit of 0.1g/kg. Organic fibre detected. No trace (respirable) asbestos detected.	NF	0.0000	NF	0.0000	<0.001%

Darren Kenny

Approved Identifier/Signatory

Any and all services carried out by Agon for the Client are subject to the Terms and Conditions provided in Agon form QFB-008 and are governed by our Statement of Limitations provided in Agon form QFB-024 (both documents accessible at https://agonenviro.com.au/documents/).

Appendix D: Audit Criteria Tables

	Unit	EQL	ASC NEPM (2013) Table 1A(1) HILs Rec C Soil	ASC NEPM (2013) Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand >=0m, <1m	CRC CARE Direct Contact HSL-C Recreational / Open Space
BTEX					
Benzene	mg/kg	0.1		NL	120
Toluene	mg/kg	0.1		NL	18,000
Ethylbenzene	mg/kg	0.1		NL	5,300
Xylene (m & p)	mg/kg	0.2			
Xylene (o)	mg/kg	0.1			
Total Xylene	mg/kg	0.3		NL	15,000
Total BTEX	mg/kg	0.2			
Total Petroleum Hydrocarbons					
C6-C9 Fraction	mg/kg	10			
C10-C14 Fraction	mg/kg	20			
C15-C28 Fraction	mg/kg	50			
C29-C36 Fraction	mg/kg	50			
C10-C36 Fraction (Sum)	mg/kg	50			
Total Recoverable Hydrocarbons					
C6-C10 Fraction	mg/kg	10			
C6-C10 Fraction minus BTEX (F1)	mg/kg	10		NL	5,100
>C10-C16 Fraction	mg/kg	50			
>C10-C16 Fraction minus naphthalene (F2)	mg/kg	50		NL	3,800
>C16-C34 Fraction	mg/kg	100			5,300
>C34-C40 Fraction	mg/kg	100			7,400
>C10-C40 Fraction (Sum)	mg/kg	50			
PAHs					
Acenaphthene	mg/kg	0.5			
Acenaphthylene	mg/kg	0.5			
Anthracene	mg/kg	0.5			
Benz(a)anthracene	mg/kg	0.5			
Benzo(a)pyrene	mg/kg	0.5			
Benzo(b+j)fluoranthene	mg/kg	0.5			
Benzo(g,h,i)perylene	mg/kg	0.5			
Benzo(k)fluoranthene	mg/kg	0.5			
Chrysene	mg/kg	0.5			
Dibenz(a,h)anthracene	mg/kg	0.5			
Fluoranthene	mg/kg	0.5			
Fluorene	mg/kg	0.5			
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5			
Naphthalene	mg/kg	0.5			1,900
Phenanthrene	mg/kg	0.5			
Pyrene	mg/kg	0.5			
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.5	3		
Sum of Polycyclic aromatic hydrocarbons (PAH)	mg/kg	0.5	300		
Phenols					
2-Methylphenol	mg/kg	0.2			
2-Nitrophenol	mg/kg	0.5			
2,4-Dimethylphenol	mg/kg	0.5			
2,4-Dinitrophenol	mg/kg	5			
3-&4-Methylphenol (m&p-cresol)	mg/kg	0.4			
4-Chloro-3-methylphenol	mg/kg	0.5			
4-Nitrophenol	mg/kg	5			
4,6-Dinitro-2-methylphenol	mg/kg	0.5			
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	20			
Cresol Total	mg/kg	0.5	4,000		
Phenol	mg/kg	0.5	40,000		
Phenolics Total	mg/kg	0.5			
Phenols (non-halogenated)	mg/kg	20			
Halogenated Phenols					
2,4,5-Trichlorophenol	mg/kg	0.5			
2,4,6-Trichlorophenol	mg/kg	0.5			
2,4-Dichlorophenol	mg/kg	0.5			
2,6-Dichlorophenol	mg/kg	0.5			
2-Chlorophenol	mg/kg	0.5			
Pentachlorophenol	mg/kg	1	120		
Tetrachlorophenols	mg/kg	10			
Phenols (Halogenated)	mg/kg	1			

Comments
NL - Non Limiting (i.e Derived soil HSL exceeds soil saturation concentration)

GREENCAP
Going Further in Managing Risk

Groundwater Monitoring Analytical Results
July 2020 to December 2021

J168829

Monitoring Well	Date	TRH - 1999 NEPM Fractions (µg/L)					TRH - 2013 NEPM Fractions (µg/L)								BTEX (µg/L)			Xylene (µg/L)			Naphthalene (µg/L)	Natural Attenuation Parameters (mg/L)					
		C_6-C_9	$C_{10}-C_{14}$	$C_{15}-C_{28}$	$C_{29}-C_{36}$	$C_{10}-C_{36}$ (Total)	C_6-C_{10}	F1	$>C_{10}-C_{16}$	F2	F3	F4	$>C_{16}-C_{34}$ Total	$>C_{34}-C_{40}$ Total	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m-	p-	o-		Fe^{2+}	NO_3	SO_4	$CaCO3$	Manganese	Methane
CRC Care HSL Intrusive Workers, Sand (2 <4m)		-	-	-	-	-	NL	-	NL	-	-	-	-	-	NL	NL	NL	-	-	NL	NL	-	-	-	-	-	-
CRC Care HSL Intrusive Workers, Sand (4 <8m)		-	-	-	-	-	NL	-	NL	-	-	-	-	-	NL	NL	NL	-	-	NL	NL	-	-	-	-	-	-
NEPM HSL[1]		-	-	-	-	-	-	6,000	-	NL	-	-	-	-	5,000	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-
ANZECC[3]		-	-	-	-	-	-	-	-	-	-	-	-	-	500	110	50	50	140	200	90	-	-	-	-	1.2	-
NEPM GIL Marine Waters		-	-	-	-	-	-	-	-	-	-	-	-	-	500	-	-	-	200	350	50	-	-	-	-	1.9	-
ESL CWB (2019)[2]		-	-	-	-	-	-	440	640	640	640	640	640		-	-	-	-	-	-	-	-	-	-	-	-	-
Primary Contact Recreational		-	-	-	-	-	-	100	900	900	900	900	900	900	10	8000	3000	6000	6000	6000	-	-	900	9000	-	5	-
Primary Contact Aesthetic		-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	20	-	-	-	-	-	250	-	0.1	-
Marine Ecosystem[4]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-
MW01	30/07/2020	<20	150	<300	<100	150	20	<20	140	140	<100	**<100**	140	**140**	<1	**<1**	**2**	**<2**		3	<10	-	-	-	-	-	-
MW01	9/09/2021	<20	150	400	<100	550	<20	<20	270	270	**200**	**<100**	200	**470**	<1	**<1**	**<1**	<2		<1	<10	29	0.02	640	<20	2	<0.05
MW01	10/12/2021	<20	520	1200	<100	1720	<20	<20	860	860	900	**<100**	1760	1760	**<1**	**<1**	**<1**	<2		<1	<10	33	<0.02	320	230	2	<0.05
MW01A	14/10/2020	<20	<50	500	200	700	20	<20	<50	<50	**600**	**<100**	**600**	600	**<1**	**<1**	**2**	<2		3	<10	-	-	-	-	-	-
MW01A	21/01/2021	<20	<50	<300	<100	<100	<20	<20	<50	<50	**<100**	**<100**	**<100**	<100	**<1**	**<1**	**<1**	<2		<1	<10	20	0.68	2900	90	1.2	<0.05
MW01A	5/05/2021	<20	<50	<300	<100	<100	<20	<20	<50	<50	**<100**	**<100**	**<100**	<100	<1	**<1**	**<1**	<2		<1	<10	7.6	0.11	2800	87	2.2	<0.05
MW01A	9/09/2021	<20	<50	<300	<100	<100	<20	<20	<50	<50	<100	**<100**	**<100**	**<100**	<1	**<1**	<1	<2		<1	<10	12	<0.02	3100	85	2.1	<0.05
MW01A	8/12/2021	<20	<50	300	<100	<100	<20	<20	<50	<50	300	<100	**<100**	**100**	<1	**<1**	<1	<2		<1	<10	10	0.38	2900	52	1.5	<0.05
MW02	30/07/2020	<20	<50	<300	<100	<100	<20	<20	**<50**	<50	**<100**	<100	<100	**<100**	**<1**	18	<1	<2		<1	<10	-	-	-	-	-	-
MW02	14/10/2020	<20	<50	<300	<100	<100	<20	<20	**<50**	<50	**<100**	<100	<100	**<100**	**<1**	<1	<1	<2		<1	<10	-	-	-	-	-	-
MW02	21/01/2021	<20	<50	<300	<100	<100	<20	<20	**<50**	<50	**<100**	**<100**	<100	<100	**<1**	<1	<1	<2		<1	<10	<0.05	0.46	480	<20	3.8	<0.05
MW02	20/05/2021	<20	<50	<300	<100	<100	<20	**<20**	**<50**	<50	**<100**	**<100**	<100	<100	<1	<1	<1	<2		<1	<10	0.08	0.11	920	<20	9.8	<0.05
MW02	9/09/2021	<20	<50	<300	<100	<100	<20	**<20**	**<50**	<50	**<100**	**<100**	<100	**<100**	<1	<1	<1	<2		<1	<10	0.07	<0.02	860	<20	16	<0.05
MW02	12/12/2021	<20	<50	<300	<100	<100	<20	**<20**	**<50**	<50	**<100**	**<100**	**<100**	**<100**	<1	<1	<1	<2		<1	<10	0.12	0.23	490	<20	5.2	<0.05
MW03	30/07/2020	<20	<50	<300	<100	<100	<20	<20	**<50**	<50	<100	<100	**<100**	**<100**	<1	<1	<1	<2		<1	<10	-	-	-	-	-	-
MW03	14/10/2020	<20	<50	<300	<100	<100	<20	<20	**<50**	<50	<100	**<100**	**<100**	<100	<1	<1	<1	<2		<1	<10	-	-	-	-	-	-
MW03	21/01/2021	<20	<50	300	<100	300	<20	**<20**	**<50**	<50	300	**<100**	**300**	300	<1	<1	<1	<2		<1	<10	<0.05	1	180	<20	1.1	<0.05
MW03	5/05/2021	<20	<50	<300	<100	<100	**<20**	**<20**	<50	54	**<50**	**<100**	**<100**	<100	<1	<1	<1	<2		<1	<10	0.4	1.7	190	<20	1.1	<0.05
MW03	9/09/2021	<20	<50	<300	<100	<100	**<20**	**<20**	<50	**<50**	**<100**	**<100**	<100	<100	<1	<1	<1	<2		<1	<10	2.5	0.06	700	<20	2.6	<0.05
MW03	8/12/2021	<20	<50	400	<100	400	**<20**	**<20**	<50	**<50**	**400**	<100	400	400	<1	<1	<1	<2		<1	<10	0.1	0.68	110	<20	1.8	<0.05
MW04	30/07/2020	<20	100	600	<100	**700**	**<20**	**<20**	**240**	**240**	**400**	<100	640	640	<1	<1	<1	<2		<1	<10	-	-	-	-	-	-
MW04	14/10/2020	<20	230	1600	<100	**1810**	**<20**	<20	520	**530**	**1300**	<100	1820	**1820**	<1	<1	<1	<2		1	<10	-	-	-	-	-	-
MW04	21/01/2021	<20	230	1600	**<100**	**1830**	**<20**	<20	<50	<50	300	<100	<100	<100	<1	<1	<1	<2		1	<10	0.18	1.2	290	21	1.2	<0.05
MW04	5/05/2021	<20	160	**<100**	**<100**	160	**<20**	<20	**240**	240	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	0.36	0.78	410	24	2.4	<0.05
MW04	9/09/2021	<20	<50	**<100**	**<100**	<100	**<20**	**<20**	**<50**	**<50**	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	4.8	<0.02	800	<20	2	<0.05
MW04	8/12/2021	<20	<50	**400**	**<100**	**400**	<20	**<20**	**<50**	**<50**	400	<100	400	400	<1	<1	<1	<2		<1	<10	2.5	<0.02	660	<20	1.8	<0.05
MW05	31/10/2020	<20	<50	<300	**<100**	**<110**	<20	**<20**	**<50**	**<50**	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	-	-	-	-	-	-
MW05	21/01/2021	<20	<50	<300	<100	**<100**	<20	**<20**	**<50**	**<50**	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	5.8	<0.02	2100	35	0.88	<0.05
MW05	30/04/2021	<20	<50	<200	<100	**<100**	<20	**<20**	**<50**	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	2.6	0.13	1600	28	0.96	<0.05
MW05	9/09/2021	<20	<50	**<100**	<100	**<100**	**<20**	<20	**<50**	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	7.4	<0.02	1700	55	0.88	<0.05
MW05	10/12/2021	<20	**<50**	**<100**	**<100**	<100	**<20**	<20	**<50**	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	6	<0.02	2100	55	1.1	<0.05
MW06	31/10/2020	<20	**<50**	**<100**	**<100**	<100	**<20**	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	-	-	-	-	-	-
MW06	21/01/2021	<20	**<50**	**<100**	**<100**	<100	**<20**	**<20**	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	<0.05	1.1	320	<20	1	<0.05
MW06	30/04/2021	<20	**<50**	**<100**	**<100**	<100	**<20**	**<20**	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	0.08	0.66	490	<20	1.5	<0.05
MW06	9/09/2021	<20	**<50**	**<100**	**<100**	<100	**<20**	**<20**	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	1.1	0.09	1100	26	1.3	<0.05
MW06	10/12/2021	<20	**<50**	**<100**	**<100**	<100	**<20**	**<20**	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	0.25	0.26	610	<20	1.3	<0.05
MW07	31/10/2020	<20	**<50**	**<100**	**<100**	<100	**<20**	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	-	-	-	-	-	-
MW07	21/01/2021	<20	<50	**<100**	**<100**	**<100**	**<20**	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	3.8	0.69	850	37	1	<0.05
MW07	5/05/2021	<20	<50	**<100**	**<100**	<100	<20	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	6.2	0.7	530	21	1.4	<0.05
MW07	9/09/2021	<20	<50	**<100**	**<100**	<100	<20	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	18	0.13	1600	40	1.1	<0.05
MW07	8/12/2021	<20	<50	400	**<100**	400	<20	<20	<50	<50	500	<100	500	500	<1	<1	<1	<2		<1	<10	0.75	0.35	580	97	1.2	<0.05
MW08	31/10/2020	<20	<50	<300	**<100**	<100	<20	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	-	-	-	-	-	-
MW08	21/01/2021	<20	<50	300	<100	300	<20	<20	<50	<50	300	<100	<100	<100	<1	<1	<1	<2		<1	<10	1	1.2	290	<20	1.3	<0.05
MW08	5/05/2021	<20	<50	<300	<100	<100	<20	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	2.3	1.3	430	24	1.6	<0.05
MW08	9/09/2021	<20	<50	<300	<100	<100	<20	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	5.3	<0.02	1600	190	1.6	<0.05
MW08	8/12/2021	<20	<50	200	<100	200	<20	<20	<50	<50	200	<100	200	200	<1	<1	<1	<2		<1	<10	1.4	1.1	500	<20	1.5	<0.05
MW09	10/12/2021	<20	<50	<300	<100	<100	<20	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	3.1	0.21	1100	36	1.3	<0.05
MW10	10/12/2021	<20	<50	<300	<100	<100	<20	<20	<50	<50	<100	<100	<100	<100	<1	<1	<1	<2		<1	<10	7.6	<0.02	590	31	2.4	<0.05
MW11	8/12/2021	<20	<50	300	<100	300	<20	<20	<50	<50	300	<100	300	300	<1	<1	<1	<2		<1	<10	1.9	<0.02	870	34	2.3	<0.05

F1 = C_6-C_{10} less BTEX; F2 = $>C_{10}-C_{16}$ less naphthalene; F3 = $>C_{16}-C_{34}$; F4 = $>C_{34}-C_{40}$

$Fe2+$ = Ferrous Iron; N = Nitrate; SO^2 = Sulphate; $CaCO_3$ = Total Alkalinity

1 = Groundwater Health Screening Level for vapour intrusion – Commercial/Industrial land use with sand 2 m to <4 m. *Assessment of Site Contamination National Environment Protection Measure* (1999). National Environment Protection Council (as amended 2013)

3 = Marine ecosystems (99 % protection) – ANZG 2018. Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia. Available at www.waterquality.gov.au/anz-guidelines

2 = California Water Board Guidelines for Environmental Screening Levels (2019 rev. 2) - Aquatic Habitat Goal Levels (Saltwater Ecotox)

4 = ANZECC (2000)

GREENCAP
Going Further in Managing Risk

Groundwater Monitoring Analytical Results
July 2020 to December 2021

J168829

Monitoring Well	Date	PAH (mg/L)																	Phenols (mg/L)																							
		Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b&j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH*	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,6-Dichlorophenol	2-Chlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	Tetrachlorophenols - Total	Total Halogenated Phenol*	2,4-Dimethylphenol	2,4-Dinitrophenol	3-Cyclohexyl-4,6-dinitrophenol	2-Methyl-4,6-dinitrophenol	2-Methylphenol (o-Cresol)	2-Nitrophenol	3&4-Methylphenol (m&p-Cresol)	4-Nitrophenol	Dinoseb	Phenol	Total cresols*	Total Non-Halogenated Phenol*
CRC Care HSL Intrusive Workers, Sand (2-<4m)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRC Care HSL Intrusive Workers, Sand (4-<8m)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM HSL[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANZECC[2]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM GIL Marine Waters		-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	-	-	0.12	-	0.34	-	0.011	-	-	-	0.045	-	-	-	-	-	-	-	0.4	-	-
ESL CRWB (2019)[3]		0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.008	0.015	0.015	0.015	0.0046	0.015	-	0.011	-	-	-	-	-	0.0079	-	-	0.011	0.049	-	-	-	-	-	-	0.0058	-	-
Primary Contact Recreational		-	-	-	-	0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	2	-	3	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Primary Contact Aesthetic		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	0.0003	-	0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marine Ecosystem[4]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01	30/07/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01	10/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW01A	14/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01A	21/01/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01A	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01A	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01A	8/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW02	30/07/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	14/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	21/01/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	20/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	12/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW03	30/07/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW03	14/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW03	21/01/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW03	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW03	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW03	8/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW04	30/07/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04	14/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04	21/01/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04	8/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW05	31/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW05	21/01/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW05	30/04/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW05	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW05	10/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW06	31/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW06	21/01/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW06	30/04/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW06	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW06	10/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW07	31/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW07	21/01/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW07	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW07	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW07	8/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW08	31/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW08	21/01/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW08	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW08	9/09/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW08	8/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW09	10/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW10	10/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1
MW11	8/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.03	< 0.01	< 0.003	< 0.03	< 0.1	< 0.03	< 0.003	< 0.01	< 0.006	< 0.03	< 0.1	< 0.003	< 0.01	< 0.1

F1 =C6-C10 less BTEX; F2 = >C10-C16 less naphthalene; F3 = >C16-C34; F4 = >C34-C40

Fe2++ Ferrous Iron; N = Nitrate; SO4 = Sulphate; CaCO3 = Total Alkalinity

1 = Groundwater Health Screening Level for vapour intrusion – Commercial/industrial land use with sand 2 m to <4 m . Assessment of Site Contamination National Environment Protection Measure (1999). National Environment Protection Council (as amended 2013)

2 = Marine ecosystems (99 % protection) – ANZG 2018. Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia. Available at www.waterquality.gov.au/anz-guidelines

3 = California Water Board Guidelines for Environmental Screening Levels (2019 rev. 2) - Aquatic Habitat Goal Levels (Saltwater Ecotox)

4 = ANZECC (2000)

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						Inorganic	TRH						TPH					BTEXN						
						Moisture Content (dried @ 103°C)	C6-C10	C6-C10 - BTEX (F1)	TRH >C10-C16	C10-C16 - Napth (F2)	TRH >C16-C34	TRH >C34-C40	C6 - C9	C10 - C14	C15 - C28	C29-C36	>C10 - C36 (Sum of)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Naphthalene
						%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					LOR	1	20	20	50	50	100	100	20	20	50	50	50	0.1	0.1	0.1	0.2	0.1	0.3	0.5
NEPM 2013 Table 1A(1) Comm/Ind D Soil HIL for Soil Contaminants, Sand																								
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m								260		NL								3	NL	NL			230	NL
1-2m								370		NL								3	NL	NL			NL	NL
2-4m								630		NL								3	NL	NL			NL	NL
>4m								NL		NL								3	NL	NL			NL	NL
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil								215		170	1700	3300						75	165	135			180	370
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil							700		1000		3500	10000												
CRC Care (2011) HSL D (Comm/Ind) (Direct Contact)							26000		20000		27000	38000						430	27000	99000			81000	11000
CRC Care (2011) HSL Intrusive Maintenance Worker (Direct Contact)							82000		62000		85000	120000						1100	85000	120000			130000	29000
Location	Area	Depth (m)	Field_ID	Sample_Date	Lab_Report_#																			
SOIL BORE SAMPLES																								
BH03		0	BH03-0.00	4/06/2020	724546	5.4	<20	<20	<50	<50	110	110	<20	<20	90	70	160	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH03		0.6	BH03-0.60	4/06/2020	724546	11	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH03		2	BH03-2.00	4/06/2020	724546	6.8	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH04		0	BH04-0.00	4/06/2020	724546	5	<20	<20	<50	<50	160	180	<20	<20	120	120	240	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH06		0.7	BH06-0.70	4/06/2020	724546	8.6	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH07		0.5	BH07-0.50	4/06/2020	724546	10	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH07		1.35	BH07-1.35	4/06/2020	724546	8.3	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH08		2.5	BH08A-2.50	4/06/2020	724546	7.1	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH08		3.5	BH08A-3.50	4/06/2020	724546	18	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH12		0.03	BH12-0.03	4/06/2020	724546	4.7	<20	<20	<50	<50	180	230	<20	<20	96	170	266	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH13		0.25	BH13-0.25	5/06/2020	724546	9	290	270	24000	24000	20000	10,000	<200	15000	32000	<5000	47000	<1	2.7	1.1	8.9	6.4	15	<5
BH13		0.55	BH13-0.55	5/06/2020	724546	15	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH14		0.25	BH14-0.25	5/06/2020	724546	3.8	470	430	20000	20000	16000	10,000	<200	13000	26000	<5000	39000	<1	6.1	4	20	12	32	<5
BH14		0.6	BH14-0.60	5/06/2020	724546	11	<20	<20	<50	<50	<100	<100	<20	<20	82	<50	82	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH14		0.9	BH14-0.90	5/06/2020	724546	7.9	<20	<20	140	140	150	<100	<20	79	220	<50	299	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH14		3.1	BH14-3.10	5/06/2020	724546	17	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH15		0.25	BH15-0.25	5/06/2020	724546	8.1	480	440	27000	27000	23000	10,000	<200	18000	36000	<5000	54000	<1	5.2	2.6	17	11	28	<5
BH15		0.3	BH15-0.30	5/06/2020	724546	7.8	<20	<20	550	550	730	<100	<20	270	1000	<50	1270	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH15		0.8	BH15-0.80	5/06/2020	724546	6.9	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH15		3.05	BH15-3.05	5/06/2020	724546	15	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH16		0	BH16-0.00	5/06/2020	724546	7	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH16		0.3	BH16-0.30	5/06/2020	724546	9.3	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH17		0	BH17-0.00	5/06/2020	724546	6.5	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH17		0.45	BH17-0.45	5/06/2020	724546	9.1	45	43	1200	1200	990	<100	<20	740	1500	<50	2240	<0.1	0.3	0.1	1.1	0.7	1.8	<0.5
BH17		0.65	BH17-0.65	5/06/2020	726580	10	<20	<20	95	95	120	<100	<20	55	150	<50	215	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH17		2.4	BH17-2.4	5/06/2020	726580	9.2	<20	<20	140	140	160	<100	<20	77	220	<50	297	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BH17		3.4	BH17-3.4	5/06/2020	726580	13	<20	<20	<50	<50	<100	<100	<20	<20	100	<50	100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
NON DESTRUCTIVE TEST PIT SAMPLES																								
NDTP01		0.5	NDTP01_0.5	10/06/2020	725276	10	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
NDTP02		0.5	NDTP02_0.5	10/06/2020	725276	7.9	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
NDTP03		0.5	NDTP03_0.5	10/06/2020	725276	7.4	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
NDTP04		0.6	NDTP04_0.6	10/06/2020	725276	2.4	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
NDTP05		0.2	NDTP05_0.2	10/06/2020	725276	4.9	<200	<200	17000	17000	15000	<500	<200	11000	23000	<250	34000	<1	2.3	<1	11	7.4	18	<10
NDTP06		0.35	NDTP06_0.35	10/06/2020	725276	7.1	<20	<20	<50	<50	<100	<100	<20	<20	<50	64	64	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
NDTP07		1.1	NDTP07	16/07/2020	732705	7.3	700	590	31000	30997.5	20000	<100	270	19000	33000	96	52096	<0.4	18	11	53	33	86	2.5
NDTP08		1.1	NDTP08	16/07/2020	732705	11	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
NDTP09		0.3	NDTP09	16/07/2020	732705	6.0	270	250	14000	14000	10000	510	97	8400	16000	200	24600	<0.5	3	2	11	6.5	17	<2.5
NDTP10		1.5	NDTP10	16/07/2020	732705	3.2	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5

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						Inorganic	TRH						TPH					BTEXN						
						Moisture Content (dried @ 103°C)	C6-C10	C6-C10 - BTEX (F1)	TRH >C10-C16	C10-C16 - Napth (F2)	TRH >C16-C34	TRH >C34-C40	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Naphthalene
						%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					LOR	1	20	20	50	50	100	100	20	20	50	50	50	0.1	0.1	0.1	0.2	0.1	0.3	0.5
NEPM 2013 Table 1A(1) Comm/Ind D Soil HIL for Soil Contaminants, Sand																								
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m								260		NL								3	NL	NL			230	NL
1-2m								370		NL								3	NL	NL			NL	NL
2-4m								630		NL								3	NL	NL			NL	NL
>4m								NL		NL								3	NL	NL			NL	NL
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil								215		170	1700	3300						75	165	135			180	370
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil							700		1000		3500	10000												
CRC Care (2011) HSL D (Comm/Ind) (Direct Contact)							26000		20000		27000	38000						430	27000	99000			81000	11000
CRC Care (2011) HSL Intrusive Maintenance Worker (Direct Contact)							82000		62000		85000	120000						1100	85000	120000			130000	29000
Location	Area	Depth (m)	Field_ID	Sample_Date	Lab_Report_#																			
TEST PIT SAMPLES																								
TP05		1	TP05-1.00	3/06/2020	724546	30	<20	<20	<50	<50	<100	<100	**<20**	**<20**	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP07		1.2	TP07-1.20	3/06/2020	724546	46	<20	<20	<50	<50	<100	**<100**	**<20**	**<20**	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP08		1.7	TP08-1.70	3/06/2020	724546	19	<20	<20	<50	<50	<100	**<100**	**<20**	**<20**	**<50**	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP09		0	TP09-0.00	3/06/2020	724546	9	<20	<20	<50	<50	<100	**<100**	**<20**	**<20**	**<50**	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP10		0.25	TP10-0.25	5/06/2020	724546	2.7	<20	<20	<50	<50	<100	**<100**	**<20**	**<20**	**<50**	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP11		0.35	TP11_0.35	10/06/2020	725276	9	110	100	7200	7199	7800	**730**	**<40**	4600	10000	1000	15600	<0.2	<0.2	<0.2	3.2	2.2	5.4	1.5
TP11		0.8	TP11_0.80	10/06/2020	725276	11	<20	<20	90	90	120	**<100**	**<20**	47	150	<50	197	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP12		0	TP12_0.0	10/06/2020	725276	<1	<20	<20	<50	<50	170	250	**<20**	**<20**	86	170	256	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP12		0.6	TP12_0.6	10/06/2020	725276	11	<20	<20	<50	<50	**<100**	**<100**	**<20**	**<20**	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP14		0	TP14_0.0	10/06/2020	726613	1.5	<20	<20	<50	<50	**<100**	**<100**	**<20**	**<20**	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP14		0.4	TP14_0.4	10/06/2020	726613	10	<20	<20	<50	<50	**<100**	**<100**	**<20**	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP15		0.3	TP15_0.3	10/06/2020	725276	8.2	<20	<20	610	610	1900	240	**<20**	210	2000	440	2650	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP17		0.15	TP17_0.15	10/06/2020	726613	8.8	<20	<20	12	120	370	**<100**	**<20**	<20	480	<50	480	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP18		0	TP18_0.0	10/06/2020	725276	2.3	<20	<20	550	550	1600	**<100**	**<20**	170	2000	<50	2170	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP18		0.1	TP18_0.1	10/06/2020	725276	5.5	<20	<20	360	360	1100	**<100**	**<20**	110	1400	<50	1510	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP19		0.35	TP19_0.35	10/06/2020	725276	15	<20	<20	<50	<50	<100	**<100**	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP20		0.9	TP20_0.9	10/06/2020	725276	8.7	<20	<20	<50	<50	<100	**<100**	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP21		0.35	TP21_0.35	10/06/2020	725276	6	**<20**	**<20**	**<50**	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP22		0.35	TP22_0.35	10/06/2020	725276	8.2	**<20**	**<20**	**<50**	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP24		0.3	TP24_0.3	10/06/2020	725276	6.9	**<20**	**<20**	**<50**	<50	1000	490	<20	<20	440	870	1310	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP26		0.35	TP26_0.35	10/06/2020	725276	5.4	**<20**	**<20**	**<50**	**<50**	**<100**	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP27		0.35	TP27_0.35	10/06/2020	725276	2.7	**<20**	**<20**	600	600	570	<100	<20	340	860	<50	1200	<0.1	<0.1	<0.1	0.2	0.2	0.4	<0.5
TP27A		0.35	TP27A_0.35	11/06/2020	725527	6.7	<20	**<20**	**<50**	**<50**	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP27A		0.45	TP27A_0.45	11/06/2020	725527	**8.8**	<20	**<20**	**<50**	**<50**	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP28		0.45	TP28_0.45	10/06/2020	725276	**10**	<20	**<20**	**<50**	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP29		0.35	TP29_0.35	10/06/2020	725276	**7.8**	<200	<200	8000	8000	8000	<500	<200	4900	12000	<250	16900	<1	<1	<1	<2	<1	<3	<5
TP29		1	TP29_1.0	10/06/2020	725276	**10**	<20	<20	**<50**	<50	<100	<100	<20	25	75	<50	100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP30		0.6	TP30_0.6	19/06/2020	**727254**	**12**	**<20**	**<20**	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP31		0	TP31_0.0	19/06/2020	**727254**	**<1**	**<20**	**<20**	<50	<50	720	<100	<20	<20	840	<50	840	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP34		0.35	TP34_0.35	16/07/2020	**732705**	**4.5**	**<20**	**<20**	<50	<50	<100	<100	<20	<20	67	<50	67	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP35		1.05	TP35_1.05	24/08/2020	**740295**	**11**	**30**	**30**	3700	3700	4800	<100	<20	2000	6000	<50	8000	<0.1	<0.1	<0.1	0.2	0.3	0.5	<0.5
TP36		1	TP36_1.0	26/08/2020	**740295**	**11**	**<20**	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP36		1.5	TP36_1.5	26/08/2020	**740295**	**11**	**<20**	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
TP37		1.6	TP37_1.6	26/08/2020	**740295**	**11**	91	86	3400	3400	3400	<100	23	2200	4200	<50	6400	<0.1	0.7	0.2	2	1.8	4.4	<0.5
MONITORING WELL INSTALLATION SOIL SAMPLES																								
MW01		3	MW01_3.0	16/07/2020	**732705**	**13**	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
MW02		2.2	MW02_2.2	16/07/2020	**732705**	**12**	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
MW03		3.4	MW03_3.4	16/07/2020	**732705**	**10**	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
MW04		3.5	MW04_3.5	16/07/2020	**732705**	19	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5

GREENCAP
Going Further in Managing Risk

One Rail Diesel Spil - Soil Bores, Test Pits Validation Samples Results

J168829

						Inorganic	TRH						TPH					BTEXN							
						Moisture Content (dried @ 105°C)	C6-C10	C6-C10 - BTEX (F1)	TRH >C10-C16	C10-C16 - Napth (F2)	TRH >C16-C34	TRH >C34-C40	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Naphthalene
						%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					LOR	1	20	20	50	50	100	100	20	20	50	50	50	0.1	0.1	0.1	0.2	0.1	0.3	0.5
NEPM 2013 Table 1A(1) Comm/Ind D Soil HIL for Soil Contaminants, Sand																									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
0-1m								260		NL								3	NL	NL			230	NL	
1-2m								370		NL								3	NL	NL			NL	NL	
2-4m								630		NL								3	NL	NL			NL	NL	
>4m								NL		NL								3	NL	NL			NL	NL	
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil								215		170	1700	3300						75	165	135			180	370	
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil							700		1000		3500	10000													
CRC Care (2011) HSL D (Comm/Ind) (Direct Contact)							26000		20000		27000	38000						430	27000	99000			81000	11000	
CRC Care (2011) HSL Intrusive Maintenance Worker (Direct Contact)							82000		62000		85000	120000						1100	85000	120000			130000	29000	
Location	Area	Depth (m)	Field_ID	Sample_Date	Lab_Report_#																				
VALIDATION SAMPLES																									
V02	Trench b/w Aux & Ramp	0.03	V02_0.03	16/06/2020	726076	6.5	240	220	14000	14000	15000	<100	<200	8100	22000	190	30290	<1	2.4	1.3	8.5	5.6	14	<5	
V03	Trench b/w Aux & Ramp	0.03	V03_0.03	16/06/2020	726076	5	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V04	Trench b/w Aux & Ramp	0.03	V04_0.03	16/06/2020	726076	6.4	<200	<200	5500	5500	5200	<100	<200	3600	7800	<50	11400	<1	1.2	<1	4.1	2.6	6.7	<5	
V05	Trench b/w Aux & Ramp	0.03	V05_0.03	16/06/2020	726076	7.5	<200	<200	4500	4500	5100	<100	<200	2600	7400	<50	10000	<1	<1	<1	<2	0.7	<3	<5	
V06	Trench b/w Aux & Ramp	0.05	V06_0.05	16/06/2020	726076	6.6	<200	<200	5600	5600	7700	<100	<200	2900	11000	<50	13900	<1	<1	<1	<2	<0.4	<3	<5	
V07	Trench b/w Aux & Ramp	0.06	V07_0.06	16/06/2020	726076	6.3	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V08	Trench b/w Aux & Ramp	0.04	V08_0.04	16/06/2020	726076	5.1	<20	<20	<50	<50	<100	<100	<20	<20	97	<50	97	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V09	Trench b/w Aux & Ramp	0.04	V09_0.04	16/06/2020	726076	4.5	<20	<20	<50	<50	<100	<100	<20	<20	90	<50	90	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V10	Trench b/w Aux & Ramp	0.04	V10_0.04	16/06/2020	726076	4	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V11	Trench b/w Aux & Ramp	0.03	V11_0.03	16/06/2020	726076	4.3	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V12	Trench b/w Aux & Ramp	0.025	V12_0.025	16/06/2020	726076	3.5	<200	<200	20000	20000	19000	<100	<200	12000	29000	69	41069	<1	1.3	<1	4.4	3.2	7.6	<5	
V13	Trench b/w Aux & Ramp	0.05	V13_0.05	16/06/2020	726076	9.1	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V14	1/Aux Road	0.03	V14_0.03	16/06/2020	726076	2.3	<20	<20	480	480	1700	<100	<20	160	2100	<50	2260	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V15	1/Aux Road	0.03	V15_0.03	16/06/2020	726076	1.7	<20	<20	330	330	1400	<100	<20	98	1700	<50	1798	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V16	1/Aux Road	0.03	V16_0.03	16/06/2020	726076	1.6	<20	<20	320	320	1800	<100	<20	61	2100	<50	2161	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V17	1/Aux Road	0.03	V17_0.03	16/06/2020	726076	<1	<20	<20	300	300	840	<100	<20	99	1100	<50	1199	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5	
V18	1/Aux Road	0.03	V18_0.03	16/06/2020	726076	2.8	<200	<200	25000	25000	38000	170	<200	12000	53000	420	65420	<1	<1	<1	2.3	1.9	4.2	<5	
V19	1/Aux Road	0.03	V19_0.03	16/06/2020	726076	1.7	<200	<200	3500	3500	7700	<100	<200	1300	10000	150	11450	<1	<1	<1	<2	<1	<3	<5	
V20	1/Aux Road	0	V20	24/08/2020	740295	1.6	< 20	< 20	54	54	1500	< 100	< 20	< 20	1500	< 50	1500	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V21	1/Aux Road	0	V21	24/08/2020	740295	6.8	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V22	1/Aux Road	0	V22	24/08/2020	740295	6.9	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V23	1/Aux Road	0	V23	24/08/2020	740295	5.8	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V24	1/Aux Road	0	V24	24/08/2020	740295	6.6	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V25	1/Aux Road	0	V25	24/08/2020	740295	8.3	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V26	1/Aux Road	0	V26	24/08/2020	740295	7.2	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V27	1/Aux Road	0	V27	24/08/2020	740295	7.1	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V28	1/Aux Road	0	V28	24/08/2020	740295	7.7	< 20	< 20	160	160	< 100	< 100	< 20	23	110	< 50	133	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V29	1/Aux Road	0	V29	24/08/2020	740295	4.4	< 20	< 20	< 50	< 50	220	< 100	< 20	< 20	210	< 50	210	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V30	1/Aux Road	0	V30	24/08/2020	740295	1.2	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	54	< 50	54	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V57	West Exc - N	1.5	V57	26/08/2020	740295	9.2	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V60	West Exc - E	1.5	V60	26/08/2020	740295	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	73	< 50	73	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V63	West Exc - B	1.75	V63	26/08/2020	740295	11	< 20	< 20	180	180	< 100	< 100	< 20	31	100	< 50	131	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V64	West Exc - S	1.5	V64	26/08/2020	740295	11	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V65	West Exc - S	0.75	V65	26/08/2020	740295	10	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V66	West Exc - S	0	V66	26/08/2020	740295	4.4	< 20	< 20	150	150	280	< 100	< 20	67	360	< 50	427	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V67	West Exc - W	1.5	V67	26/08/2020	740295	10	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V68	West Exc - W	0.75	V68	26/08/2020	740295	9.6	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V69	West Exc - W	0	V69	26/08/2020	740295	8.4	< 20	< 20	< 50	< 50	140	< 100	< 20	< 20	130	< 50	130	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V70	West Exc - B	2	V70	26/08/2020	740295	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V71	East Exc - W	1.5	V71	26/08/2020	740295	13	< 20	< 20	160	160	< 100	< 100	< 20	50	88	< 50	138	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V72	East Exc - W	0.75	V72	26/08/2020	740295	13	300	290	5700	5700	6000	< 100	64	3800	7100	< 50	10900	< 0.1	0.9	0.2	4	2	6	< 0.5	
V73	East Exc - W	0	V73	26/08/2020	740295	9.5	< 20	< 20	270	270	330	< 100	< 20	150	420	< 50	570	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V74	East Exc - S	1.5	V74	26/08/2020	740295	11	< 20	< 20	410	410	470	< 100	< 20	240	590	< 50	830	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V77	East Exc - B	2	V77	26/08/2020	740295	12	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	63	< 50	63	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V78	East Exc - E	1.5	V78	26/08/2020	740295	10	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V79	East Exc - E	0.75	V79	26/08/2020	740295	8.5	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V80	East Exc - E	0	V80	26/08/2020	740295	8.1	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V81	East Exc - N	1.75	V81	26/08/2020	740295	11	37	36	1200	1200	1000	< 100	< 20	830	1300	< 50	2130	< 0.1	< 0.1	< 0.1	0.5	0.4	0.8	< 0.5	
V84	East Exc - B	2.0	V84	26/08/2020	740295	12	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V85	West Exc - W	1.0	V85	22/09/2020	745838	11	< 20	< 20	340	340	420	< 100	< 20	130	580	<50	710	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V86	West Exc - W	2.0	V86	22/09/2020	745838	12	< 20	< 20	820	820	680	< 100	< 20	400	1000	<50	1400	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	
V87	West Exc - S	1.0	V87	22/09/2020	745838	11	< 20	< 20	<50	<50	< 100	< 100	< 20	< 20	<50	<50	<50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5	

GREENCAP
Going Further in Managing Risk

One Rail Diesel Spil - Soil Bores, Test Pits Validation Samples Results

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						Inorganic	TRH						TPH					BTEXN							
						Moisture Content (dried @ 105°C)	C6-C10	C6-C10 - BTEX (F1)	TRH >C10-C16	C10-C16 - Napth (F2)	TRH >C16-C34	TRH >C34-C40	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Naphthalene
						%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					LOR	1	20	20	50	50	100	100	20	20	50	50	50	0.1	0.1	0.1	0.2	0.1	0.3	0.5
NEPM 2013 Table 1A(1) Comm/Ind D Soil HIL for Soil Contaminants, Sand																								
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m								260		NL								3	NL	NL			230	NL
1-2m								370		NL								3	NL	NL			NL	NL
2-4m								630		NL								3	NL	NL			NL	NL
>4m								NL		NL								3	NL	NL			NL	NL
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil								215		170	1700	3300						75	165	135			180	370
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil							700		1000		3500	10000												
CRC Care (2011) HSL D (Comm/Ind) (Direct Contact)							26000		20000		27000	38000						430	27000	99000			81000	11000
CRC Care (2011) HSL Intrusive Maintenance Worker (Direct Contact)							82000		62000		85000	120000						1100	85000	120000			130000	29000
Location	Area	Depth (m)	Field_ID	Sample_Date	Lab_Report_#																			
V88	West Exc - S	2.0	V88	22/09/2020	745838	12	< 20	< 20	<50	<50	< 100	< 100	< 20	< 20	<50	<50	<50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V89	West Exc - S	1.0	V89	22/09/2020	745838	13	< 20	< 20	1000	1000	1200	< 100	< 20	400	1700	< 50	2100	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V90	West Exc - S	2.0	V90	22/09/2020	745838	15	< 20	< 20	270	270	300	< 100	< 20	110	430	< 50	540	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V91	West Exc - S	1.0	V91	22/09/2020	745838	6.1	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V92	West Exc - S	2.0	V92	22/09/2020	745838	10	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	73	< 50	73	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V93	West Exc - S	1.0	V93	22/09/2020	745838	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V94	West Exc - S	2.0	V94	22/09/2020	745838	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V95	West Exc - S	1.0	V95	22/09/2020	745838	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V96	West Exc - S	2.0	V96	22/09/2020	745838	14	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V97	West Exc - E	1.0	V97	22/09/2020	745838	11	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V98	West Exc - E	2.0	V98	22/09/2020	745838	19	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V99	West Exc - N	1.0	V99	22/09/2020	745838	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V100	West Exc - N	2.0	V100	22/09/2020	745838	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V101	West Exc - N	1.0	V101	22/09/2020	745838	12	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V102	West Exc - N	2.0	V102	22/09/2020	745838	13	< 20	< 20	240	240	230	< 100	< 20	140	330	< 50	470	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V103	West Exc - N	1.0	V103	22/09/2020	745838	1.5	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V104	West Exc - N	2.0	V104	22/09/2020	745838	12	< 20	< 20	200	200	280	< 100	< 20	89	370	< 50	459	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V105	West Exc - N	1.0	V105	22/09/2020	745838	6.5	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V106	West Exc - N	2.0	V106	22/09/2020	745838	12	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	80	< 50	80	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V107	West Exc - N	1.0	V107	22/09/2020	745838	12	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V108	West Exc - N	2.0	V108	22/09/2020	745838	14	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V109	West Exc - B	2.0	V109	22/09/2020	745838	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	87	< 50	87	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V110	West Exc - B	2.0	V110	22/09/2020	745838	18	28	28	1800	1800	1800	< 100	< 20	1100	2500	< 50	3600	< 0.1	< 0.1	< 0.1	< 0.2	0.2	< 0.3	< 0.5
V111	West Exc - B	2.0	V111	22/09/2020	745838	8.4	280	270	11000	10997.6	11000	< 100	56	6700	15000	< 50	21700	< 0.1	< 0.1	< 0.1	7.6	5.1	13	2.4
V112	West Exc - B	2.0	V112	22/09/2020	745838	15	25	25	1200	1200	1600	< 100	< 20	630	2200	< 50	2830	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V113	West Exc - B	2.0	V113	22/09/2020	745838	15	< 20	< 20	440	440	500	< 100	< 20	240	700	< 50	940	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V114	West Exc - B	2.0	V114	22/09/2020	745838	17	< 20	< 20	1800	1800	6900	< 100	< 20	390	8000	< 50	8390	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V115	West Exc - B	2.0	V115	22/09/2020	745838	13	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V116	Trench b/w Aux & Ramp	0	V116	1/10/2020	747984	14	< 20	< 20	170	170	690	100	< 20	75	740	67	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V117	Trench b/w Aux & Ramp	0	V117	1/10/2020	747984	12	< 20	< 20	< 50	< 50	200	110	< 20	22	170	69	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V118	Trench b/w Aux & Ramp	0	V118	1/10/2020	747984	18	< 20	< 20	< 50	< 50	330	350	< 20	<20	220	210	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V119	Trench b/w Aux & Ramp	0	V119	1/10/2020	747984	13	< 20	< 20	590	590	2000	140	< 20	200	2300	90	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V120	Trench b/w Aux & Ramp	0	V120	1/10/2020	747984	11	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V121	Trench b/w Aux & Ramp	0	V121	1/10/2020	747984	6.9	< 20	< 20	< 50	< 50	390	510	< 20	< 20	230	310	540	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V122	Trench b/w Aux & Ramp	0	V122	1/10/2020	747984	11	<20	<20	4100	4100	6600	1100	<20	1800	8600	430	10830	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V123	Trench b/w Aux & Ramp	0	V123	1/10/2020	747984	7	< 20	< 20	< 50	< 50	210	440	<20	<20	79	230	309	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V124	Trench b/w Aux & Ramp	0	V124	1/10/2020	747984	15	< 20	< 20	< 50	< 50	230	520	<20	<20	79	270	349	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V125	Trench b/w Aux & Ramp	0	V125	1/10/2020	747984	15	< 20	< 20	< 50	< 50	630	270	<20	<20	560	150	710	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V126	Trench b/w Aux & Ramp	0	V126	1/10/2020	747984	11	< 20	< 20	< 50	< 50	< 100	< 100	<20	<20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V127	S of Ramp Rd	0.1	V127	1/10/2020	747984	6.8	< 20	< 20	< 50	< 50	< 100	< 100	<20	<20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V128	S of Ramp Rd	0	V128	1/10/2020	747984	<1	<20	<20	< 50	< 50	< 100	< 100	<20	<20	54	60	114	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V129	S of Ramp Rd	0	V129	1/10/2020	747984	<1	<20	<20	< 50	< 50	<100	120	<20	<20	<50	72	72	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V130	S of Ramp Rd	0	V130	1/10/2020	747984	1.3	<20	<20	< 50	< 50	<100	160	<20	<20	<50	95	95	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V131	S of Ramp Rd	0	V131	1/10/2020	747984	1.9	<20	<20	< 50	< 50	<100	170	<20	<20	52	94	146	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V132	S of Ramp Rd	0	V132	1/10/2020	747984	<1	<20	<20	< 50	< 50	130	180	<20	<20	85	110	195	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V133	S of Ramp Rd	0	V133	1/10/2020	747984	6.9	<20	<20	< 50	< 50	<100	100	<20	<20	<50	71	71	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V134	S of Ramp Rd	0.5	V134	1/10/2020	747984	2.7	<20	<20	< 50	< 50	100	190	<20	<20	<50	120	120	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V135	S of Ramp Rd	0.5	V135	1/10/2020	747984	3.3	<20	<20	< 50	< 50	<100	200	<20	<20	<50	110	110	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V136	S of Ramp Rd	0.5	V136	1/10/2020	747984	10	<20	<20	< 50	< 50	130	120	<20	<20	<50	54	54	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V137	S of Ramp Rd	0.5	V137	1/10/2020	747984	7.2	<20	<20	< 50	< 50	<100	160	<20	<20	<50	80	80	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V138	S of Ramp Rd	0.5	V138	1/10/2020	747984	6.4	<20	<20	< 50	< 50	100	160	<20	<20	<50	79	79	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V139	S of Ramp Rd	0.5	V139	1/10/2020	747984	6.1	<20	<20	< 50	< 50	<100	160	<20	<20	<50	84	84	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V140	S of Ramp Rd	0.5	V140	1/10/2020	747984	4.8	< 20	< 20	< 50	< 50	< 100	130	<20	<20	< 50	65	65	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V141	S of Ramp Rd	0.5	V141	1/10/2020	747984	9.3	< 20	< 20	< 50	< 50	< 100	< 100	<20	<20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V142	S of Ramp Rd	0.2	V142	1/10/2020	747984	8	< 20	< 20	< 50	< 50	< 100	< 100	<20	<20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V143	S of Ramp Rd	0.2	V143	1/10/2020	747984	11	< 20	< 20	< 50	< 50	< 100	< 100	<20	<20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V144	S of Ramp Rd	0.2	V144	1/10/2020	747984	9.4	< 20	< 20	< 50	< 50	< 100	< 100	<20	<20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V145	S of Ramp Rd	0.2	V145	1/10/2020	747984	5.6	180	170	16000	15999.1	13000	510	45	8400	19000	480	27880	< 0.1	0.3	< 0.1	5.5	4.5	10	0.9
V146	S of Ramp Rd	0.2	V146	1/10/2020	747984	6.9	240	220	17000	16999	17000	820	72	11000	23000	770	34770	< 0.1	0.2	< 0.1	9	7.6	17	1
V147	S of Ramp Rd	0.2	V147	1/10/2020	747984	9.2	< 20	< 20	< 50	< 50	< 100	< 100	<20	<20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V148	S of Ramp Rd	0.5	V148	1/10/2020	747984	14	< 20	< 20	< 50	< 50	110	< 100	< 20	< 20	120	< 50	120	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V149	S of Ramp Rd	0	V149	1/10/2020	747984	11	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5

GREENCAP
Going Further in Managing Risk

One Rail Diesel Spil - Soil Bores, Test Pits Validation Samples Results

J168829

						Inorganic	TRH						TPH					BTEXN						
						Moisture Content (dried @ 103°C)	C6-C10	C6-C10 - BTEX (F1)	TRH >C10-C16	C10-C16 - Napth (F2)	TRH >C16-C34	TRH >C34-C40	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Naphthalene
						%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					LOR	1	20	20	50	50	100	100	20	20	50	50	50	0.1	0.1	0.1	0.2	0.1	0.3	0.5
NEPM 2013 Table 1A(1) Comm/Ind D Soil HIL for Soil Contaminants, Sand																								
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m								260		NL								3	NL	NL			230	NL
1-2m								370		NL								3	NL	NL			NL	NL
2-4m								630		NL								3	NL	NL			NL	NL
>4m								NL		NL								3	NL	NL			NL	NL
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil								215		170	1700	3300						75	165	135			180	370
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil							700		1000		3500	10000												
CRC Care (2011) HSL D (Comm/Ind) (Direct Contact)							26000		20000		27000	38000						430	27000	99000			81000	11000
CRC Care (2011) HSL Intrusive Maintenance Worker (Direct Contact)							82000		62000		85000	120000						1100	85000	120000			130000	29000
Location	Area	Depth (m)	Field_ID	Sample_Date	Lab_Report_#																			
V150	S of Ramp Rd	0	V150	1/10/2020	747984	8.7	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V151	S of Ramp Rd	0	V151	1/10/2020	747984	11	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V152	S of Ramp Rd	0	V152	1/10/2020	747984	11	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V153	S of Ramp Rd	0	V153	1/10/2020	747984	8.4	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V154	S of Ramp Rd	0	V154	1/10/2020	747984	9.3	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V155	S of Ramp Rd	0.5	V155	1/10/2020	747984	13	< 20	< 20	< 50	< 50	140	< 100	< 20	< 20	150	< 50	150	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V156	S of Ramp Rd	0.5	V156	1/10/2020	747984	9.7	< 20	< 20	1400	1400	7600	4900	< 20	620	5000	5100	10720	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V157	S of Ramp Rd	0.5	V157	1/10/2020	747984	4.6	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V158	S of Ramp Rd	0.5	V158	1/10/2020	747984	11	< 20	< 20	2900	2900	4400	990	< 20	1500	5200	900	7600	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V159	S of Ramp Rd	0.5	V159	1/10/2020	747984	9.5	< 20	< 20	< 50	< 50	< 100	< 100	< 20	21	90	< 50	111	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V160	S of Ramp Rd	0.5	V160	1/10/2020	747984	9.8	< 20	< 20	240	240	640	< 100	< 20	100	770	< 50	870	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V161	S of Ramp Rd	0.1	V161	1/10/2020	747984	6.2	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V162	S of Ramp Rd	0.1	V162	1/10/2020	747984	3.5	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V163	S of Ramp Rd	0.1	V163	1/10/2020	747984	6	< 20	< 20	< 50	< 50	< 100	100	< 20	< 20	< 50	60	60	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V164	S of Ramp Rd	0.1	V164	1/10/2020	747984	5.1	< 20	< 20	< 50	< 50	< 100	120	< 20	< 20	< 50	70	70	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V165	S of Ramp Rd	0.1	V165	1/10/2020	747984	5.5	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V166	S of Ramp Rd	0.1	V166	1/10/2020	747984	4.5	< 20	< 20	< 50	< 50	120	130	< 20	< 20	81	75	156	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V167	S of Ramp Rd	0.1	V167	1/10/2020	747984	11	20	< 20	5300	5300	7500	4700	< 20	3200	7600	3800	14600	< 0.1	< 0.1	< 0.1	< 0.2	0.2	< 0.3	< 0.5
V168	S of Ramp Rd	0.1	V168	1/10/2020	747984	5	< 20	< 20	< 50	< 50	< 100	220	< 20	< 20	< 50	120	120	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V169	S of Ramp Rd	0.1	V169	1/10/2020	747984	5.5	< 20	< 20	< 50	< 50	< 100	170	< 20	< 20	< 50	93	93	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V170	S of Ramp Rd	0.1	V170	1/10/2020	747984	5.2	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	58	58	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V171	S of Ramp Rd	0.1	V171	1/10/2020	747984	4.9	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V172	S of Ramp Rd	0.1	V172	1/10/2020	747984	6	< 20	< 20	< 50	< 50	< 100	130	< 20	< 20	< 50	76	76	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V173	S of Ramp Rd	0.1	V173	1/10/2020	747984	5.8	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
V174	S of Ramp Rd	0.1	V174	1/10/2020	747984	6	< 20	< 20	< 50	< 50	< 100	< 100	< 20	< 20	< 50	< 50	< 50	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.3	< 0.5
BIOPILE SAMPLES (PAH/Phenol Assessment)																								
BP01	Biopile 1			10/12/2021	850365	<1	<20	<20	340	340	1400	370	2110	<20	130	1300	420	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BP02	Biopile 2			10/12/2021	850365	1.2	<20	<20	3600	3600	8700	210	12510	<20	1200	10000	190	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BP03	Biopile 3			10/12/2021	850365	2.6	<20	<20	730	730	2200	120	3050	<20	230	2500	99	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BP04	Biopile 4			10/12/2021	850365	2.5	<20	<20	57	57	450	<100	507	<20	<20	430	55	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5
BP05	Biopile 5			10/12/2021	850365	1.8	<20	<20	530	530	1800	190	2520	<20	160	2000	180	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.5

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						PAH																				
						Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (lower bound) *	Benzo(a)pyrene TEQ (medium bound) *	Benzo(a)pyrene TEQ (upper bound) *	Benzo(b&j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH*
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					LOR	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) Comm/Ind D Soil HIL for Soil Contaminants, Sand												40													4000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
0-1m																									
1-2m																									
2-4m																									
>4m																									
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
CRC Care (2011) HSL D (Comm/Ind) (Direct Contact)																									
CRC Care (2011) HSL Intrusive Maintenance Worker (Direct Contact)																									
Location	Area	Depth (m)	Field_ID	Sample_Date	Lab_Report_#																				
V150	S of Ramp Rd	0	V150	1/10/2020	747984																				
V151	S of Ramp Rd	0	V151	1/10/2020	747984																				
V152	S of Ramp Rd	0	V152	1/10/2020	747984																				
V153	S of Ramp Rd	0	V153	1/10/2020	747984																				
V154	S of Ramp Rd	0	V154	1/10/2020	747984																				
V155	S of Ramp Rd	0.5	V155	1/10/2020	747984																				
V156	S of Ramp Rd	0.5	V156	1/10/2020	747984																				
V157	S of Ramp Rd	0.5	V157	1/10/2020	747984																				
V158	S of Ramp Rd	0.5	V158	1/10/2020	747984																				
V159	S of Ramp Rd	0.5	V159	1/10/2020	747984																				
V160	S of Ramp Rd	0.5	V160	1/10/2020	747984																				
V161	S of Ramp Rd	0.1	V161	1/10/2020	747984																				
V162	S of Ramp Rd	0.1	V162	1/10/2020	747984																				
V163	S of Ramp Rd	0.1	V163	1/10/2020	747984																				
V164	S of Ramp Rd	0.1	V164	1/10/2020	747984																				
V165	S of Ramp Rd	0.1	V165	1/10/2020	747984																				
V166	S of Ramp Rd	0.1	V166	1/10/2020	747984																				
V167	S of Ramp Rd	0.1	V167	1/10/2020	747984																				
V168	S of Ramp Rd	0.1	V168	1/10/2020	747984																				
V169	S of Ramp Rd	0.1	V169	1/10/2020	747984																				
V170	S of Ramp Rd	0.1	V170	1/10/2020	747984																				
V171	S of Ramp Rd	0.1	V171	1/10/2020	747984																				
V172	S of Ramp Rd	0.1	V172	1/10/2020	747984																				
V173	S of Ramp Rd	0.1	V173	1/10/2020	747984																				
V174	S of Ramp Rd	0.1	V174	1/10/2020	747984																				
BIOPILE SAMPLES (PAH/Phenol Assessment)																									
BP01	Biopile 1			10/12/2021	850365	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BP02	Biopile 2			10/12/2021	850365	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.9	0.9
BP03	Biopile 3			10/12/2021	850365	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BP04	Biopile 4			10/12/2021	850365	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BP05	Biopile 5			10/12/2021	850365	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

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						Phenols																				
						2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,6-Dichlorophenol	2-Chlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	Tetrachlorophenols - Total	Total Halogenated Phenols	2,4-Dimethylphenol	2,4-Dinitrophenol	2-Cyclohexyl-4,6-dinitrophenol	2-Methyl-4,6-dinitrophenol	2-Methylphenol (o-Cresol)	2-Nitrophenol	3&4-Methylphenol (m&p-Cresol)	4-Nitrophenol	Dinoseb	Phenol	Total cresols*	Total Non-Halogenated Phenols
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
					LOR	1	1	0.5	0.5	0.5	1	1	10	1	0.5	5	20	5	0.2	1	0.4	5	20	0.5	0.5	20
NEPM 2013 Table 1A(1) Comm/Ind D Soil HIL for Soil Contaminants, Sand												660									25000			240000		
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																										
0-1m																										
1-2m																										
2-4m																										
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NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																										
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																										
CRC Care (2011) HSL D (Comm/Ind) (Direct Contact)																										
CRC Care (2011) HSL Intrusive Maintenance Worker (Direct Contact)																										
Location	Area	Depth (m)	Field_ID	Sample_Date	Lab_Report_#																					
V150	S of Ramp Rd	0	V150	1/10/2020	747984																					
V151	S of Ramp Rd	0	V151	1/10/2020	747984																					
V152	S of Ramp Rd	0	V152	1/10/2020	747984																					
V153	S of Ramp Rd	0	V153	1/10/2020	747984																					
V154	S of Ramp Rd	0	V154	1/10/2020	747984																					
V155	S of Ramp Rd	0.5	V155	1/10/2020	747984																					
V156	S of Ramp Rd	0.5	V156	1/10/2020	747984																					
V157	S of Ramp Rd	0.5	V157	1/10/2020	747984																					
V158	S of Ramp Rd	0.5	V158	1/10/2020	747984																					
V159	S of Ramp Rd	0.5	V159	1/10/2020	747984																					
V160	S of Ramp Rd	0.5	V160	1/10/2020	747984																					
V161	S of Ramp Rd	0.1	V161	1/10/2020	747984																					
V162	S of Ramp Rd	0.1	V162	1/10/2020	747984																					
V163	S of Ramp Rd	0.1	V163	1/10/2020	747984																					
V164	S of Ramp Rd	0.1	V164	1/10/2020	747984																					
V165	S of Ramp Rd	0.1	V165	1/10/2020	747984																					
V166	S of Ramp Rd	0.1	V166	1/10/2020	747984																					
V167	S of Ramp Rd	0.1	V167	1/10/2020	747984																					
V168	S of Ramp Rd	0.1	V168	1/10/2020	747984																					
V169	S of Ramp Rd	0.1	V169	1/10/2020	747984																					
V170	S of Ramp Rd	0.1	V170	1/10/2020	747984																					
V171	S of Ramp Rd	0.1	V171	1/10/2020	747984																					
V172	S of Ramp Rd	0.1	V172	1/10/2020	747984																					
V173	S of Ramp Rd	0.1	V173	1/10/2020	747984																					
V174	S of Ramp Rd	0.1	V174	1/10/2020	747984																					
BIOPILE SAMPLES (PAH/Phenol Assessment)																										
BP01	Biopile 1			10/12/2021	850365	< 1	< 1	< 0.5	< 0.5	< 0.5	< 1	< 1	< 10	< 1	< 0.5	< 5	< 20	< 5	< 0.2	< 1	< 0.4	< 5	< 20	< 0.5	< 0.5	< 20
BP02	Biopile 2			10/12/2021	850365	< 1	< 1	< 0.5	< 0.5	< 0.5	< 1	< 1	< 10	< 1	< 0.5	< 5	< 20	< 5	< 0.2	< 1	< 0.4	< 5	< 20	< 0.5	< 0.5	< 20
BP03	Biopile 3			10/12/2021	850365	< 1	< 1	< 0.5	< 0.5	< 0.5	< 1	< 1	< 10	< 1	< 0.5	< 5	< 20	< 5	< 0.2	< 1	< 0.4	< 5	< 20	< 0.5	< 0.5	< 20
BP04	Biopile 4			10/12/2021	850365	< 1	< 1	< 0.5	< 0.5	< 0.5	< 1	< 1	< 10	< 1	< 0.5	< 5	< 20	< 5	< 0.2	< 1	< 0.4	< 5	< 20	< 0.5	< 0.5	< 20
BP05	Biopile 5			10/12/2021	850365	< 1	< 1	< 0.5	< 0.5	< 0.5	< 1	< 1	< 10	< 1	< 0.5	< 5	< 20	< 5	< 0.2	< 1	< 0.4	< 5	< 20	< 0.5	< 0.5	< 20

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