



Yulara Landfill

**Environmental Compliance
Monitoring - February 2026**

Prepared for

Voyages Indigenous Tourism
Australia Pty Ltd

27 February 2026

Tierra Environment Pty Ltd
ABN 84 111 615 680

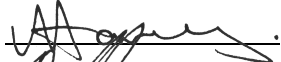
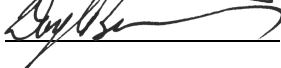
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Document Status

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1 INTRODUCTION

1.1 General

This report has been prepared by Terra Environment Pty Ltd (Terra) for Voyages Indigenous Tourism Australia (Voyages). It documents an environmental compliance monitoring event undertaken in February 2026 as part of the compliance reporting for the Yulara Landfill, Northern Territory. A plan showing the location of the site is provided as Figure 1 in Appendix A.

1.2 Objectives

As per the licence (EPL179-02) the landfill “must implement, maintain and follow the Monitoring Plan”. An “Ongoing Monitoring Plan” (OMP) was prepared by Greencap in 2016 for the landfill. The OMP requires that a groundwater, surface water, leachate and landfill gas monitoring programme must be carried out every 6 months with the intention to achieve the following objectives:

- Determine baseline environmental conditions at and around the landfill site.
- Determine processes occurring within the landfill through monitoring of leachate production, leachate composition and landfill gas composition.
- Determine risks or effects on the environment due to the landfill through monitoring of groundwater, surface water and landfill gas.
- Check compliance with regulatory requirements.
- Identify the need for, and extent of, remedial/mitigation measures to reduce effects on the environment.

1.3 Site Definition

The site is defined as follows:

Description	Yulara Landfill
Address	Lot 248 Yulara NT
Title	Volume CUFT 866 Folio 877
Plan	LTO94/017B
Council	Unincorporated area within McDonnell Shire Council
Zoning	No Zone
Size	201,400m ²
Owner	Voyages Indigenous Tourism Australia

1.4 Geological and Topographical Information

The OMP discusses the geology of Yulara as one area however since the preparation of this document NT Power and Water Corporation commissioned CloudGMS to prepare a model of the Dune Plains Aquifer. From this it appears that the landfill lies just to the west of the boundary between the “Dune Plains Aquifer” and outcrops and sediments associated with the “Sedimentaries” whereas the township of Yulara lies within the Dune Plains Aquifer as the OMP details.

The landfill being just outside of the Dune Plains Aquifer appears to be confirmed with the material logs from groundwater well installation by Low Ecological in 2017 and a previous investigation by Terra in February 2025. On this basis the geology at the site is as described below.

The Yulara landfill site lies on a portion of the Amadeus Basin to the south west of the outcrops of The Sedimentaries and approximately 1km west of the western extent of the Dune Plains Aquifer near Yulara.

Underlying soils are:

- Quaternary age Red Soils – Red sand, mud and gravel; sheet wash deposits found in inter-dune depressions and on gentle slopes flanking hills.

Overlying

- Proterozoic age Winnall Beds – Brown to pale quartz sandstone, often micaceous, dominantly tabular but massive in upper part; minor red-purple fine sandstone to siltstone.

The Quaternary age Red Soils have formed from erosion of the outcropping Sedimentaries which themselves are Neoproterozoic age conglomerates. The south eastern most outcrop lies approximately 1.5km west north west of the landfill.

The Dune Plains Aquifer in the vicinity of the landfill is approximately co-located with the Olga Thrust. To the east of this boundary/fault soils are Quaternary age Aeolian Sands – (aeolian sand plains and sand dune deposits). These Quaternary age sediments within the Dune Plains Aquifer are significantly deeper (up to 100m thick) than the Quaternary age sediments below the landfill (less than 20m thick) and they constitute the aquifer itself.

The topography in the vicinity of the landfill is relatively complicated due to outcropping of the Sedimentaries, the Quaternary sediments formed on its flanks and the change in geology across the western boundary of the Dune Plains Aquifer and the Olga Thrust. The topography is as described below.

To the north west of the landfill are north west to south east trending ridges of the Sedimentaries. To the north east and south west of these outcrops the ground falls away gently. The landfill is to the north east of one of these outcrops and as such there is a gentle fall to the north east. The landfill is also to the south east of the ends of a collection of the outcrops and as a result there is an even shallower component of cross fall to the south east. All of the land immediately surrounding the landfill sits higher than the land to the east which is essentially flat plains.

1.5 Hydrogeology

The hydrogeology of the site based on information contained in the OMP and the geology and topography discussed in Section 1.4 is as follows:

“Yulara is highly seasonal with the lowest average rainfall occurring in August (4.3mm) and increasing and extending through the northern Australian monsoon period through to December. Both the Cainozoic sediments and Proterozoic bedrock provide useable groundwater. This multi-layered aquifer is called the Dune Plains Aquifer and correlates with the palaeovalley underneath Yulara.

The Dune Plains Aquifer is actively recharged during the high rainfall events during the monsoonal periods. Based upon available information the net groundwater flow is towards Lake Amadeus (i.e. to the north-east). However, the shallower local groundwater is generally more complex and flows in a generally easterly direction. Information suggests that the site lies in an area which acts as a recharge zone for the Dune Plains Aquifer.”

The above appears correct with the exception of the landfill site being just to the west of the Dune Plains Aquifer. It is expected that the upper Quaternary aquifer is linked to (feeds into) the Dune Plains Aquifer through permeable and porous layers within the Quaternary age Red Soils.

1.6 Previous Environmental Investigations

Previous monitoring has been carried out at the site since 2017. Tierra undertook the last round of monitoring in August 2025. A review of the report identified the following:

- Groundwater was present in wells at depths ranging from 19.4m to 23.3m below ground surface.
- Groundwater flow in the northern portion of the site appears to be to the south east while in the southern portion it's to the north east. Groundwater flows converge around MW2D and possibly flow eastward from there.
- LNAPL, odours and sheens were not observed in purged or sampled waters.

- Results from MW2D exceeded acceptance criteria for cadmium and copper and MW5D exceeded acceptance criteria for selenium.
- TRH C₁₀-C₁₆ and C₁₀-C₁₄ was detected in MW4D above the limits of reporting.
- Results from the Mann Kendall trend assessment found a decreasing trend for aluminium and a possible decreasing trend for selenium. Other analytes had either no discernible trend or a stable trend.
- Leachate was not present in the two wells (LMW1 & LMW2).
- Methane was not detected in perimeter wells. Carbon dioxide was detected exceeding criteria in MW3S and MW9S. As the criterion are based on minimising risk of accumulation in structures and there are no structures in the immediate vicinity of the landfill the risk is expected to be low.
- Methane levels in the landfill ranged from 0% to 1.6%. Measured concentrations were outside the explosive limits.

1.7 Scope of Works

The following activities were undertaken as part of the environmental monitoring by Tierra:

- Field monitoring of 11 landfill gas monitoring points for methane (CH₄), carbon dioxide (CO₂), oxygen (O₂), and volatile organic compounds (VOCs)
- Groundwater level gauging of 5 groundwater wells
- Purging and sampling of 5 groundwater wells
- Field analysis of 5 groundwater samples for temperature (°C), dissolved oxygen (% and mg/L), specific conductivity SPC (µS/cm), conductivity (µS/cm), total dissolved solids (ppm), pH and redox potential (mV)
- Laboratory analysis of 5 groundwater samples, 1 intra-laboratory and 1 inter-laboratory groundwater sample for TSS, alkalinity, total nitrogen, ammonia, nitrate, nitrite, total phosphorous, orthophosphate, dissolved organic carbon, COD, Fe, Al, Cu, Zn, Cr, Mn, Ni, Pb, Ca, chloride, Ca, sulphate, Na, P, Mg, As, Hg, Se, TRH, BTEX, PAH, OCP, OPP, PCB
- Gauging of 2 leachate wells
- Data review and assessment and reporting

2 INVESTIGATION METHODOLOGY

2.1 Landfill Gas

2.1.1 Gas well status

The following table details the current status of the gas wells at the landfill.

Gas Well	Depth	Screen	Status in Feb 2026	Comments
MW1S	4m	1-4m	In service	-
MW2S	10m	1-10m	In service	-
MW3S	11m	2-11m	In service	-
MW4S	2.5m	0.5-2.5m	In service	-
MW5S	3.9m	0.9-3.9m	In service	-
MW6S	3.4m	0.9-3.4m	In service	-
MW7S	4.2m	1.2-4.2m	In service	-
MW8S	3.9m	0.9-3.9m	In service	Co-located with new MW1D
MW9S	15m	12-15m	In service	Former MW2D groundwater well
LMW1	6m	1.5-6m	In service	-
LMW2	8m	1-8m	In service	-

A site plan detailing locations of in-service gas wells is presented as Figure 2 in Appendix A.

The positions and purposes of the wells based on their location are as follows:

- MW1S and MW8S are situated on the western boundary and are considered to show background concentrations.
- MW2S, MW3S and MW9S are situated on the eastern boundary adjacent a filled area of the landfill.
- MW4S and MW5S are situated on the northern boundary adjacent a filled area of the landfill.
- MW6S, MW7S, LMW1 and LMW2 are located within the filled area of the landfill.

2.1.2 Landfill gas monitoring

Available gas wells were monitored for concentrations of methane, carbon dioxide, oxygen and volatile organic compounds (CH₄, CO₂, O₂ and VOCs respectively) on 5 February 2026. Monitoring data prior to February 2026 while not presented in this report, has been utilised to produce plots of gas levels over time.

A GA5000 landfill gas analyser with sampling pump was used to test for CH₄, CO₂ and O₂ concentrations. VOC concentrations were measured using an Ion Phocheck Tiger Photo Ionisation Detector (PID).

2.1.3 Landfill gas accumulation monitoring

While onsite structures do not penetrate the ground below creating a preferential pathway landfill gas accumulation monitoring was undertaken inside the tool shed using a GA5000 landfill gas analyser and PID as the shed is founded directly on the ground with a paver floor. It is however constructed such that the upper approximately 500mm is open mesh hence well ventilated. The monitoring is a precautionary observation.

2.2 Landfill Leachate

2.2.1 Leachate well status

Leachate Well	Depth	Screen	Status in Feb 2026	Comments
LMW1	6m	1.5-6m	In service	Dry
LMW2	8m	1-8m	In service	Dry

A plan detailing the location of the leachate wells is presented as Figure 2 in Appendix A.

2.2.2 Leachate sampling

Leachate samples were not able to be collected as no leachate was present in the wells.

2.3 Groundwater

2.3.1 Groundwater well status

The following table details the current status of the groundwater wells at the landfill.

Groundwater Well	Depth	Screen	Status at Feb 2026	Comments
MW1D	36.1m	21.1-36.1m	In service	-
MW2D	33.2m	18.2-33.2m	In service	-
MW3D	30m	15-27m	In service	-
MW4D	33.5m	18.5-33.5m	In service	-
MW5D	35m	17-35m	In service	-

A site plan detailing locations of these groundwater wells is presented as Figure 2 in Appendix A.

2.3.2 Sampling preparation

Sample bottles were labelled prior to going on site. Sample bottles for individual wells were removed from the site vehicle immediately after purging and prior to sampling. Sample bottles were labelled with the groundwater well designation as only one sample was to be taken from each well.

2.3.3 Groundwater sampling

All groundwater wells were dipped on 7 February 2026 prior to purging and sampling. A summary of well gauging results is provided in Appendix C.

Purging and sampling was also undertaken on 7 February 2026 using a Waterra inertial pump. Wells were generally purged until dissolved oxygen, redox potential, conductivity, pH and temperature readings, measured in the field using a YSI Quatro Pro Plus multi parameter water meter, had stabilised. Stabilisation was not achieved in three wells (MW1D, MW3D and MW5D) which ran dry before stabilisation could occur. The wells were left to recover (water returned to the well and back to a level similar to the starting level) prior to sampling. Groundwater well summary records for purging are provided in Appendix C.

After the completion of purging activities samples were taken from the wells. One sample was collected from each well. Appropriate sampling bottles were used and samples were stored in an esky with ice prior to transportation to the laboratory to ensure that optimal storage conditions were achieved as relevant to the type of analyses to be undertaken.

2.4 Quality Control Sampling

Quality control sampling was undertaken at the rates indicated in the following table.

Quality Sampling	Number samples collected	Number samples analysed
Intra Laboratory Duplicate	1 sample	1 sample
Inter Laboratory Duplicate	1 sample	1 sample

The procedure for collecting quality samples was the same as for normal samples.

2.5 Tracking of Samples

Tracking of samples was undertaken using Chain of Custody (COC) documentation. COCs were sent to the laboratories with instructions for the analyses required. The laboratories checked the condition and number of samples and signed and returned copies of the COC to confirm the receipt of samples. Copies of COCs are provided in Appendix H.

2.6 Analytical Testing

Analysis of groundwater samples and intra-laboratory duplicate samples were conducted by Eurofins. Inter-laboratory duplicates were analysed by Envirolab Services. Both laboratories hold National Association of Testing Authorities (NATA) registration for the parameters listed in the following table:

Parameter	Analytical Method	Limits of Reporting	Total Number of Samples Tested
BTEX	Eurofins: LTM-ORG-2010 BTEX and Volatile TRH	0.001, 0.002, 0.003	5 + (1) quality
	Envirolab: ORG-023_F1_TOT	0.01, 0.001, 0.002	(1) quality
OCP	Eurofins: LTM-ORG-2220 (USEPA 8270)	0.0002, 0.002, 0.005	5 + (1) quality
	Envirolab: ORG-022_OC	0.2	(1) quality
OPP	Eurofins: LTM-ORG-2200 (USEPA 8270)	0.02, 0.002	5 + (1) quality
	Envirolab: ORG-022	0.2	(1) quality
Phenols	Eurofins: LTM-ORG-2130	various	5 + (1) quality
	Envirolab: ORG-022	various	(1) quality
Turbidity	Eurofins: APHA 2130B (LTM-INO-4140)	1 (NTU)	5 + (1) quality
	Envirolab: INORG-022	0.1 (NTU)	(1) quality
Alkalinity	Eurofins: LTM-INO-4250 by Electrometric Titration	10, 20	5 + (1) quality
	Envirolab: INORG-006	5	(1) quality
Chloride	Eurofins: LTM-INO-4270 by Ion Chromatography	1	5 + (1) quality
	Envirolab: INORG-081	1	(1) quality
Alkali Metals	Eurofins: LTM-MET-3010 by ICP-AES	0.5	5 + (1) quality
Sulphate	Eurofins: LTM-INO-4270 by Ion Chromatography	5	5 + (1) quality
	Envirolab: INORG-081	1	(1) quality
Organic N	Eurofins: APHA 4500	0.2	5 + (1) quality
	Envirolab: Calc	0.1	(1) quality
Ammonia	Eurofins: LTM-INO-4450 by Discrete Analyser	0.01	5 + (1) quality
	Envirolab: INORG-057	0.005	(1) quality
Nitrate & Nitrite	Eurofins: LTM-INO-4450 by Discrete Analyser	0.05	5 + (1) quality
	Envirolab: INORG-055	0.005	(1) quality
Total Kjeldahl Nitrogen	Eurofins: APHA 4500	0.2	5 + (1) quality
	Envirolab: INORG-062	0.1	(1) quality
Phosphorous Reactive	Eurofins: APHA 4500-P by FIA	0.01	5 + (1) quality
	Envirolab: INORG-060	0.005	(1) quality
Phosphate total	Eurofins: LTM-MET-3040 by ICP-MS	0.01	5 + (1) quality
COD	Eurofins: LTM-INO-4220	25	5 + (1) quality
	Envirolab: INORG-067	50	(1) quality
DOC	Eurofins: APHA 5310B	5	5 + (1) quality
	Envirolab: APHA 5310B	1	(1) quality
TSS	Eurofins: LTM-INO-4070 by Gravimetry	5	5 + (1) quality
	Envirolab: INORG-019	5	(1) quality
TDS	Eurofins: LTM-INO-4170	10	5 + (1) quality
	Envirolab: INORG-018	5	(1) quality

Parameter	Analytical Method	Limits of Reporting	Total Number of Samples Tested
Metals	Eurofins: LTM-MET-3040 by ICP-MS	various	5 + (1) quality
	Envirolab: Metals-022 ICP-MS	Various	(1) quality
TRH	Eurofins: LTM-ORG-2010 TRH C6-C40	0.02, 0.05, 0.1	5 + (1) quality
	Envirolab: Org-023	0.05, 0.1	(1) quality
PCB	Eurofins: LTM-ORG-2220	0.005	5 + (1) quality
	Envirolab: ORG-021/022/025_PCB	2	(1) quality
PAH	Eurofins: LTM-ORG-2130	0.001	5 + (1) quality
	Envirolab: ORG-022_PAH	0.1	(1) quality

Notes to table:

- Units are in mg/L unless otherwise stated.
- Quality in the brackets refers to Eurofins intra-laboratory sample and Envirolab inter-laboratory samples.

3 QUALITY ASSESSMENT

Tierra Environment conducts investigations in accordance with the principles of quality assurance and quality control (QA/QC). The Tierra QA/QC principles include:

- use of established procedures and suitably qualified field personnel for environmental sampling
- documentation of chain-of-custody and sample handling and storage
- use of NATA registered laboratories (where possible)
- use of intra and inter laboratory field duplicates samples and rinsate, field blank, trip blank or trip spike samples

Quality of investigation outputs is maintained by ensuring:

- all staff are appropriately trained
- safety standards are defined and implemented
- good housekeeping practices are adopted during all phases of the investigation
- complete records of fieldwork, samples and data are maintained

Specific quality control procedures conducted for this investigation include:

- the use of appropriate sample collection and handling procedures
- the use of appropriately skilled and experienced personnel
- the application of decontamination procedures where appropriate to minimise cross contamination
- the extraction and analysis within appropriate handling times
- the use of an independent, NATA accredited laboratory for analysis (where possible)
- the collection and analysis of quality samples, e.g. blind duplicates, split duplicates, and internal laboratory duplicates, rinsate, field blank and matrix spike/matrix spike duplicates

Based on the QA/QC information listed in this report in Appendix E, the results are considered to be of an appropriate standard and it is concluded that:

- field investigation and sample preservation methods are appropriate for the investigations reported
- the analytical methods used for site assessment are of appropriate precision and accuracy, and that the sensitivity and selectivity of the analytical methods are appropriate for the assessment of risks
- the precision and accuracy criteria set out in the QA/QC plan, for a given method and matrix, meet the performance expected of the reference method
- the quality of data supplied by the analytical laboratory meets the objectives of the testing laboratory's quality plan for blanks, spikes, control samples, laboratory duplicates and holding times

4 ACCEPTANCE CRITERIA

The OMP stipulates that acceptance criteria should be selected based on:

- the most suitable available (national or Territory) or site-specific risk based criteria derived at the time of monitoring
- the NT EPA (2013) Guidelines for the Siting, Design and Management of Solid Waste Disposal Sites in the Northern Territory

On the basis of the above, groundwater and leachate results (where available) were assessed against the following criteria:

- ANZG (2018)¹ toxicant default guideline values for 95% level of species protection in freshwater

Selected assessment criteria are listed in the summary table of analytical results provided in Appendix D.

The acceptance criteria for landfill gas were as follows:

- methane should be less than 1% by volume in perimeter wells
- CO₂ should be less than 1.5% by volume in perimeter wells

The gas acceptance levels are based on minimising risk of accumulation in structures.

¹ Australian and New Zealand Guidelines for Fresh and Marine Water Quality, 2018 online revision

5 INVESTIGATION RESULTS

5.1 Landfill Gas Monitoring

In February 2026, methane, carbon dioxide and oxygen concentrations were measured in 11 landfill gas monitoring points.

Monitoring results for the 4 wells (MW6S, MW7S, LMW1 & LMW2) situated within the filled landfill area were as follows:

	Feb 2026	
	Min	Max
Methane	0.0%	8.9%
Carbon dioxide	4.5%	23.5%
Oxygen	0.0%	16.7%
VOC (PID)	0.02ppm	0.75ppm

Methane concentrations were higher than the August round of monitoring up from 1.6% to 8.9%. Oxygen levels were also lower in all the bores.

The higher methane and lower oxygen could be due to more prolonged wet conditions in the lead up to the February monitoring compared to the August monitoring. More methane is produced in wetter periods compared to decreased production in drier periods.

Monitoring results for the 7 perimeter wells (MW1S, MW2S, MW3S, MW4S, MW5S, MW8S and MW9S) were as follows:

	Feb 2026	
	Min	Max
Methane	0.0%	2.2%
Carbon dioxide	0.2%	28.6%
Oxygen	0.4%	20.6%
VOC (PID)	0.2ppm	1.5ppm

Methane levels measured in the perimeter wells were below the 1% criterion with the exception of MW2S which recorded 2.2%. Carbon dioxide levels were generally below the 1.5% criterion with the exception of exceeded in MW2S and MW3S. MW3S has a history of elevated CO₂ levels however the high CO₂ and methane in MW2S is not in line with historical concentrations. The elevated levels could be due to the proximity of filled waste to MW2S. Continued monitoring of this bore should be continued to assess if this trend continues.

Methane concentrations recorded in LMW2 are within the active waste mass are consistent with normal methanogenic conditions despite being within the explosive range (5% - 15%). Perimeter monitoring indicates no lateral migration above LEL. No confined structures or subsurface service conduits are present that would facilitate accumulation. Accordingly, explosive risk to site receptors is considered low under current site conditions.

Landfill gas accumulation monitoring was also undertaken inside the shed onsite. Recorded readings were as follows and support the no accumulation inside of buildings.

	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	CO (ppm)	H ₂ S (ppm)	PID (ppm)
Shed	0.0	0.0	20.8	0	0	0.01

The shed results were consistent with open air conditions.

Landfill gas monitoring results are presented in Appendix B.

5.2 Landfill Gas Trends

Methane and carbon dioxide concentrations from monitoring rounds since 2018 (with the exception of July and November 2021 and May 2022 which appears to have erroneous data) were graphed and the following was noted:

- Historically methane has been detected in LMW1, LMW2 and MW3S. This monitoring event, methane was detected in LMW2 and MW2S and not in LMW1 or MW3S. Concentrations in LMW2 were also higher than last event but lower than February 2025. Methane has never been detected before in LMW2S.
- CO₂ concentrations have generally increased since the last monitoring event but are lower than February 2025 concentrations.
- CO₂ concentrations in general follow the same trend in fluctuations with the exception of MW2S which has a high spike in CO₂ and MW9S which has seen a continued decreasing trend since the well was installed.

Trend graphs are provided in Appendix B.

5.3 Leachate Analytical Results

Leachate samples were not collected as the wells were dry.

5.4 Groundwater Gauging

All wells had water during the February 2026 monitoring event. The depth to water ranged from 19.4m to 23.3m and reduced water levels ranged from 482.5mAHD to 486.3mAHD. Reduced water levels were plotted to create groundwater level contours. A plan showing the contours is presented as Figure 3 in Appendix A.

Groundwater flow was found to be consistent with the February and August 2025 contours with the flow in the southern half of the site to the north east and flow in the northern half to the south east. The two flows appear to converge around MW2D and possibly flows eastward from there. This may be associated with leakage towards the western edge of the Dune Plains Aquifer or the Olga Thrust Fault to the east². It was also noted from an inspection of the land beyond the landfill that there is a surface drainage line in the vicinity of MW2D which flows to the east. This is consistent with the groundwater contours and as sedimentary groundwater typically follows topography trends it provides support to the groundwater flow regime.

Continued water level gauging activities should be undertaken to assess the long term trend in flows.

5.5 Groundwater Field Observations

Records of groundwater gauging and purging are presented in Appendix C. In summary the following purging results were obtained:

	pH	Temp (C)	Specific Conductivity (µS/cm)	Dissolved Oxygen (%) ³	Redox Potential (mV)	Odour	Dis- colouration	LNAPL
MW1D	6.9	27	2430	33	132	No	No	No
MW2D	6.7	27	1560	11	181	No	No	No
MW3D	7.0	27	2197	47	91	No	No	No
MW4D	7.0	28	1447	71	179	No	No	No
MW5D	6.8	26	3595	75	106	No	No	No

² Based on a review of information in the Dune Plains Aquifer Groundwater Modelling version 0.2 October 2019 – prepared for NT Poer and Water Corporation by CloudGMS.

³ Results for dissolved oxygen may be higher than usual in wells that ran dry due to the presence of air from the lack of water in the well.

5.6 Groundwater Analytical Findings

Results for the analytes described in this section are presented in Appendix D. Original laboratory certificates are presented in Appendix H.

Copper concentrations in MW1D, MW2D and MW3D exceeded ANZG Freshwater criteria for 95% species protection. Selenium concentrations in MW5D also exceeded criteria.

All other results complied with acceptance criteria with the exception of some OCPs, OPPs, PAHs and PCBs which were below the laboratory's limits of reporting however the limits of reporting exceeded the acceptance criteria. It should be noted that these contaminants may not in fact be present. However, where laboratory reporting limits are elevated (typically due to analytical interference from sediment load or salinity) and exceed the relevant acceptance criteria, the analytes must still be reported as potential exceedances.

Accordingly, even in the absence of confirmed detection, such results require notation and consideration in the assessment. As such these chemicals will be tracked over coming monitoring events.

5.7 Groundwater Trend Analysis

A Mann Kendall trend assessment was undertaken for MW3D to assess if there are trends in the analytical concentrations in the well over time and if that trend is increasing, decreasing or stable. No trend analysis could be undertaken for the other groundwater wells as a minimum of four monitoring events is required (only three monitoring events have occurred so far).

A Mann Kendall assessment was undertaken for analytes that have had exceedances, results above the limits of detection and analytes which are considered key landfill leachate indicators.

From the Mann Kendall assessment the following is noted:

- No discernible trend was reported for aluminium, copper, total chromium, manganese, nickel, zinc, ammonia and pH.
- A decreasing trend was observed for selenium.

The Mann Kendall assessments are provided in Appendix G.

6 SUMMARY AND RECOMMENDATIONS

6.1 Summary

On the basis of information contained in this report (i.e. observations made during site presence, field and analytical testing), the following conditions are summarised:

- Gas levels inside perimeter wells generally complied with criteria (methane levels below 1% and carbon dioxide below 1.5%) with the exception of MW2S (which had high methane and carbon dioxide) and MW3S (which had high carbon dioxide).
- Wells within the filled area of the landfill reported methane levels between 0% to 8.9%. Measured concentrations in LMW2 were within the explosive limits.
- While methane was detected within the explosive limits in LMW2 the well is located within the active waste mass and levels are consistent with normal methanogenic conditions despite being within the explosive range. While methane was also detected in a perimeter well the concentrations were below the lower explosive limit. Also, no confined structures or subsurface service conduits are present in this area that would facilitate accumulation and readings taken inside the one structure onsite was found to have atmospheric conditions. Accordingly, explosive risk to site receptors is considered low under current site conditions.
- Methane levels were slightly higher than in August and in addition oxygen concentrations were lower in both perimeter and filled area wells. The changes in gas levels are likely due to wet conditions in the lead up to the February monitoring.
- All groundwater wells had water in February 2026. The depth to water ranged from 19.4m to 23.3m.
- Groundwater flow in the northern half was to the south east and in the southern half to the north east converging near MW2D.
- LNAPL, odours and sheens were not observed in purged waters.
- Results from MW1D, MW2D and MW3D exceeded acceptance criteria for copper.
- MW5D exceeded acceptance criteria for selenium.
- All other results complied with acceptance criteria.
- A Mann Kendall trend assessment was undertaken for MW3D using historical results for analytes that have previously had exceedances and analytes that are key indicators. Results from the Mann Kendall assessment found a decreasing trend in selenium concentrations. Other analytes had no discernible trend.

6.2 Recommendations

Based on the findings we suggest the following:

- Continued monitoring as per the existing schedule. As recommended previously we would suggest the scope of analytical investigations is reviewed as some of the current analytes are not good indicators of leachate impact. This is being addressed in the new monitoring plan (Yulara Landfill Environmental Monitoring, Mitigation, Action and Responsibilities Plan) that is currently being prepared. The new monitoring plan should be used for the next round of monitoring.
- The bentonite around gas wells should continue to be wetted in the days before future monitoring is proposed to be undertaken.
- Methane, carbon dioxide and oxygen should continue to be closely monitored.
- OCPs, OPPs, PAHs and PCBs while unlikely to actually be present (refer Section 5.6) will be monitored in the next round of monitoring.
- Continued trend analysis (Mann Kendall trend assessment) with particular focus on key indicators of landfill impact. The Mann Kendall trend analysis should be expanded to all wells next monitoring event.

7 LIMITATIONS OF USE

Site contamination is generally a product of man-made processes and therefore exhibits characteristics and properties that vary from place to place and can change with time. Contamination assessments involve gathering and assimilating limited facts about these characteristics and properties in order to better understand or predict the status of contamination on a particular site under certain conditions.

The facts reported and utilised in this document were obtained by inspection, excavation, sampling, testing, and other means of investigation or from the client. They are directly relevant only to the ground at the place where and time when an investigation was carried out.

Any interpretation or recommendation given in this report is based on judgment and experience and not on greater knowledge of the facts than the sources of information indicate. The interpretations and recommendations are opinions provided for the sole use by Voyages Indigenous Tourism Australia and in accordance with a specific brief.

Tierra Environment does not represent that the information or interpretation contained in this document addresses completely existing features such as surface and subsurface contamination, groundwater and geotechnical conditions or ground or contamination behaviour on a subject site or of particular materials.

The responsibility of Tierra Environment Pty Ltd is solely to Voyages Indigenous Tourism Australia. It is not intended that this document be relied upon by any third party other than a site contamination auditor appointed by Voyages Indigenous Tourism Australia to undertake a site contamination audit. Tierra Environment does not undertake any duty or accept any responsibility to any other parties who may rely upon this document.

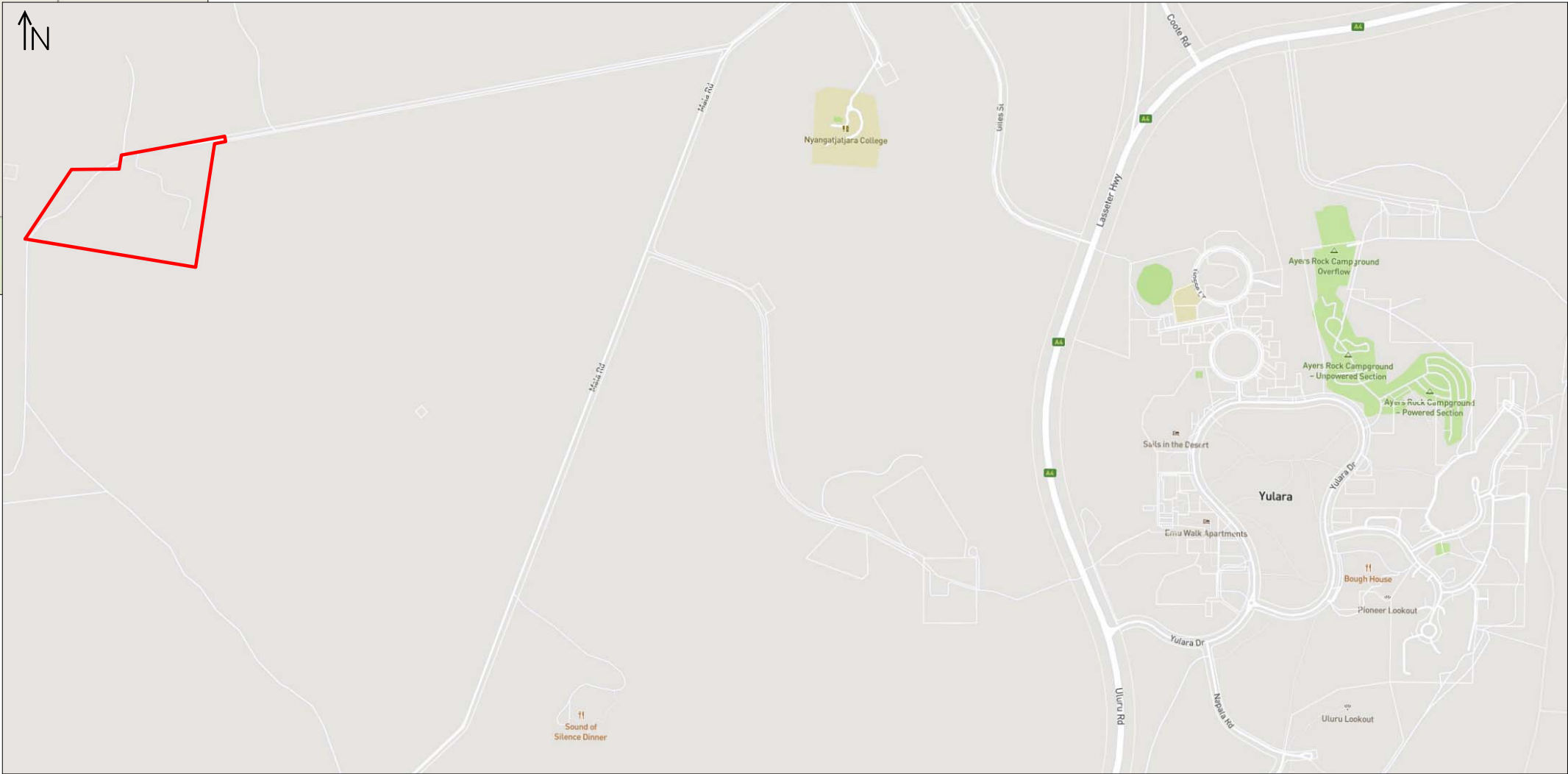
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APPENDIX A
FIGURES



Scale (m)
0 50 100

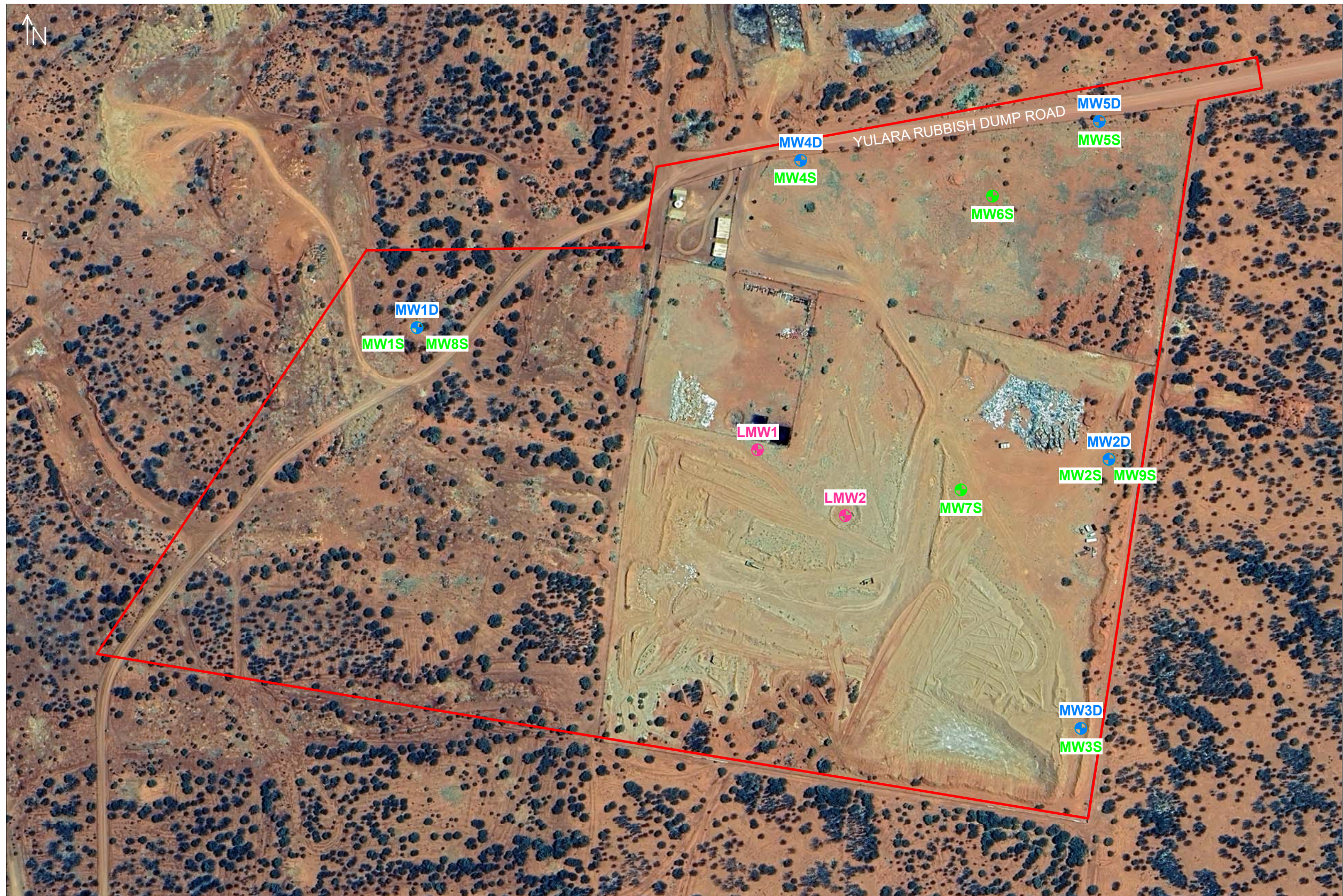


Scale (m)
0 200 400

 Approximate site boundary

- Notes:
1. Base aerial photo by Google Maps, taken 22 February 2023.
 2. Site boundary approximate, based on coordinates from strike.net.gov.au.

Figure 1 - Site Location
Environmental Compliance Monitoring – February 2026
Yulara Landfill



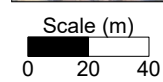
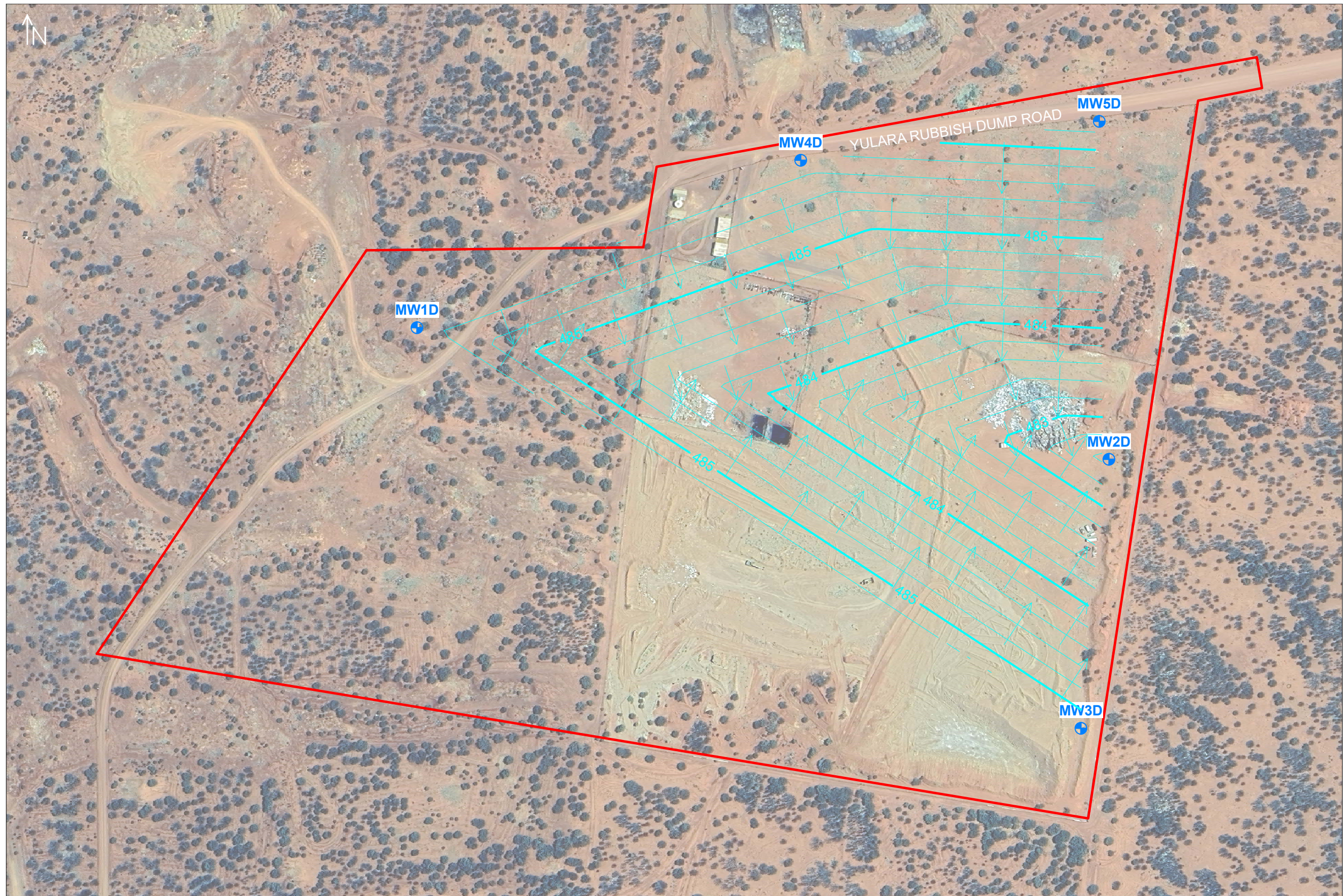
Legend

- MW1D Groundwater monitoring well
- MW1S Landfill Gas monitoring well
- LMW1 Leachate/Landfill Gas monitoring well
- Landfill boundary

Notes:

- 1. Base aerial photo by Google Maps, taken 22 February 2023.
- 2. Well locations based on surveyed coordinates.
- 3. Site boundary approximate, based on coordinates from strike.net.gov.au.

Figure 2 - Groundwater, Leachate and Landfill Gas Wells
Environmental Compliance Monitoring – February 2026
Yulara Landfill



Legend

- MW1D Groundwater monitoring well
- Reduced water level contours
- Landfill boundary

Notes:

1. Base aerial photo by Google Maps, taken 22 February 2023.
2. Well locations based on surveyed coordinates.
3. Site boundary approximate, based on coordinates from strike.net.gov.au.
4. Water Level contours based on measurements taken 7 February 2026.

Figure 3 - Groundwater Contours
Environmental Compliance Monitoring – February 2026
Yulara Landfill

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APPENDIX B
GAS RECORDS AND CHARTS

**Yulara Landfill
Environmental Compliance
Monitoring - February 2026**

**February 2026 Landfill Gas
Monitoring Records**



Well	MW1S	Date	5/02/2026	Time	1:30pm	Sampled By	DPB
Barometric Pressure	956						
Relative Pressure	0.21						
Flow (L/hr)	0.0						
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.0	0.2	20.2	0	0	0.17	
1	0.0	0.3	20.1	0	0	0.11	
2	0.0	0.2	20.1	0	0	0.08	
3	0.0	0.2	20.2	0	0	0.06	
4	0.0	0.2	20.2	0	0	0.03	
5	0.0	0.2	20.2	0	0	0.02	
6	0.0	0.2	20.2	0	0	0.02	
7	0.0	0.2	20.3	0	0	0.02	
8	0.0	0.2	20.3	0	0	0.02	
9	0.0	0.2	20.3	0	0	0.02	
10	0.0	0.2	20.3	0	0	0.02	
15	0.0	0.2	20.3	0	0	0.02	

Well	MW2S	Date	5/02/2026	Time	9:55am	Sampled By	DPB
Barometric Pressure	961						
Relative Pressure	-0.28						
Flow (L/hr)	0.0						
ran for extra time as methane was rising and O2 falling							
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.3	6.6	14.7	0	0	0.38	
1	0.3	6.9	14.3	0	0	0.36	
2	0.3	6.9	14.3	0	0	0.36	
3	0.3	7	14.1	0	0	0.38	
4	0.3	7.2	14	0	1	0.38	
5	0.3	7.6	13.8	0	1	0.40	
6	0.5	8.1	13.4	0	0	0.41	
7	0.4	8.5	13.1	0	0	0.44	
8	0.4	8.9	12.8	0	0	0.45	
9	0.5	9.5	12.4	0	0	0.46	
10	0.5	10.2	11.9	0	1	0.49	
15	0.8	14.8	9.1	0	0	0.76	
20	1.1	18.6	6.5	0	0	0.37	
25	1.4	22.5	4.1	0	1	0.30	
30	1.6	25.3	2.3	0	0	0.51	
35	1.9	28.1	0.5	0	0	1.61	
40	2.0	28.4	0.4	0	1	1.54	
45	2.2	28.5	0.4	0	0	1.54	
50	2.2	28.6	0.4	0	0	1.55	

Well	MW3S	Date	5/02/2026	Time	8:30am	Sampled By	DPB
Barometric Pressure	960						
Relative Pressure	-0.14						
Flow (L/hr)	0.0						
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.0	8.3	11.7	0	0	0.26	
1	0.0	9	11.3	0	0	0.21	
2	0.0	8.8	11.5	0	0	0.17	
3	0.0	8.4	11.8	0	0	0.17	
4	0.0	7.9	12.9	0	0	0.14	
5	0.0	7.4	13.6	0	0	0.13	
6	0.0	7.5	13.7	0	0	0.12	
7	0.0	7.8	13.5	0	0	0.12	
8	0.0	7.9	13.3	0	1	0.12	
9	0.0	8.1	13.2	0	0	0.12	
10	0.0	8.2	13.2	0	0	0.12	
15	0.0	8.3	13.2	0	0	0.12	

**Yulara Landfill
Environmental Compliance
Monitoring - February 2026**

**February 2026 Landfill Gas
Monitoring Records**



Well	MW4S	Date	5/02/2026	Time	12:15pm	Sampled By	DPB
Barometric Pressure	959						
Relative Pressure	-0.02						
Flow (L/hr)	0.0						
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.0	0.4	19.7	0	1	0.17	
1	0.0	0.4	19.7	0	0	0.11	
2	0.0	0.4	19.7	0	0	0.11	
3	0.0	0.5	19.6	0	0	0.10	
4	0.0	0.5	19.6	0	0	0.09	
5	0.0	0.5	19.7	0	0	0.08	
6	0.0	0.5	19.7	0	0	0.06	
7	0.0	0.5	19.6	0	0	0.05	
8	0.0	0.5	19.6	0	0	0.05	
9	0.0	0.5	19.7	0	0	0.03	
10	0.0	0.5	19.7	0	0	0.02	
15	0.0	0.5	19.7	0	0	0.02	

Well	MW5S	Date	5/02/2026	Time	11:10am	Sampled By	DPB
Barometric Pressure	960						
Relative Pressure	-0.05						
Flow (L/hr)	0.0						
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.0	0.6	20.4	0	0	0.36	
1	0.0	0.5	20.7	0	0	0.29	
2	0.0	0.4	20.6	0	0	0.28	
3	0.0	0.4	20.2	0	0	0.27	
4	0.0	0.4	20.2	0	0	0.27	
5	0.0	0.4	20.1	0	0	0.26	
6	0.0	0.4	20.1	0	0	0.24	
7	0.0	0.4	20.1	0	0	0.24	
8	0.0	0.4	20	0	0	0.12	
9	0.0	0.4	20	0	0	0.06	
10	0.0	0.4	20	0	0	0.07	
15	0.0	0.4	20	0	0	0.09	

Well	MW6S	Date	5/02/2026	Time	11:40am	Sampled By	DPB
Barometric Pressure	960						
Relative Pressure	-0.04						
Flow (L/hr)	0.0						
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.0	3.4	17.1	0	0	0.05	
1	0.0	3.4	16.3	0	0	0.00	
2	0.0	13	6.9	0	0	0.01	
3	0.0	12.6	7.1	0	0	0.02	
4	0.0	13.1	6.8	0	0	0.02	
5	0.0	13.9	5.8	0	0	0.02	
6	0.0	13.3	6.4	0	0	0.03	
7	0.0	14.2	5.6	0	0	0.02	
8	0.0	14.1	5.8	0	0	0.02	
9	0.0	12	8.3	0	0	0.02	
10	0.0	12.6	7.1	0	0	0.02	
15	0.0	12.1	8	0	0	0.02	

**Yulara Landfill
Environmental Compliance
Monitoring - February 2026**

**February 2026 Landfill Gas
Monitoring Records**



Well	MW7S	Date	5/02/2026	Time	7:50am	Sampled By	DPB
Barometric Pressure	959						
Relative Pressure	-0.11						
Flow (L/hr)	0						
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.0	3.8	16.6	0	0	0.22	
1	0.0	3.5	17.6	0	0	0.09	
2	0.0	5.1	16.1	0	0	0.03	
3	0.0	6.4	14.9	0	0	0.01	
4	0.0	7.5	13.9	0	0	0.00	
5	0.0	8	13.3	0	0	0.00	
6	0.0	8.4	12.8	0	0	0.00	
7	0.0	9	12.3	0	0	0.00	
8	0.0	9	12.2	0	0	0.00	
9	0.0	9.1	12.1	0	0	0.03	
10	0.0	9.1	12.1	0	0	0.03	
15	0.0	9	12.0	0	0	0.02	

Well	MW8S	Date	5/02/2026	Time	2:05pm	Sampled By	DPB
Barometric Pressure	956						
Relative Pressure	-0.02						
Flow (L/hr)	0.0						
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.0	0.2	20.6	0	0	0.20	
1	0.0	0.2	20.6	0	0	0.15	
2	0.0	0.3	20.5	0	0	0.14	
3	0.0	0.3	20.6	0	0	0.13	
4	0.0	0.3	20.6	0	0	0.12	
5	0.0	0.3	20.6	0	0	0.12	
6	0.0	0.3	20.6	0	0	0.11	
7	0.0	0.3	20.6	0	0	0.10	
8	0.0	0.3	20.6	0	0	0.10	
9	0.0	0.3	20.6	0	0	0.09	
10	0.0	0.3	20.6	0	0	0.08	
15	0.0	0.3	20.6	0	0	0.07	

Well	MW9S	Date	5/02/2026	Time	9:10am	Sampled By	DPB
Barometric Pressure	960						
Relative Pressure	+0.02						
Flow (L/hr)	0.0						
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)	
0	0.0	0.6	20.4	0	0	0.10	
1	0.0	0.6	20.3	0	0	0.08	
2	0.0	0.6	20.4	0	0	0.07	
3	0.0	0.6	20.5	0	0	0.07	
4	0.0	0.6	20.5	0	0	0.06	
5	0.0	0.6	20.4	0	0	0.06	
6	0.0	0.7	20.4	0	0	0.05	
7	0.0	0.7	20.4	0	0	0.05	
8	0.0	0.7	20.4	0	0	0.06	
9	0.0	0.7	20.4	0	0	0.06	
10	0.0	0.7	20.4	0	0	0.06	
15	0.0	0.7	20.4	0	0	0.06	

**Yulara Landfill
Environmental Compliance
Monitoring - February 2026**

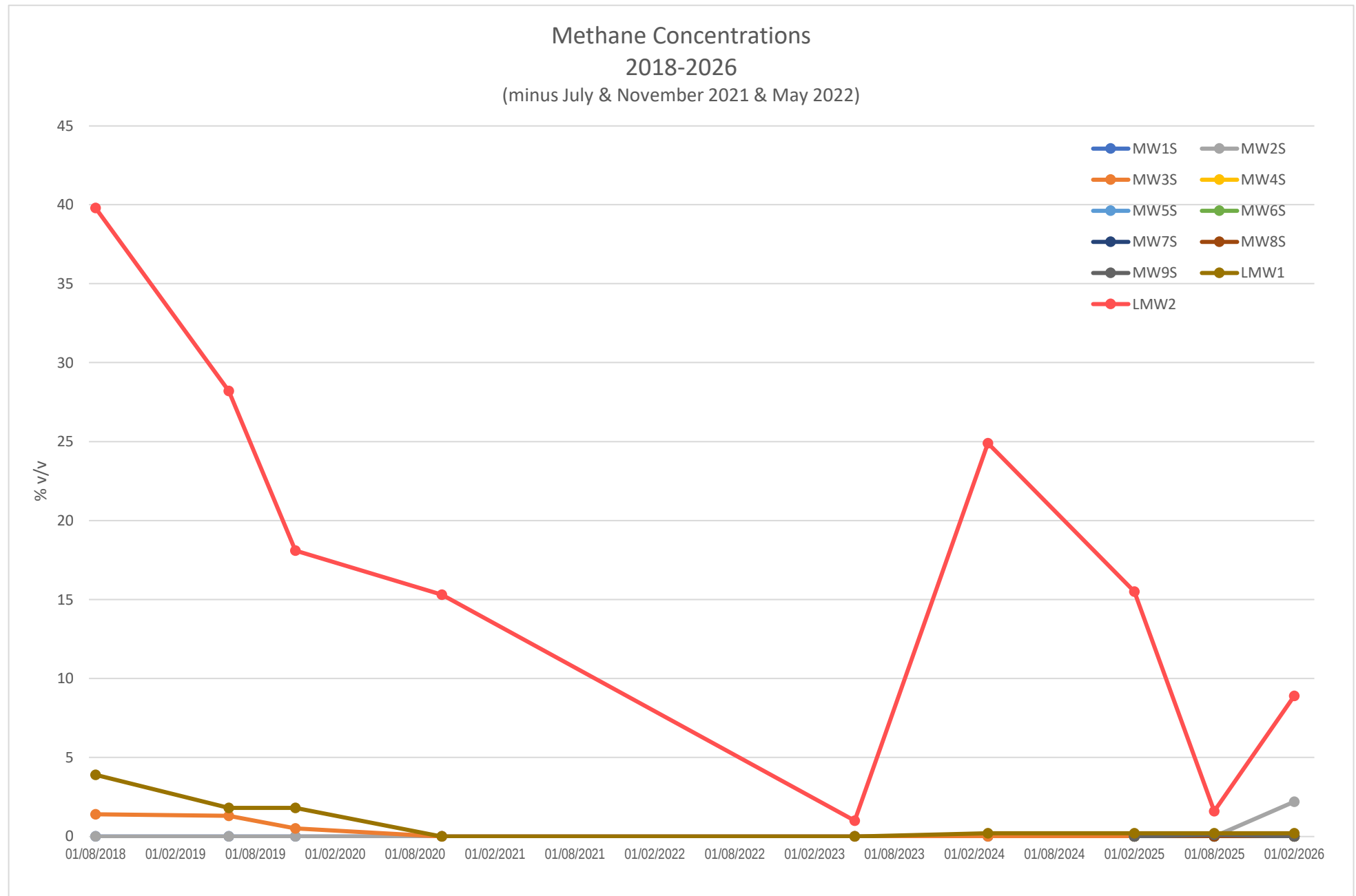
**February 2026 Landfill Gas
Monitoring Records**

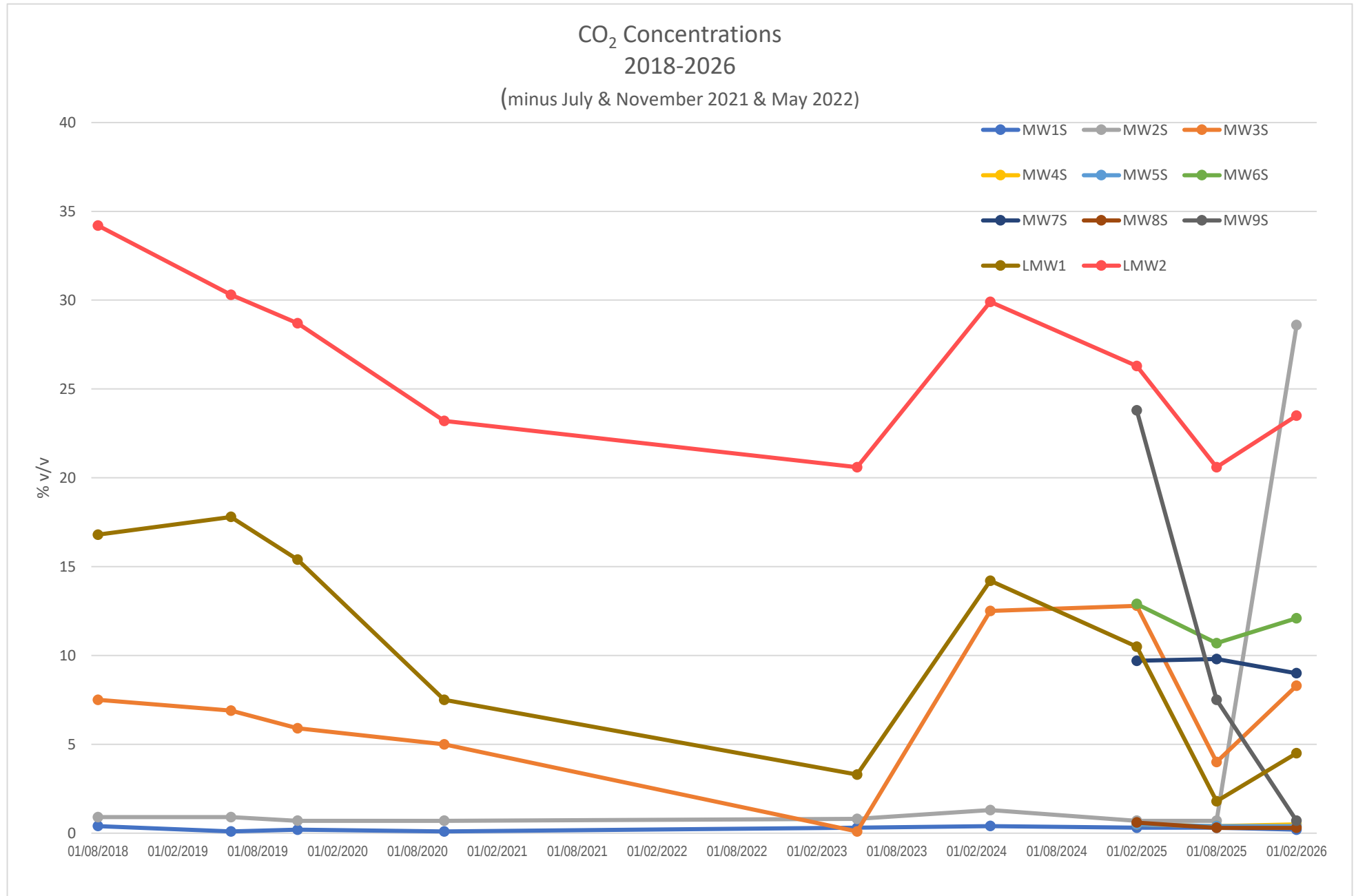


Well	LMW1	Date	5/02/2026	Time	7:00	Sampled By	DPB
Barometric Pressure	959						
Relative Pressure	0.0						
Flow (L/hr)	0.0						

Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)
0	0.0	5.6	17.5	0	0	0.18
1	0.0	5.7	16	0	0	0.23
2	0.0	5.6	16	0	0	0.23
3	0.0	5.5	16.1	0	0	0.22
4	0.0	5.4	16.1	0	0	0.22
5	0.0	5.1	16.3	0	0	0.22
6	0.0	5	16.4	0	0	0.22
7	0.0	4.8	16.5	0	0	0.22
8	0.1	4.8	16.5	0	0	0.22
9	0.1	4.6	16.6	0	0	0.24
10	0.1	4.5	16.7	0	0	0.24
15	0.2	4.5	16.7	0	0	0.24

Well	LMW2	Date	5/02/2026		Time	7:30am		Sampled By	DPB
Barometric Pressure		959							
Relative Pressure		+3.5mb							
Flow (L/hr)		0.00							
Time Pumping (minutes)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	PID (ppm)			
0	11.8	23.7	1.2	0	0	0.67			
1	11.8	24	0.2	0	0	0.64			
2	11.7	24.1	0.0	0	0	0.69			
3	11.7	24.1	0.0	0	1	0.57			
4	11.6	24.1	0.0	0	0	0.55			
5	11.2	24	0.0	0	1	0.58			
6	10.2	23.7	0.0	0	0	0.69			
7	9.5	23.6	0.0	0	1	0.74			
8	9.1	23.6	0.0	0	0	0.75			
9	9.0	23.5	0.0	0	0	0.76			
10	8.9	23.6	0.0	0	0	0.76			
15	8.9	23.5	0.0	0	0	0.75			





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APPENDIX C
GROUNDWATER GAUGING & PURGING RECORDS

Well No	Easting	Northing	Date	Well depth (m)	Depth to Water (m)	Well Elevation (mAHD)	Reduced Water Level (mAHD)	Metres of water in well (m)	Volume of water removed (L)
MW1D	695835.753	7208009.901	7/02/2026	36.1	21.432	506.93	485.50	14.67	46*
MW2D	696264.151	7207928.47	7/02/2026	33.2	23.280	505.808	482.53	9.92	80
MW3D	696246.824	7207761.992	7/02/2026	30.5	21.195	506.367	485.17	9.26	43*
MW4D	696073.339	7208113.551	7/02/2026	33.5	20.871	506.604	485.73	12.63	90
MW5D	696258.153	7208137.629	7/02/2026	35	19.359	505.682	486.32	15.64	72*

Purging of water from well continued until temperature, DO, conductivity, pH and redox parameters are stabilised

*well ran dry prior to stabilisation

Groundwater Purging Record Sheet



Client: Voyages Indigenous Tourism Australia Pty Ltd		Job no: ASY 24 050.05	Well No. MW1D
Project: Yulara Landfill Monitoring		Date: 7/02/2026	
Location: North West - New Area		Logged: DPB	
Depth to Groundwater: 21.432m		Comments: Pump 30cm off bottom	
Weather: Raining & 30°C			
Purging Method: Waterra Pump, Footvalve & Tubing			
Purging Equipment: Waterra Pump, Footvalve & Tubing			
Sampling Method: Waterra Pump, Footvalve & Tubing			
Start Time: 1:51pm			
Finish Time: 2:40pm			

[illegible]

Groundwater Purging Record Sheet



Client: Voyages Indigenous Tourism Australia Pty Ltd		Job no: ASY 24 050.05	Well No. MW2D-AXY
Project: Yulara Landfill Monitoring		Date: 7/02/2026	
Location: East Side Middle		Logged: DPB	
Depth to Groundwater: 23.280m		Comments: Pumo 50cm off bottom (had to go higher due to tape on tube wouldn't fit in clamp).	
Weather: Cloudy, 28°C			
Purging Method: Waterra Pump, Footvalve & Tubing			
Purging Equipment: Waterra Pump, Footvalve & Tubing			
Sampling Method: Waterra Pump, Footvalve & Tubing			
Start Time: 7:59am			
Finish Time: 9:25am			

[illegible]

Groundwater Purging Record Sheet



Client: Voyages Indigenous Tourism Australia Pty Ltd		Job no: ASY 24 050.05	Well No. MW3D
Project: Yulara Landfill Monitoring		Date: 7/02/2026	
Location: South east corner		Logged: DPB	
Depth to Groundwater: 21.195m		Comments: Pump 30cm off bottom, relatively fast.	
Weather: Overcast 25°C			
Purging Method: Waterra Pump, Footvalve & Tubing			
Purging Equipment: Waterra Pump, Footvalve & Tubing			
Sampling Method: Waterra Pump, Footvalve & Tubing			
Start Time: 6:54am			
Finish Time: 10:10am			

[illegible]

Groundwater Purging Record Sheet



Client: Voyages Indigenous Tourism Australia Pty Ltd		Job no: ASY 24 050.05	Well No. MW4D
Project: Yulara Landfill Monitoring		Date: 7/02/2026	
Location: Near main gate		Logged: DPB	
Depth to Groundwater: 20.871m		Comments: Pump 30cm off bottom, fast pump rate, good flow.	
Weather: Cloudy, 32°C			
Purging Method: Waterra Pump, Footvalve & Tubing			
Purging Equipment: Waterra Pump, Footvalve & Tubing			
Sampling Method: Waterra Pump, Footvalve & Tubing			
Start Time: 11:40am			
Finish Time: 12:50pm			

[illegible]

Groundwater Purging Record Sheet



Client: Voyages Indigenous Tourism Australia Pty Ltd		Job no: ASY 24 050.05	Well No. MW5D
Project: Yulara Landfill Monitoring		Date: 7/02/2026	
Location: North West - New Area		Logged: DPB	
Depth to Groundwater: 19.359m		Comments: Pump 30cm off bottom, fast pump speed, good flow	
Weather: Overcast, 30°C			
Purging Method: Waterra Pump, Footvalve & Tubing			
Purging Equipment: Waterra Pump, Footvalve & Tubing			
Sampling Method: Waterra Pump, Footvalve & Tubing			
Start Time: 10:19am			
Finish Time: 11:30am			

[illegible]

APPENDIX D
RESULT SUMMARY TABLE



	Inorganics																		Metals																	
	Alkalinity (Bicarbonate as CaCO3)	Carbonate as CaCO3	Alkalinity (total) as CaCO3	Ammonia as N	Chloride	COD	Dissolved Organic Carbon (Filtered)	Kjeldahl Nitrogen Total	Nitrate (as N)	Nitrite (as N)	Nitrate & Nitrite (as N)	Nitrogen (Organic)	Nitrogen (Total)	Phosphate (as P)	Phosphorus reactive (as P)	Sodium	Sulphate	TSS	Aluminium (Filtered)	Arsenic (Filtered)	Cadmium (Filtered)	Calcium	Chromium (III+VI) (Filtered)	Copper (Filtered)	Iron (Filtered)	Lead (Filtered)	Magnesium	Manganese (Filtered)	Mercury (Filtered)	Nickel (Filtered)	Potassium	Selenium (Filtered)	Zinc (Filtered)			
	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			
EQL	20	10	20	10	1	25	5	0.2	0.02	0.02	0.05	0.2	200	0.01	0.01	0.5	5	5	0.05	0.001	0.0002	0.5	0.001	0.001	0.05	0.001	0.001	0.5	0.005	0.0001	0.001	0.5	0.001	0.005		
ANZG (2018) Freshwater 95% Species Protection				900															0.055		0.0002			0.0014		0.0034		1.9	0.0006	0.011		0.011	0.008			

Location	Sample Date	210	<10	210	30	310	<25	45	4.5	61	<0.02	61	4.47	66,000	0.02	0.02	180	110	2,600	<0.05	0.002	<0.0002	100	<0.001	0.004	<0.05	<0.001	53	<0.005	<0.0001	<0.001	38	0.002	<0.005
MW1D	7/02/2026	400	<10	400	<10	140	30	38	2	18	<0.02	18	2	20,000	0.02	0.02	180	36	1,700	<0.05	0.001	<0.0002	46	<0.001	0.006	<0.05	<0.001	28	<0.005	<0.0001	0.002	29	<0.001	<0.005
MW2D	7/02/2026	180	<10	180	<10	280	32	23	3.5	53	<0.02	53	3.5	57,000	0.03	0.02	210	230	9.2	<0.05	<0.001	<0.0002	75	0.002	0.003	<0.05	<0.001	46	<0.005	<0.0001	0.001	28	0.004	0.007
MW3D	7/02/2026	320	<10	320	<10	100	<25	31	2.1	27	<0.02	27	2.1	29,000	0.02	0.01	180	82	1,000	<0.05	<0.001	<0.0002	30	<0.001	<0.001	<0.05	<0.001	17	<0.005	<0.0001	<0.001	26	0.004	<0.005
MW4D	7/02/2026	140	<10	140	30	510	28	18	3.7	63	<0.02	63	3.67	67,000	<0.01	0.01	280	420	1,500	<0.05	0.001	<0.0002	150	0.001	<0.001	<0.05	<0.001	92	<0.005	<0.0001	0.002	41	0.011	<0.005
MW5D	7/02/2026																																	

	Organochlorine Pesticides																								Pesticides					
	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordan	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Vic EPA IWRG 621 OCP (Total)*	Vic EPA IWRG 621 Other OCP (Total)*	Tokuthion	EPN	Parathion	Pirimiphos-methyl	
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	mg/L
EQL	0.2	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	0.005	0.002	0.002	0.002	2	2	2	0.02
ANZG (2018) Freshwater 95% Species Protection						0.08			0.01						0.02			0.2	0.09				0.0002					0.004		

Location	Sample Date	<0.2	<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	<0.005	<0.002	<0.002	<0.002	<2	<2	<0.02
MW1D	7/02/2026	<0.2	<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	<0.005	<0.002	<0.002	<0.002	<2	<2	<0.02
MW2D	7/02/2026	<0.2	<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	<0.005	<0.002	<0.002	<0.002	<2	<2	<0.02
MW3D	7/02/2026	<0.2	<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	<0.005	<0.002	<0.002	<0.002	<2	<2	<0.02
MW4D	7/02/2026	<0.2	<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	<0.005	<0.002	<0.002	<0.002	<2	<2	<0.02
MW5D	7/02/2026	<0.2	<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	<0.005	<0.002	<0.002	<0.002	<2	<2	<0.02

	Organophosphorous Pesticides																												BTEX								
	Azinophos methyl	Bolstar (Sulprofos)	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion	Fensulfothion	Fenthion	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Pyrazophos	Ronnel	Terbufos	Trichloronate	Tetrachlorvinphos	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	
EQL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
ANZG (2018) Freshwater 95% Species Protection	0.02			0.01					0.01		0.15				0.2			0.05												0.002		950				350	

Location	Sample Date	<2	<2	<20	<2	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.002	<2	<2	<2	<2	<20	<2	<2	<2	<2	<2	<0.002	<1	<1	<1	<2	<1	<3
MW1D	7/02/2026	<2	<2	<20	<2	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.002	<2	<2	<2	<2	<20	<2	<2	<2	<2	<2	<0.002	<1	<1	<1	<2	<1	<3
MW2D	7/02/2026	<2	<2	<20	<2	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.002	<2	<2	<2	<2	<20	<2	<2	<2	<2	<2	<0.002	<1	<1	<1	<2	<1	<3
MW3D	7/02/2026	<2	<2	<20	<2	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.002	<2	<2	<2	<2	<20	<2	<2	<2	<2	<2	<0.002	<1	<1	<1	<2	<1	<3
MW4D	7/02/2026	<2	<2	<20	<2	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.002	<2	<2	<2	<2	<20	<2	<2	<2	<2	<2	<0.002	<1	<1	2	<2	<1	<3
MW5D	7/02/2026	<2	<2	<20	<2	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.002	<2	<2	<2	<2	<20	<2	<2	<2	<2	<2	<0.002	<1	<1	<1	<2	<1	<3



	PAH																Phenols (non-Halogenated)										Phenols	Phenols (Halogenated)											
	Benzo[b+j]fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Pyrene	2,4-dimethylphenol	2,4-dinitrophenol	2-methylphenol	2-nitrophenol	3- & 4-methylphenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-nitrophenol	Dinoseb	Phenol	Phenols (Total Non Halogenated)	Cresol Total	2,4,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,6-dichlorophenol	2-chlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	tetrachlorophenols	Phenols (Total Halogenated)	
EQL	0.001	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	0.03	3	10	6	30	100	30	100	3	0.1	0.01	10	10	3	3	3	10	10	30	0.01	
ANZG (2018) Freshwater 95% Species Protection													16					0.045									320				20	160		490		10			

Location	Sample Date	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<0.03	<3	<10	<6	<30	<100	<30	<100	<3	<0.1	<0.01	<10	<10	<3	<3	<3	<10	<10	<30	<0.01
MW1D	7/02/2026	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<0.03	<3	<10	<6	<30	<100	<30	<100	<3	<0.1	<0.01	<10	<10	<3	<3	<3	<10	<10	<30	<0.01
MW2D	7/02/2026	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<0.03	<3	<10	<6	<30	<100	<30	<100	<3	<0.1	<0.01	<10	<10	<3	<3	<3	<10	<10	<30	<0.01
MW3D	7/02/2026	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<0.03	<3	<10	<6	<30	<100	<30	<100	<3	<0.1	<0.01	<10	<10	<3	<3	<3	<10	<10	<30	<0.01
MW4D	7/02/2026	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<0.03	<3	<10	<6	<30	<100	<30	<100	<3	<0.1	<0.01	<10	<10	<3	<3	<3	<10	<10	<30	<0.01
MW5D	7/02/2026	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<0.03	<3	<10	<6	<30	<100	<30	<100	<3	<0.1	<0.01	<10	<10	<3	<3	<3	<10	<10	<30	<0.01

	Polychlorinated Biphenyls								TRH											
	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	C6-C10	C6-C10 less BTEX (F1)	C10-C16	C10-C16 less NAPHTHALENE (F2)	C16-C34	C34-C40	C10 - C40 (Sum of total)	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)
EQL	5	5	5	5	5	5	5	5	0.02	0.02	0.05	0.05	0.1	0.1	0.1	20	50	0.1	100	0.1
ANZG (2018) Freshwater 95% Species Protection				0.6		0.03														

Location	Sample Date	<5	<5	<5	<5	<5	<5	<5	<0.02	<0.02	<0.05	<0.05	<0.1	<0.1	<0.1	<20	<50	<0.1	<100	<0.1
MW1D	7/02/2026	<5	<5	<5	<5	<5	<5	<5	<0.02	<0.02	<0.05	<0.05	<0.1	<0.1	<0.1	<20	<50	<0.1	<100	<0.1
MW2D	7/02/2026	<5	<5	<5	<5	<5	<5	<5	<0.02	<0.02	<0.05	<0.05	<0.1	<0.1	<0.1	<20	<50	<0.1	<100	<0.1
MW3D	7/02/2026	<5	<5	<5	<5	<5	<5	<5	<0.02	<0.02	<0.05	<0.05	<0.1	<0.1	<0.1	<20	<50	<0.1	<100	<0.1
MW4D	7/02/2026	<5	<5	<5	<5	<5	<5	<5	<0.02	<0.02	<0.05	<0.05	<0.1	<0.1	<0.1	<20	<50	<0.1	<100	<0.1
MW5D	7/02/2026	<5	<5	<5	<5	<5	<5	<5	<0.02	<0.02	<0.05	<0.05	<0.1	<0.1	<0.1	<20	<50	<0.1	<100	<0.1

Consulting Engineers and Scientists



APPENDIX E
QA/QC ASSESSMENT

E.1 Field QA/QC Procedures

Field methodology

The field methodology described in Section 2 is considered appropriate and applicable to site conditions encountered during field works and groundwater characteristics reported by the laboratories.

Sample preservation

The primary laboratory supplied clean bottles for groundwater samples. The bottles were labelled prior to field work based on a predetermined sampling program. On site the bottles were filled with water and stored in an esky with ice. At the end of the day samples were stored in a refrigerator if not sent to the laboratories. During transportation to the laboratories the samples were packed in eskies with ice and packaging to avoid damage.

Field Equipment Calibration

Kennards Hire provided a GA 5000 landfill gas analyser and YSI Pro Quatro multifunction water quality meter for use on 5 and 7 February 2026 respectively. Kennards calibrated the equipment prior to delivery. Copies of the calibration certificates are provided in Appendix F.

E.2 Data Quality Indicators

E.2.1 Completeness

Completeness is expressed as a percentage of usable data from a data collection activity. The following factors were considered and assessed:

Field and laboratory considerations	Achieved
All critical locations sampled	Yes
All samples collected (e.g. all available wells)	Groundwater – Yes Gas – Yes Leachate - No
Standard operating practices (SOPs) listed in Section 2 appropriate and complied with	Yes
Experienced field personnel utilised	Yes
Field documentation appropriate and complete	Yes
All critical samples analysed	Yes
All critical analytes analysed	Yes
Appropriate methods and practical quantitation limits (PQL)	Generally, refer to Section E.2.2
Sample documentation complete	Yes
Sample holding times complied with	Generally yes, see below

A review of reports provided by Eurofins indicated that sample holding times as specified by the laboratory were adhered to with the following exception:

- Nitrite and reactive phosphorus exceeded their respective maximum stipulated laboratory holding time of 2 days due to transport time restrictions from Yulara to the laboratory (consistent with previous rounds of investigation at Yulara).

Delayed analysis would not have significantly altered the nitrite and reactive phosphate results and hence the delayed analysis is considered acceptable.

Completeness is influenced by field performance issues (e.g. access, site restrictions, damage to sampling infrastructure) and laboratory performance issues (e.g. matrix interference, holding times). A percentage

completeness of 95% is considered acceptable. The above assessment indicates that the achieved percentage completeness is over 95%.

E.2.2 Comparability

Comparability is expressed qualitatively to indicate that data may be considered to be equivalent for each sampling and analytical event.

Field and laboratory considerations	Results
Same SOPs used on each occasion	Standard operating practices as listed in Section 2
Same sampling procedures	Yes, refer Section 2
Experienced sampler	Environmental scientist with 29 years experience
Climatic conditions (temperature, rainfall, wind)	No climatic influences
Same types of samples collected	Yes, specific laboratory prepared water bottles
Same analytical methods used (including clean-up)	Yes
Sample PQLs	Standard, see below
Same laboratories	Yes
Same units	Yes

Laboratory PQLs were above selected criteria for chlordane, DDT, endrin, lindane, heptachlor, toxaphene, azinphos-methyl, chlorpyrifos, diazinon, dimethoate, fenitrothion, malathion, parathion, arochlor 1242 and arochlor 1254.

E.2.3 Representativeness

Representativeness is expressed qualitatively to indicate that data is representative of each medium present on the site.

Field and laboratory considerations	Achieved
Appropriate media sampled according to field observations	Yes
All media identified during field work sampled	Yes
All samples analysed according to field observations	Yes
Samples were reasonably homogeneous	Yes

The above assessment indicates that data is representative of each medium encountered on the site.

E.2.4 Precision

Precision is a quantitative measure of the variability of data.

Field and laboratory considerations	Achieved
Standard operating procedure appropriate and complied with	Yes
Analysis of intra and inter laboratory duplicates	Yes
Analysis of laboratory duplicates	Yes, refer to Section 2.4

Duplicate samples were collected to provide an indication of the reliability of the sampling and analysis process. Duplicate groundwater samples were analysed for the majority of parameters. Duplicate sample results are presented in the quality assessment data provided at the end of Appendix E.

Relative Percentage Differences (RPDs) for intra-laboratory (or field) and inter-laboratory duplicate samples were calculated and are presented at the end of Appendix E.

Elevated RPDs were obtained for nitrate, organic nitrogen and total suspended solids. Concentrations in mg/L are shown below for each sample.

	Primary (A)	Intra-lab (X)	Inter-lab (Y)
Nitrate	18	17	<0.005
Total Nitrogen	20	19	5.5
Total Suspended Solids	1,700	2,300	3,400

TSS results are all of the same order of magnitude and relatively close to one another, consistent with normal variation, the results are considered acceptable.

The differences between the primary and secondary lab results for nitrate and total nitrogen reflect the analytical methods and sample matrix interactions rather than chemical transformation. The primary lab used a discrete analyser (DA) method whereas the secondary lab used a colorimetric method. The sample was noted to be cream coloured and cloudy indicating the presence of colloidal and organic matrix components. The DA method is more sensitive to these components which can result in higher apparent nitrate concentrations compared to the colorimetric method. Therefore as the primary lab results are more conservative and internally consistent (total nitrogen = nitrate + TKN + ammonia) they are considered acceptable for use.

All other calculated RPDs were within the acceptable limits of 0% to 50% for concentrations 10 to 30 times the limits of reporting and 0% to 30% for concentrations 30 times greater than the limits of reporting.

The above assessment indicates that observed data variability (or reproducibility) is acceptable.

E.2.5 Accuracy

Accuracy is a quantitative measure of the closeness of reported data to the true value. Bias could be introduced by chemicals during collection/handling or transport, from contaminated equipment, from contaminated reagent, during laboratory analysis, during laboratory preparation or by the analytical method.

Field and laboratory considerations	Achieved
Standard operating procedure appropriate and complied with	Yes
Analysis of rinsates, field blanks and trip blanks	Yes, rinsate sample only
Analysis of laboratory method blanks, control samples, spike samples and duplicates	Yes, refer below
Analysis of laboratory prepared volatile trip spikes	No

A rinsate and field blank sample were collected on 7 February 2026. The rinsate sample was collected by pouring distilled water through a piece of new tubing. Rinsate results were below the limits of detection for all analytes and as such the field blank sample was not analysed. Results for the rinsate sample are presented at the end of this appendix.

During the analysis of samples, Eurofins conducted internal QA/QC procedures including the analysis of laboratory method blanks, control samples, spike samples and duplicates. Results of these QA/QC procedures complied with the laboratory's acceptance criteria as presented in its reports. Laboratory reports for method blanks, control samples, spike samples and duplicates are provided in Appendix H.

E.3 Field QA/QC

The following information on field QA/QC is provided.

Issue	Achieved
Replicate samples are split in the field and submitted to two separate laboratories in accordance with the requirements of NEPM Schedule B3	Yes, refer to Section 2.4
The sampling program includes assessment of all relevant environmental media, i.e. groundwater	Yes
Sample collection, handling and transportation procedures are documented and appropriate	Yes, refer to Section 2
Sampling is representative of site conditions, based on the selection of appropriate numbers of sampling points	Yes, refer to Section 2
Experienced field team members	Yes, refer to Section 2
Sampling methods	Yes, refer to Section 2
Evidence of appropriate decontamination procedures carried out between sampling events	Yes, refer to Section 2
Completed purging records for each well, showing time, location, initials of sampler, duplicate locations, duplicate type, site observations and weather conditions	Yes, refer to Appendix C
Completed chain-of-custody documentation	Yes, refer to Appendix H
A statement of duplicate frequency for intra-laboratory and inter-laboratory duplicate samples, appropriate splitting techniques and duplicate sample results	Yes, refer to Section E.2.4
Field blank results, background sample results, rinsate sample results, laboratory-prepared trip spike results for volatile analytes and trip blank results	Yes rinsate and field blank only. Background, trip blank and trip spike samples were not used.

E.4 Laboratory QA/QC

The following information on laboratory QA/QC is provided.

Issue	Achieved
Appropriate methodologies for each potential contaminant in the matrix in laboratories accredited for those analyses by NATA	Yes, refer to Section 2.6
Appropriate practical quantitation limits (PQLs) for the chemicals of concern for use in the assessment of risk	Yes, refer to Section E.2.2
COCs, comparison of holding times, analytical methods, laboratory accreditation, laboratory performance	Yes, refer to Section 2.1
Results of blind duplicate samples (intra laboratory duplicates)	Yes, refer Section E.2.4

E.5 QA/QC Discussion

Quality assurance and quality control was conducted based upon Tierra Environment's environmental investigation principles to ensure that data of known quality is reported. The required scope of sample numbers, analytical testing and quality testing was achieved. Specific aspects of the investigation used to achieve appropriate QA/QC results are summarised below:

Field Procedures	The investigations, including the collection of duplicates, are of a standard that provides confidence in the quality of the samples collected. Field procedures were undertaken in accordance with NEPM requirements and EPA guidelines.
Analytical Procedures	The laboratories used for analytical work are NATA registered for the analyses undertaken. The laboratories' internal QA/QC results indicate that analytical information provided by the laboratories is reliable.
Sample Tracking	Chain of Custody documentation was used for the transport of all samples to the laboratories.
Sample Preservation and Storage	Samples were placed in containers supplied by the laboratories and placed in chilled eskies for transport to the laboratories.
Sample Holding Times	The required holding times were generally adhered to. The exceptions in Section E.2.1 are considered acceptable.
Data Transcription	Summary tables were generated from laboratory supplied CSV files using ESDAT software.
Laboratory Limits of Reporting	Results below the laboratory's limits of reporting were also generally below acceptance criteria. The exceptions listed in Section E.2.2 are recognised.
Field Equipment Calibration	The field equipment used was appropriately calibrated.
Intra Laboratory Duplicate Sample	The primary laboratory's processes by which its results are obtained are generally considered to be acceptable in terms of the precision/repeatability of those results.
Inter Laboratory Duplicate Sample	The primary laboratory's processes by which its results are obtained are considered to be acceptable in terms of their accuracy of those results (i.e. in terms of how close the results are to their 'true' value).
Rinsate and Field Blank Samples	The results for rinsate indicate that the equipment used for the collection of samples did not impact upon results.
Laboratory Internal Quality Control	Results obtained from laboratory internal quality control samples were within the acceptable limits of repeatability, chemical extraction and detection. Details of laboratory quality control measures are provided on laboratory certificates.

Based on the QA/QC information listed in this report, the results are considered to be of an appropriate standard and it is concluded that:

- field investigation and sample preservation methods are appropriate for the investigations reported
- the analytical methods used for site assessment are of appropriate precision and accuracy, and that the sensitivity and selectivity of the analytical methods are appropriate for the assessment of risks
- the precision and accuracy criteria set out in the QA/QC plan, for a given method and matrix, meet the performance expected of the reference method
- the quality of data supplied by the analytical laboratory meets the objectives of the testing laboratory's quality plan for blanks, spikes, control samples, laboratory duplicates and holding times



SDG		T2158	T2158	RPD	T2158	Interlab_D		
Field_ID		MW2D-A	MW2D-X		MW2D-A	MW2D-Y	RPD	
Sampled_Date		7/02/2026	7/02/2026		7/02/2026	7/02/2026		
Method_Type	ChemName	Units	EQL					
Heavy Metal	Aluminium (Filtered)	mg/l	0.05 (Primary): 0.01 (Interlab)	<0.05	<0.05	0	<0.05	<0.01
	Arsenic (Filtered)	mg/l	0.001	0.001	<0.001	0	0.001	<0.001
	Cadmium (Filtered)	mg/l	0.0002 (Primary): 0.0001 (Interlab)	<0.0002	0.0002	0	<0.0002	0.0002
	Calcium	mg/l	0.5	46.0	50.0	8	46.0	
	Chromium (III+VI) (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001
	Copper (Filtered)	mg/l	0.001	0.006	0.002	100	0.006	<0.001
	Iron (Filtered)	mg/l	0.05 (Primary): 0.01 (Interlab)	<0.05	<0.05	0	<0.05	<0.01
	Lead (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001
	Magnesium	mg/l	0.5	28.0	29.0	4	28.0	
	Manganese (Filtered)	mg/l	0.005 (Primary): 0.001 (Interlab)	<0.005	<0.005	0	<0.005	0.0023
	Mercury (Filtered)	mg/l	0.0001 (Primary): 0.00005 (Interlab)	<0.0001	<0.0001	0	<0.0001	<0.0001
	Nickel (Filtered)	mg/l	0.001	0.002	0.001	67	0.002	0.0019
	Potassium	mg/l	0.5	29.0	29.0	0	29.0	
	Selenium (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001
	Sodium	mg/l	0.5	180.0	180.0	0	180.0	
	Zinc (Filtered)	mg/l	0.005 (Primary): 0.001 (Interlab)	<0.005	<0.005	0	<0.005	<0.001
Inorganic	Alkalinity (Bicarbonate as CaCO3)	mg/l	20 (Primary): 5 (Interlab)	400.0	400.0	0	400.0	410.0
	Alkalinity (total) as CaCO3	mg/l	20 (Primary): 5 (Interlab)	400.0	400.0	0	400.0	410.0
	Ammonia as N	µg/l	10 (Primary): 5 (Interlab)	<10.0	20.0	67	<10.0	13.0
	Carbonate as CaCO3	mg/l	10 (Primary): 5 (Interlab)	<10.0	<10.0	0	<10.0	<5.0
	Chloride	mg/l	1	140.0	140.0	0	140.0	110.0
	COD	mg/l	25 (Primary): 50 (Interlab)	30.0	<25.0	18	30.0	52.0
	Dissolved Organic Carbon (Filtered)	mg/l	5 (Primary): 1 (Interlab)	38.0	49.0	25	38.0	1.3
	Kjeldahl Nitrogen Total	mg/l	0.2 (Primary): 0.1 (Interlab)	2.0	2.3	14	2.0	0.22
	Nitrate & Nitrite (as N)	mg/l	0.05	18.0	17.0	6	18.0	
	Nitrate (as N)	mg/l	0.02 (Primary): 0.005 (Interlab)	18.0	17.0	6	18.0	<0.005
	Nitrite (as N)	mg/l	0.02 (Primary): 0.005 (Interlab)	<0.02	<0.02	0	<0.02	0.0096
	Nitrogen (Organic)	mg/l	0.2 (Primary): 0.1 (Interlab)	2.0	2.28	13	2.0	0.21
	Nitrogen (Total)	mg/l	0.2 (Primary): 0.1 (Interlab)	20	19	5	20	5.5
	Phosphate (as P)	mg/l	0.01	0.02	0.02	0	0.02	
	Sulphate	mg/l	5 (Primary): 1 (Interlab)	36.0	33.0	9	36.0	43.0
	TSS	mg/l	5	1700.0	2300.0	30	1700.0	3400.0
	Phosphorus reactive (as P)	mg/l	0.01 (Primary): 0.005 (Interlab)	0.02	0.02	0	0.02	0.0058
OCP	Vic EPA IWRG 621 OCP (Total)*	mg/l	0.002	<0.002	<0.002	0	<0.002	
	Vic EPA IWRG 621 Other OCP (Total)*	mg/l	0.002	<0.002	<0.002	0	<0.002	
	4,4-DDE	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	a-BHC	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Aldrin	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Aldrin + Dieldrin	µg/l	0.2	<0.2	<0.2	0	<0.2	
	b-BHC	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	chlordane	µg/l	2	<2.0	<2.0	0	<2.0	
	d-BHC	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	DDD	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	DDT	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	DDT+DDE+DDD	µg/l	0.2	<0.2	<0.2	0	<0.2	
	Dieldrin	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Endosulfan I	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Endosulfan II	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Endosulfan sulphate	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Endrin	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Endrin aldehyde	µg/l	0.2	0.4	<0.2	67	0.4	<0.2
	Endrin ketone	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	g-BHC (Lindane)	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Heptachlor	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Heptachlor epoxide	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Hexachlorobenzene	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Methoxychlor	µg/l	0.2	<0.2	<0.2	0	<0.2	<0.2
	Toxaphene	mg/l	0.005	<0.005	<0.005	0	<0.005	
OPP	Tokuthion	mg/l	0.002	<0.002	<0.002	0	<0.002	
	Azinophos methyl	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Bolstar (Sulprofos)	µg/l	2	<2.0	<2.0	0	<2.0	
	Chlorfenvinphos	µg/l	20	<20.0	<20.0	0	<20.0	
	Chlorpyrifos	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Chlorpyrifos-methyl	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Coumaphos	µg/l	20 (Primary): 0.2 (Interlab)	<20.0	<20.0	0	<20.0	<0.2
	Demeton-O	µg/l	2	<2.0	<2.0	0	<2.0	
	Demeton-S	µg/l	2	<2.0	<2.0	0	<2.0	
	Diazinon	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Dichlorvos	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Dimethoate	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Disulfoton	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	EPN	µg/l	2	<2.0	<2.0	0	<2.0	
	Ethion	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Ethoprop	µg/l	2	<2.0	<2.0	0	<2.0	
	Fenitrothion	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Fensulfothion	µg/l	2	<2.0	<2.0	0	<2.0	
	Fenthion	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Malathion	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Merphos	mg/l	0.002	<0.002	<0.002	0	<0.002	
	Methyl parathion	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Mevinphos (Phosdrin)	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Monocrotophos	µg/l	2	<2.0	<2.0	0	<2.0	
	Naled (Dibrom)	µg/l	2	<2.0	<2.0	0	<2.0	
	Omethoate	µg/l	20	<20.0	<20.0	0	<20.0	
	Parathion	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Phorate	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Pirimiphos-methyl	mg/l	0.02	<0.02	<0.02	0	<0.02	
	Pyrazophos	µg/l	2	<2.0	<2.0	0	<2.0	
	Ronnel	µg/l	2 (Primary): 0.2 (Interlab)	<2.0	<2.0	0	<2.0	<0.2
	Terbufos	µg/l	2	<2.0	<2.0	0	<2.0	
	Trichloronate	µg/l	2	<2.0	<2.0	0	<2.0	
	Tetrachlorvinphos	mg/l	0.002	<0.002	<0.002	0	<0.002	
Organic	C10-C16	mg/l	0.05	<0.05	<0.05	0	<0.05	<0.05
	C10-C16 less NAPHTHALENE (F2)	mg/l	0.05	<0.05	<0.05	0	<0.05	<0.05
	C16-C34	mg/l	0.1	<0.1	<0.1	0	<0.1	<0.1
	C34-C40	mg/l	0.1	<0.1	<0.1	0	<0.1	<0.1
	Naphthalene	µg/l	10 (Primary): 1 (Interlab)	<10.0	<10.0	0	<10.0	<0.1
	C6 - C9	µg/l	20 (Primary): 10 (Interlab)	<20.0	<20.0	0	<20.0	<10.0
	C10 - C40 (Sum of total)	mg/l	0.1 (Primary): 0.05 (Interlab)	<0.1	<0.1	0	<0.1	<0.05
	C6-C10 less BTEX (F1)	mg/l	0.02 (Primary): 0.01 (Interlab)	<0.02	<0.02	0	<0.02	<0.01
PAH	C6-C10	mg/l	0.02 (Primary): 0.01 (Interlab)	<0.02	<0.02	0	<0.02	<0.01
	Benzo[b+]fluoranthene	mg/l	0.001	<0.001	<0.001	0	<0.001	
	Acenaphthene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1
	Acenaphthylene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1
	Anthracene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1
	Benz(a)anthracene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1
	Benzo(a) pyrene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1
	Benzo(g,h,i)perylene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1
	Benzo(k)fluoranthene	µg/l	1	<1.0	<1.0	0	<1.0	



			SDG	T2158		T2158	T2158		Interlab_D
			Field_ID	MW2D-A	MW2D-X	RPD	MW2D-A	MW2D-Y	RPD
			Sampled_Date	7/02/2026	7/02/2026		7/02/2026	7/02/2026	
Method_Type	ChemName	Units	EQL						
	Chrysene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
	Dibenz(a,h)anthracene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
	Fluoranthene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
	Fluorene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
	Indeno(1,2,3-c,d)pyrene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
	Naphthalene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
	PAHs (Sum of total)	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
	Phenanthrene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
	Pyrene	µg/l	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	<1.0	<0.1	0
PCB	Arochlor 1016	µg/l	5 (Primary): 2 (Interlab)	<5.0	<5.0	0	<5.0	<2.0	0
	Arochlor 1221	µg/l	5 (Primary): 2 (Interlab)	<5.0	<5.0	0	<5.0	<2.0	0
	Arochlor 1232	µg/l	5 (Primary): 2 (Interlab)	<5.0	<5.0	0	<5.0	<2.0	0
	Arochlor 1242	µg/l	5 (Primary): 2 (Interlab)	<5.0	<5.0	0	<5.0	<2.0	0
	Arochlor 1248	µg/l	5 (Primary): 2 (Interlab)	<5.0	<5.0	0	<5.0	<2.0	0
	Arochlor 1254	µg/l	5 (Primary): 2 (Interlab)	<5.0	<5.0	0	<5.0	<2.0	0
	Arochlor 1260	µg/l	5 (Primary): 2 (Interlab)	<5.0	<5.0	0	<5.0	<2.0	0
	PCBs (Sum of total)	µg/l	5 (Primary): 2 (Interlab)	<5.0	<5.0	0	<5.0	<2.0	0
SVOC	2,4,5-trichlorophenol	µg/l	10 (Primary): 1 (Interlab)	<10.0	<10.0	0	<10.0	<1.0	0
	2,4,6-trichlorophenol	µg/l	10 (Primary): 1 (Interlab)	<10.0	<10.0	0	<10.0	<1.0	0
	2,4-dichlorophenol	µg/l	3 (Primary): 1 (Interlab)	<3.0	<3.0	0	<3.0	<1.0	0
	2,4-dimethylphenol	µg/l	3 (Primary): 1 (Interlab)	<3.0	<3.0	0	<3.0	<1.0	0
	2,4-dinitrophenol	mg/l	0.03 (Primary): 0.02 (Interlab)	<0.03	<0.03	0	<0.03	<0.02	0
	2,6-dichlorophenol	µg/l	3 (Primary): 1 (Interlab)	<3.0	<3.0	0	<3.0	<1.0	0
	2-chlorophenol	µg/l	3 (Primary): 1 (Interlab)	<3.0	<3.0	0	<3.0	<1.0	0
	2-methylphenol	µg/l	3 (Primary): 1 (Interlab)	<3.0	<3.0	0	<3.0	<1.0	0
	2-nitrophenol	µg/l	10 (Primary): 1 (Interlab)	<10.0	<10.0	0	<10.0	<1.0	0
	3-&4-methylphenol	µg/l	6	<6.0	<6.0	0	<6.0		
	4,6-Dinitro-2-methylphenol	µg/l	30 (Primary): 20 (Interlab)	<30.0	<30.0	0	<30.0	<20.0	0
	4,6-Dinitro-o-cyclohexyl phenol	µg/l	100 (Primary): 20 (Interlab)	<100.0	<100.0	0	<100.0	<20.0	0
	4-chloro-3-methylphenol	µg/l	10 (Primary): 5 (Interlab)	<10.0	<10.0	0	<10.0	<5.0	0
	4-nitrophenol	µg/l	30 (Primary): 20 (Interlab)	<30.0	<30.0	0	<30.0	<20.0	0
	Cresol Total	mg/l	0.01	<0.01	<0.01	0	<0.01		
	Dinoseb	µg/l	100 (Primary): 20 (Interlab)	<100.0	<100.0	0	<100.0	<20.0	0
	Pentachlorophenol	µg/l	10 (Primary): 5 (Interlab)	<10.0	<10.0	0	<10.0	<5.0	0
	Phenol	µg/l	3 (Primary): 1 (Interlab)	<3.0	<3.0	0	<3.0	<1.0	0
	tetrachlorophenols	µg/l	30	<30.0	<30.0	0	<30.0		
	Phenols (Total Halogenated)	mg/l	0.01	<0.01	<0.01	0	<0.01		
	Phenols (Total Non Halogenated)	mg/l	0.1	<0.1	<0.1	0	<0.1		
TPH	C10 - C14	µg/l	50	<50.0	<50.0	0	<50.0	<50.0	0
	C15 - C28	mg/l	0.1	<0.1	<0.1	0	<0.1	<0.1	0
	C29-C36	µg/l	100	<100.0	<100.0	0	<100.0	<100.0	0
	+C10 - C36 (Sum of total)	mg/l	0.1 (Primary): 0.05 (Interlab)	<0.1	<0.1	0	<0.1	<0.05	0
Volatile	Benzene	µg/l	1	<1.0	<1.0	0	<1.0	<1.0	0
	Ethylbenzene	µg/l	1	<1.0	<1.0	0	<1.0	<1.0	0
	Toluene	µg/l	1	<1.0	<1.0	0	<1.0	<1.0	0
	Xylene (m & p)	µg/l	2	<2.0	<2.0	0	<2.0	<2.0	0
	Xylene (o)	µg/l	1	<1.0	<1.0	0	<1.0	<1.0	0
	Xylene Total	µg/l	3 (Primary): 1 (Interlab)	<3.0	<3.0	0	<3.0	<1.0	0

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 50 (10-30 x EQL); 30 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

SDG	T2158
Field_ID	20260207R1
Sampled_Date	7/02/2026
Sample_Type	Rinsate

Method_Type	ChemName	Units	EQL	
Heavy Metal				
	Arsenic (Filtered)	mg/l	0.001	<0.001
	Cadmium (Filtered)	mg/l	0.0002	<0.0002
	Chromium (III+VI) (Filtered)	mg/l	0.001	<0.001
	Copper (Filtered)	mg/l	0.001	<0.001
	Lead (Filtered)	mg/l	0.001	<0.001
	Mercury (Filtered)	mg/l	0.0001	<0.0001
	Nickel (Filtered)	mg/l	0.001	<0.001
	Zinc (Filtered)	mg/l	0.005	<0.005
TPH				
	C6 - C9	µg/l	20	<20
	C10 - C40 (Sum of total)	mg/l	0.1	<0.1
	C6-C10 less BTEX (F1)	mg/l	0.02	<0.02
	C6-C10	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 - C14	µg/l	50	<50
	C15 - C28	mg/l	0.1	<0.1
	C29-C36	µg/l	100	<100
	+C10 - C36 (Sum of total)	mg/l	0.1	<0.1
BTEXN				
	Naphthalene	µg/l	1	<10
	Benzene	µg/l	1	<1
	Ethylbenzene	µg/l	1	<1
	Toluene	µg/l	1	<1
	Xylene (m & p)	µg/l	2	<2
	Xylene (o)	µg/l	1	<1
	Xylene Total	µg/l	3	<3

Consulting Engineers and Scientists



APPENDIX F
CALIBRATION CERTIFICATE

Liema

KENNARDS
HIRE

EQUIPMENT CERTIFICATION REPORT

PGN9003823 GAS ANALYSER – LANDFILL

GA5000 / GEM5000

Plant Number: 234894

Serial Number: 4500158

SENSOR	CONCENTRATION	INSTRUMENT READING	TRACEABILITY	PASS
O2/Zero	Fresh air	20.9%	N/A	☒
CH4	60%	<u>60.0</u> %	Lot # <u>302-4633</u> <u>15380-8</u>	☒
CO2	40%	<u>40.0</u> %	Lot # <u>"</u>	☐
O2	15%	<u>15.0</u> %	Lot # <u>MSA300972</u>	☐
CO	60ppm	<u>60</u> ppm	Lot # <u>"</u>	☐
H2S	20ppm	<u>20</u> ppm	Lot # <u>"</u>	☐

exp 04/30

exp 09/26

Data Cleared ☒

Battery Status <u>charged</u> (%)	Temperature <u>26.0</u> °C
Electrical Test & Tag (AS/NZS 3760)	Inlet Filter Cleaned/Replaced

Note: Calibration traceability information is available upon request.

Checked By: EL Date: 29/01/26 Signed: [Signature]

Accessories List:

User's Manual & USB	1x Gas Inlet Hoses	1X Gas Inlet Hose With Filter
1x Gas Inlet Hose & Clip Fitting	2x Spare Inlet Filters	1x Flow Through Desiccant
1x Wall Charger	Carry Pouch With Neck Strap	1x USB Comms Cable
Carry Transit Case	Calibration Certificate	



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EQUIPMENT CERTIFICATION REPORT

PGN9003871 WATER QUALITY METER-MULTIFUNCTION (YSI PRO PLUS)

Plant Number: 677346

Serial Number: 2E103534

SENSOR	CALIBRATION DETAILS	SPAN 1	SPAN 2	TRACEABILITY	PASS
pH	pH 7.00 / pH 4.00	7.00 pH -19 mV pH ✓	4.00 pH 156 mV pH ✓	pH 7: 431257 pH 4: 425919	☒
Conductivity	12.88 mS/cm @ 25°C	12.88 mS/cm @ 26 °C	-	399853	☒
Dissolved Oxygen	Sodium Sulphite / Air	0% in Sodium Sulphite Solution	100% in Air	12389	☒
ORP	240 mV @ 25°C	240 mV @ 26 °C		pH A: 404206 pH B: 428646	☒

Battery Status <u>97</u> %	Spare Batt Included ☒	Cal. Fluid Temperature <u>26.0</u> °C
Electrodes Cleaned and Checked ☒	<u>Data Checked</u>	

Note: Calibration solution traceability information is available upon request.

Checked By: EL

Date: 29 / 1 / 26

Signed: [Signature]

Accessories List:

User's Manual	pH Sensor	Conductivity/ Temp Sensor
Dissolved Oxygen Sensor	Redox (ORP) Sensor	Flow Cell
User Guide	Stainless Steel Restrictor	Spare Batteries
Calibration Cup		



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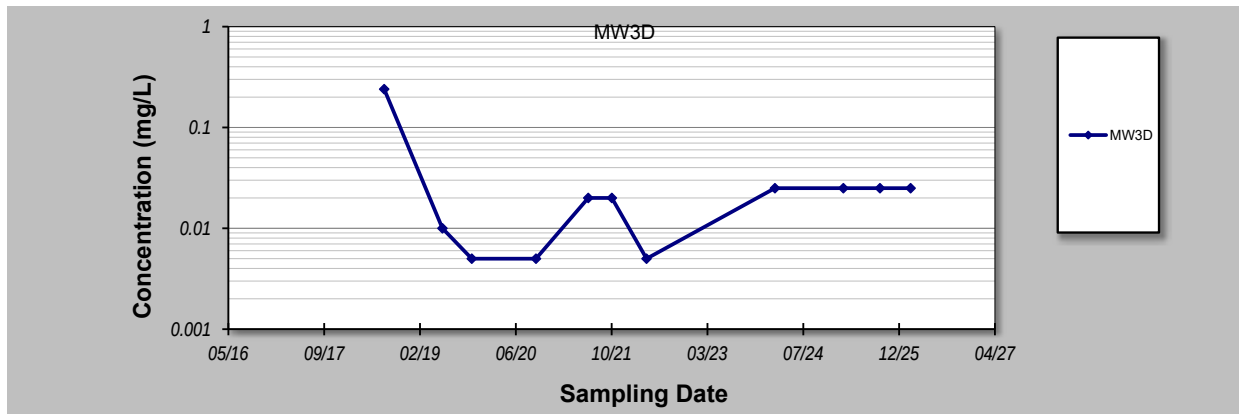


APPENDIX G
MANN KENDALL TREND ASSESSMENT

GSi MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	20-Feb-26	Job ID:	ASY 24 050.05
Facility Name:	Yulara Landfill	Constituent:	Aluminium
Conducted By:	LH	Concentration Units:	mg/L
Sampling Point ID:	MW3D		

Sampling Event	Sampling Date	ALUMINIUM CONCENTRATION (mg/L)					
1	1/11/2017						
2	1/08/2018	0.24					
3	1/06/2019	0.01					
4	1/11/2019	0.005					
5	1/10/2020	0.005					
6	1/07/2021	0.02					
7	1/11/2021	0.02					
8	1/05/2022	0.005					
9	1/05/2023						
10	1/03/2024	0.025					
11	21/02/2025	0.025					
12	31/08/2025	0.025					
13	7/02/2026	0.025					
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:	1.85						
Mann-Kendall Statistic (S):	15						
Confidence Factor:	85.9%						
Concentration Trend:	No Trend						



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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GSi MANN-KENDALL TOOLKIT for Constituent Trend Analysis

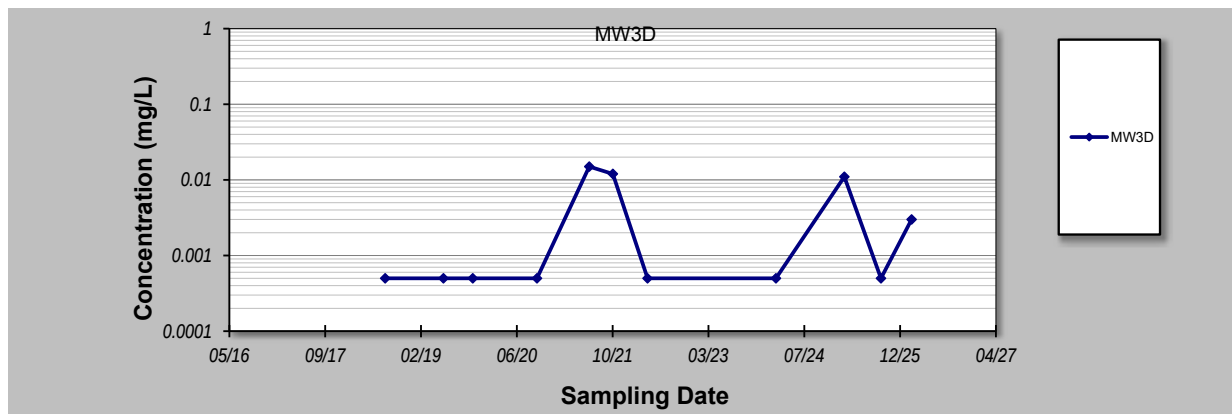
Evaluation Date: **20-Feb-26**
Facility Name: **Yulara Landfill**
Conducted By: **LH**

Job ID: **ASY 24 050.05**
Constituent: **Copper**
Concentration Units: **mg/L**

Sampling Point ID: **MW3D**

Sampling Event	Sampling Date	COPPER CONCENTRATION (mg/L)						
1	1/11/2017							
2	1/08/2018	0.0005						
3	1/06/2019	0.0005						
4	1/11/2019	0.0005						
5	1/10/2020	0.0005						
6	1/07/2021	0.015						
7	1/11/2021	0.012						
8	1/05/2022	0.0005						
9	1/05/2023							
10	1/03/2024	0.0005						
11	21/02/2025	0.011						
12	31/08/2025	0.0005						
13	7/02/2026	0.003						
14								
15								
16								
17								
18								
19								
20								

Coefficient of Variation: **1.40**
Mann-Kendall Statistic (S): **8**
Confidence Factor: **70.3%**
Concentration Trend: **No Trend**



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

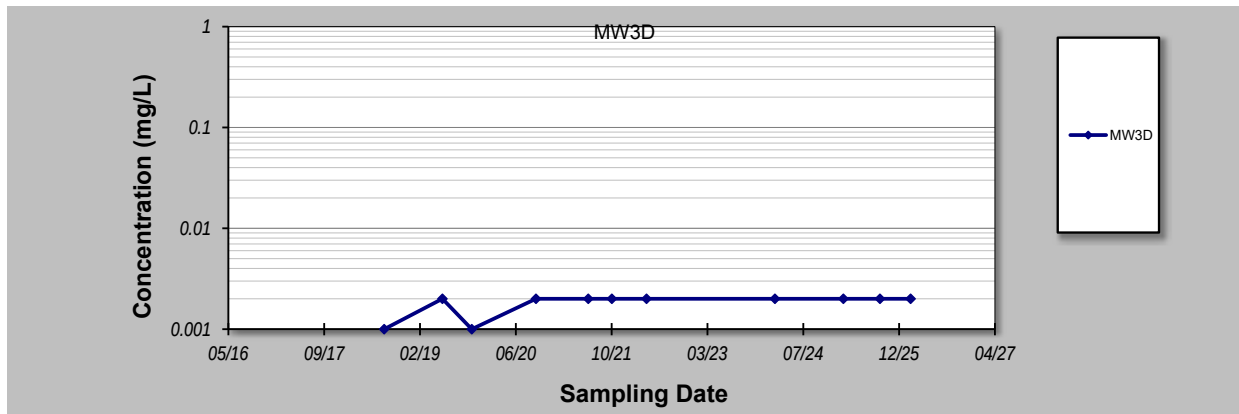
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GSi MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	20-Feb-26	Job ID:	ASY 24 050.05
Facility Name:	Yulara Landfill	Constituent:	Chromium total
Conducted By:	LH	Concentration Units:	mg/L
Sampling Point ID:	MW3D		

Sampling Event	Sampling Date	CHROMIUM TOTAL CONCENTRATION (mg/L)					
1	1/11/2017						
2	1/08/2018	0.001					
3	1/06/2019	0.002					
4	1/11/2019	0.001					
5	1/10/2020	0.002					
6	1/07/2021	0.002					
7	1/11/2021	0.002					
8	1/05/2022	0.002					
9	1/05/2023						
10	1/03/2024	0.002					
11	21/02/2025	0.002					
12	31/08/2025	0.002					
13	7/02/2026	0.002					
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:	0.22						
Mann-Kendall Statistic (S):	16						
Confidence Factor:	87.5%						
Concentration Trend:	No Trend						



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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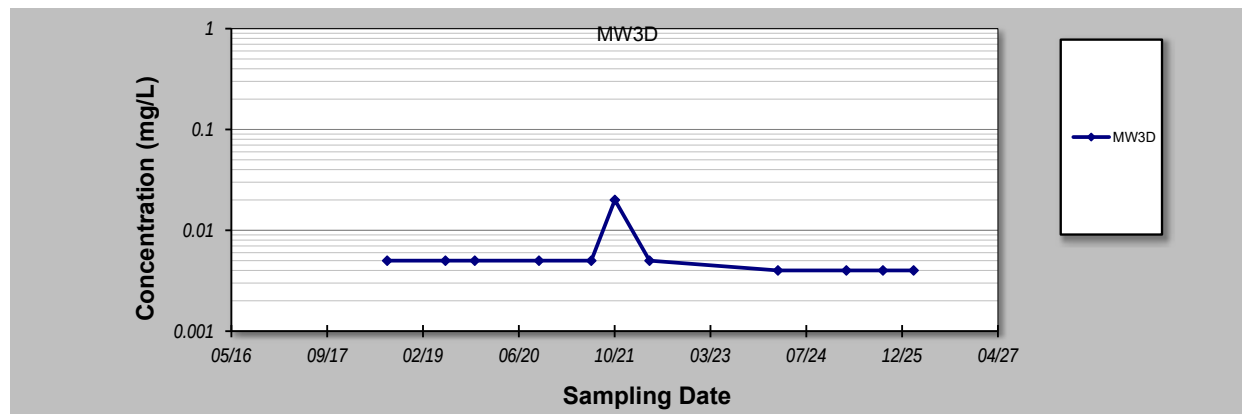
GSi MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **20-Feb-26** Job ID: **ASY 24 050.05**
Facility Name: **Yulara Landfill** Constituent: **Selenium**
Conducted By: **LH** Concentration Units: **mg/L**

Sampling Point ID: **MW3D**

Sampling Event	Sampling Date	SELENIUM CONCENTRATION (mg/L)					
1	1/11/2017						
2	1/08/2018	0.005					
3	1/06/2019	0.005					
4	1/11/2019	0.005					
5	1/10/2020	0.005					
6	1/07/2021	0.005					
7	1/11/2021	0.02					
8	1/05/2022	0.005					
9	1/05/2023						
10	1/03/2024	0.004					
11	21/02/2025	0.004					
12	31/08/2025	0.004					
13	7/02/2026	0.004					
14							
15							
16							
17							
18							
19							
20							

Coefficient of Variation: **0.78**
Mann-Kendall Statistic (S): **-24**
Confidence Factor: **96.4%**
Concentration Trend: **Decreasing**



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

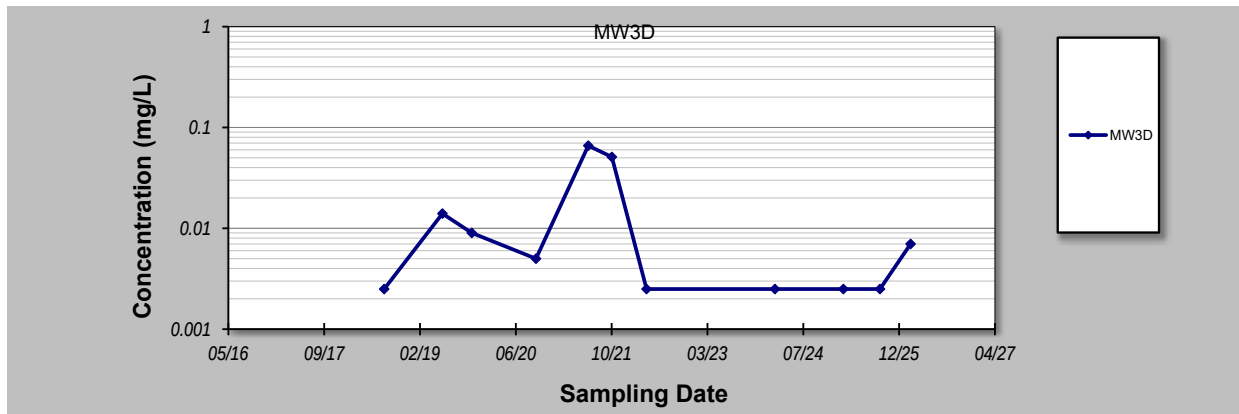
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Evaluation Date:	20-Feb-26	Job ID:	ASY 24 050.05
Facility Name:	Yulara Landfill	Constituent:	Zinc
Conducted By:	LH	Concentration Units:	mg/L
Sampling Point ID:	MW3D		

Sampling Event	Sampling Date	ZINC CONCENTRATION (mg/L)
1	1/11/2017	
2	1/08/2018	0.0025
3	1/06/2019	0.014
4	1/11/2019	0.009
5	1/10/2020	0.005
6	1/07/2021	0.066
7	1/11/2021	0.051
8	1/05/2022	0.0025
9	1/05/2023	
10	1/03/2024	0.0025
11	21/02/2025	0.0025
12	31/08/2025	0.0025
13	7/02/2026	0.007
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:	1.48	
Mann-Kendall Statistic (S):	-11	
Confidence Factor:	77.7%	
Concentration Trend:	No Trend	



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

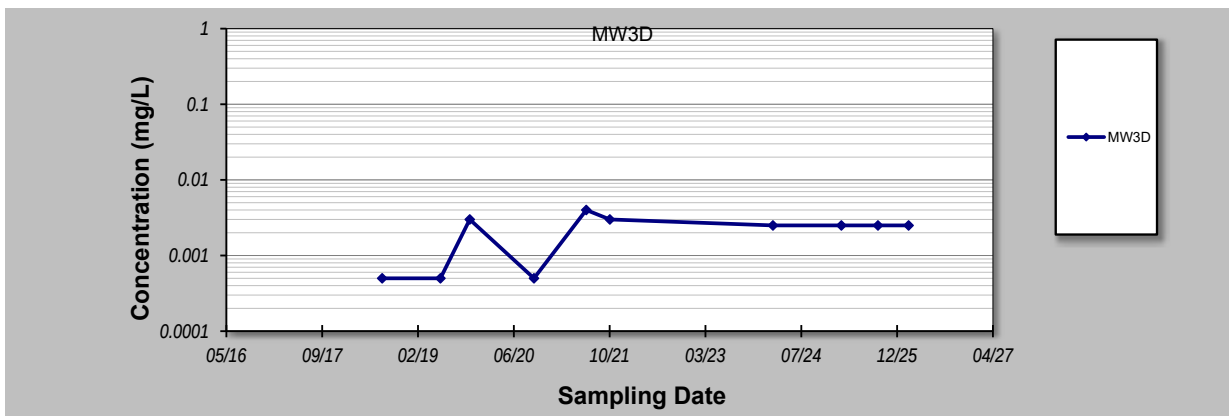
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Evaluation Date:	20-Feb-26	Job ID:	ASY 24 050.05
Facility Name:	Yulara Landfill	Constituent:	Manganese
Conducted By:	LH	Concentration Units:	mg/L
Sampling Point ID:	MW3D		

Sampling Event	Sampling Date	MANGANESE CONCENTRATION (mg/L)					
1	1/11/2017						
2	1/08/2018	0.0005					
3	1/06/2019	0.0005					
4	1/11/2019	0.003					
5	1/10/2020	0.0005					
6	1/07/2021	0.004					
7	1/11/2021	0.003					
8	1/05/2022						
9	1/05/2023						
10	1/03/2024	0.0025					
11	21/02/2025	0.0025					
12	31/08/2025	0.0025					
13	7/02/2026	0.0025					
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:	0.57						
Mann-Kendall Statistic (S):	7						
Confidence Factor:	70.0%						
Concentration Trend:	No Trend						



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

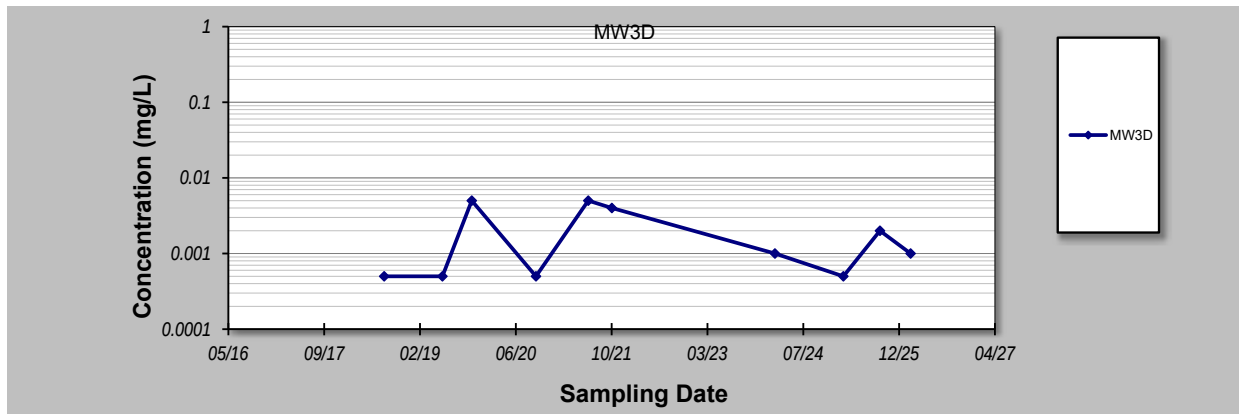
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GSi MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	20-Feb-26	Job ID:	ASY 24 050.05
Facility Name:	Yulara Landfill	Constituent:	Nickel
Conducted By:	LH	Concentration Units:	mg/L
Sampling Point ID:	MW3D		

Sampling Event	Sampling Date	NICKEL CONCENTRATION (mg/L)
1	1/11/2017	
2	1/08/2018	0.0005
3	1/06/2019	0.0005
4	1/11/2019	0.005
5	1/10/2020	0.0005
6	1/07/2021	0.005
7	1/11/2021	0.004
8	1/05/2022	
9	1/05/2023	
10	1/03/2024	0.001
11	21/02/2025	0.0005
12	31/08/2025	0.002
13	7/02/2026	0.001
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:	0.96	
Mann-Kendall Statistic (S):	3	
Confidence Factor:	56.9%	
Concentration Trend:	No Trend	



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

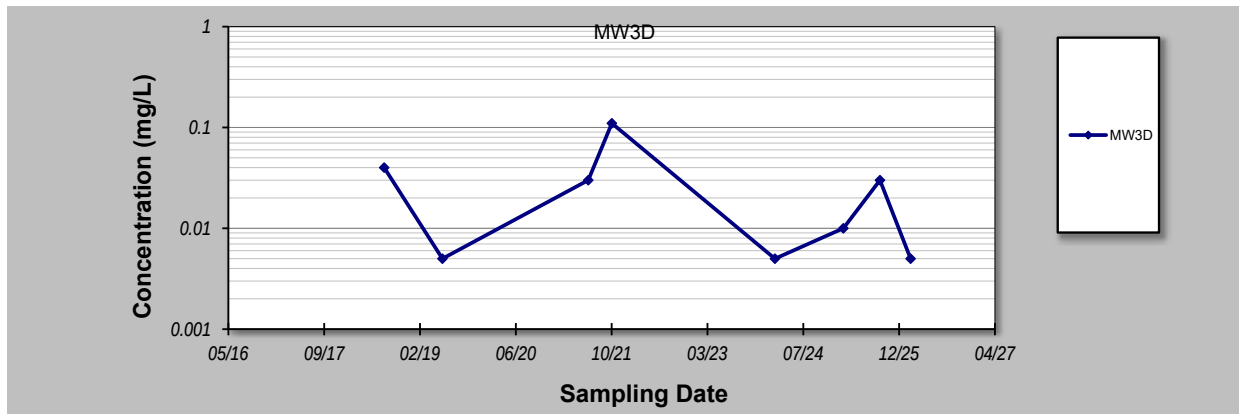
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GSi MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	20-Feb-26	Job ID:	ASY 24 050.05
Facility Name:	Yulara Landfill	Constituent:	Ammonia
Conducted By:	LH	Concentration Units:	mg/L
Sampling Point ID:	MW3D		

Sampling Event	Sampling Date	AMMONIA CONCENTRATION (mg/L)
1	1/11/2017	
2	1/08/2018	0.04
3	1/06/2019	0.005
4	1/11/2019	
5	1/10/2020	
6	1/07/2021	0.03
7	1/11/2021	0.11
8	1/05/2022	
9	1/05/2023	
10	1/03/2024	0.005
11	21/02/2025	0.01
12	31/08/2025	0.03
13	7/02/2026	0.005
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:	1.21	
Mann-Kendall Statistic (S):	-6	
Confidence Factor:	72.6%	
Concentration Trend:	No Trend	



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

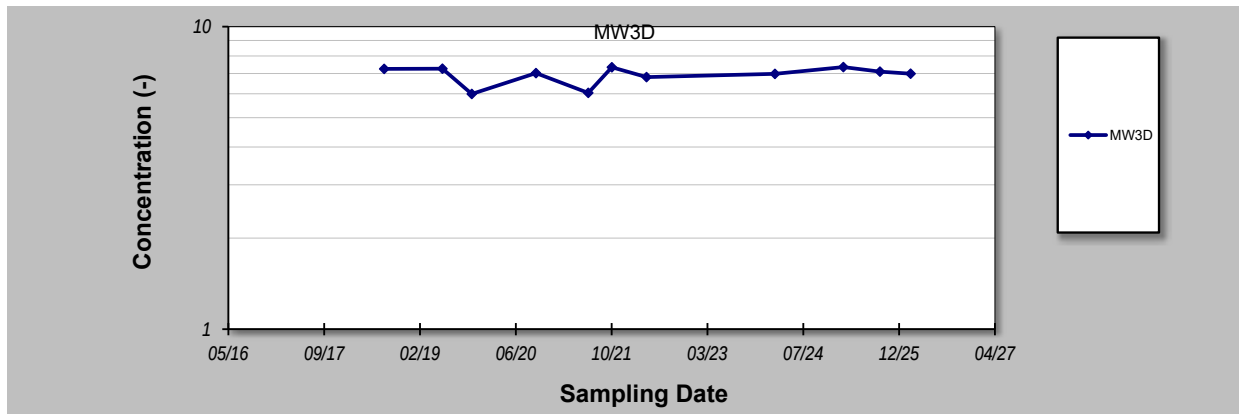
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GSi MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	20-Feb-26	Job ID:	ASY 24 050.05
Facility Name:	Yulara Landfill	Constituent:	pH
Conducted By:	LH	Concentration Units:	-
Sampling Point ID:	MW3D		

Sampling Event	Sampling Date	PH CONCENTRATION (-)							
1	1/11/2017								
2	1/08/2018	7.25							
3	1/06/2019	7.26							
4	1/11/2019	5.99							
5	1/10/2020	7.02							
6	1/07/2021	6.04							
7	1/11/2021	7.34							
8	1/05/2022	6.81							
9	1/05/2023								
10	1/03/2024	6.98							
11	21/02/2025	7.35							
12	31/08/2025	7.1							
13	7/02/2026	6.99							
14									
15									
16									
17									
18									
19									
20									
Coefficient of Variation:	0.07								
Mann-Kendall Statistic (S):	5								
Confidence Factor:	61.9%								
Concentration Trend:	No Trend								



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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Consulting Engineers and Scientists



APPENDIX H
LABORATORY REPORTS

CHAIN OF CUSTODY RECORD



CLIENT DETAILS

Page 1 of 1

Company Name : Tierra Environment				Contact Name : Daryl Burrows				Purchase Order : NA				COC Number : T2158																																		
Office Address :				Project Manager : Daryl Burrows				Project Number : ASY 24 050.05				QUOTE ID :																																		
				Email for results : general@tierra.com.au				Project Name : Yulara Landfill				Esdat																																		
Special Directions & Comments : * Additional Metals (Fe, Al, Mn, Se)				Analytes										Laboratory Address																																
				<table><tr><td>B10C Screen</td><td>B11A screen</td><td>B19E Screen</td><td>TSS</td><td>DOC</td><td>COD</td><td>* Additional Metals</td><td>B6 Screen</td><td>Hold</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										B10C Screen	B11A screen	B19E Screen	TSS	DOC	COD	* Additional Metals	B6 Screen	Hold																			Eurofins - Melbourne 6 Monterey Road, Dandenong South, VIC 3175 Phone: 03 8584 5000 Fax: 03 8564 5090 Email: EnviroSampleVic@eurofins.com					
														B10C Screen	B11A screen	B19E Screen	TSS	DOC	COD	* Additional Metals	B6 Screen	Hold																								
<table><tr><th colspan="6">Containers</th><th rowspan="2">Sample Comments</th></tr><tr><th>500P</th><th>250A</th><th>50P</th><th>250A</th><th>VIAL</th><th>125mL A</th><th>Jar</th></tr></table>						Containers						Sample Comments	500P	250A	50P	250A	VIAL	125mL A	Jar																											
Containers						Sample Comments																																								
500P	250A	50P	250A	VIAL	125mL A		Jar																																							
	Sample ID	Date	Matrix																																											
1	MW1D-A	07-Feb-26	Water	X	X	X	X	X	X	X							1	1	2	2	1																									
2	MW2D-A	07-Feb-26	Water	X	X	X	X	X	X	X							1	1	2	2	1																									
3	MW2D-X	07-Feb-26	Water	X	X	X	X	X	X	X							1	1	2	2	1																									
4	MW3D-A	07-Feb-26	Water	X	X	X	X	X	X	X							1	1	2	2	1																									
5	MW4D-A	07-Feb-26	Water	X	X	X	X	X	X	X							1	1	2	2	1																									
6	MW5D-A	07-Feb-26	Water	X	X	X	X	X	X	X							1	1	2	2	1																									
7	20260207R1	07-Feb-26	Water										X					1	1		2																									
8	20260207FB1	07-Feb-26	Water											X				1	1		2																									
9																																														
10																																														
11																																														
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Relinquished By: Daryl Burrows		Laboratory Staff Adelaide		Laboratory Staff Melbourne		Turn around Time		Method Of Shipment	
Date & Time : 9/2/26 11:30am		Received By:		Received By:		24 Hrs 48 Hrs		☒ Courier	
Signature:		Date & Time :		Date & Time :				☐ Hand Delivered	
		Signature:		Signature:		5 Days 10 Days		☐ Postal	
		Report Number :		Report Number :					

JB 10/2
1321755

Tierra Environmental Pty Ltd
PO Box 360
Mitcham
SA 5062



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: **Daryl Burrows**

Report **1321755-W**
Project name **Yulara Landfill**
Project ID **ASY 24 050.05**
Received Date **Feb 10, 2026**

Client Sample ID			MW1D-A	MW2D-A	MW2D-X	MW3D-A
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			M26- Fe0028394	M26- Fe0028395	M26- Fe0028396	M26- Fe0028397
Date Sampled			Feb 07, 2026	Feb 07, 2026	Feb 07, 2026	Feb 07, 2026
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C16 less Naphthalene (F2) ^{*N01}	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene ^{N02}	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
BTEX						
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
4-Bromofluorobenzene (surr.)	1	%	80	86	100	92
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			MW1D-A	MW2D-A	MW2D-X	MW3D-A
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			M26-Fe0028394	M26-Fe0028395	M26-Fe0028396	M26-Fe0028397
Date Sampled			Feb 07, 2026	Feb 07, 2026	Feb 07, 2026	Feb 07, 2026
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	123	123	125	120
p-Terphenyl-d14 (surr.)	1	%	90	90	86	89
Organochlorine Pesticides						
Chlordanes - Total	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
4,4'-DDD	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
4,4'-DDE	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
4,4'-DDT	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
a-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Aldrin	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
b-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
d-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Dieldrin	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endosulfan I	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endosulfan II	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endosulfan sulphate	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endrin	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endrin aldehyde	0.0002	mg/L	< 0.0002	0.0004	< 0.0002	0.0005
Endrin ketone	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
g-HCH (Lindane)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Heptachlor	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Heptachlor epoxide	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Hexachlorobenzene	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Methoxychlor	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Toxaphene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Dibutylchloroendate (surr.)	1	%	72	66	62	90
Tetrachloro-m-xylene (surr.)	1	%	109	113	108	105
Organophosphorus Pesticides						
Azinphos-methyl	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Bolstar	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorfenvinphos	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chlorpyrifos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorpyrifos-methyl	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Coumaphos	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Demeton-S	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Demeton-O	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Diazinon	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Dichlorvos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Dimethoate	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Disulfoton	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
EPN	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Ethion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	MW1D-A Water M26- Fe0028394 Feb 07, 2026	MW2D-A Water M26- Fe0028395 Feb 07, 2026	MW2D-X Water M26- Fe0028396 Feb 07, 2026	MW3D-A Water M26- Fe0028397 Feb 07, 2026
Organophosphorus Pesticides						
Ethoprop	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Ethyl parathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Fenitrothion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Fensulfothion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Fenthion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Malathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Merphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Methyl parathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Mevinphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Monocrotophos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Naled	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Omethoate	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Phorate	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Pirimiphos-methyl	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Pyrazophos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Ronnel	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Terbufos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Tetrachlorvinphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Tokuthion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Trichloronate	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Triphenylphosphate (surr.)	1	%	74	80	77	79
Polychlorinated Biphenyls						
Aroclor-1016	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1221	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1232	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1242	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1248	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1254	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1260	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Total PCB*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dibutylchlorendate (surr.)	1	%	72	66	62	90
Tetrachloro-m-xylene (surr.)	1	%	109	113	108	105
Phenols (Halogenated)						
2-Chlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2,4-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2,4,5-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2,4,6-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2,6-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Pentachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachlorophenols - Total	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
Total Halogenated Phenol*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
2-Nitrophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dimethylphenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2,4-Dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	MW1D-A Water M26- Fe0028394 Feb 07, 2026	MW2D-A Water M26- Fe0028395 Feb 07, 2026	MW2D-X Water M26- Fe0028396 Feb 07, 2026	MW3D-A Water M26- Fe0028397 Feb 07, 2026
Phenols (non-Halogenated)						
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006	< 0.006	< 0.006	< 0.006
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
Dinoseb	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Phenol-d6 (surr.)	1	%	85	74	53	89
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.01	mg/L	0.03	< 0.01	0.02	< 0.01
Chemical Oxygen Demand (COD)	25	mg/L	< 25	30	< 25	32
Chloride	1	mg/L	310	140	140	280
Dissolved Organic Carbon	5	mg/L	45	38	49	23
Nitrate & Nitrite (as N)	0.05	mg/L	61	18	17	53
Nitrate (as N)	0.02	mg/L	61	18	17	53
Nitrite (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Organic Nitrogen (as N)*	0.2	mg/L	4.47	2	2.28	3.5
Phosphate total (as P)	0.01	mg/L	0.02	0.02	0.02	0.03
Phosphorus reactive (as P)	0.01	mg/L	0.02	0.02	0.02	0.02
Sulphate (as SO4)	5	mg/L	110	36	33	230
Total Kjeldahl Nitrogen (as N)	0.2	mg/L	4.5	2.0	2.3	3.5
Total Nitrogen (as N)*	0.2	mg/L	66	20	19	57
Total Suspended Solids Dried at 103°C to 105°C	5	mg/L	2600	1700	2300	9.2
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	20	mg/L	210	400	400	180
Carbonate Alkalinity (as CaCO3)	10	mg/L	< 10	< 10	< 10	< 10
Total Alkalinity (as CaCO3)	20	mg/L	210	400	400	180
Alkali Metals						
Calcium	0.5	mg/L	100	46	50	75
Magnesium	0.5	mg/L	53	28	29	46
Potassium	0.5	mg/L	38	29	29	28
Sodium	0.5	mg/L	180	180	180	210
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	0.002	0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	0.0002	< 0.0002
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.002
Copper (filtered)	0.001	mg/L	0.004	0.006	0.002	0.003
Iron (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	< 0.001	0.002	0.001	0.001
Selenium (filtered)	0.001	mg/L	0.002	< 0.001	< 0.001	0.004
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	0.007

Client Sample ID			MW4D-A	MW5D-A	20260207R1
Sample Matrix			Water	Water	Water
Eurofins Sample No.			M26-Fe0028398	M26-Fe0028399	M26-Fe0028400
Date Sampled			Feb 07, 2026	Feb 07, 2026	Feb 07, 2026
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons					
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05
TRH >C10-C16 less Naphthalene (F2) ^{*N01}	0.05	mg/L	< 0.05	< 0.05	< 0.05
Naphthalene ^{N02}	0.01	mg/L	< 0.01	< 0.01	< 0.01
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	< 0.1	< 0.1
BTEX					
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	0.002	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003	< 0.003	< 0.003
4-Bromofluorobenzene (surr.)	1	%	87	90	76
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	-
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	-
Anthracene	0.001	mg/L	< 0.001	< 0.001	-
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	-
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	-
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	-
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	-
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	-
Chrysene	0.001	mg/L	< 0.001	< 0.001	-
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	-
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	-
Fluorene	0.001	mg/L	< 0.001	< 0.001	-
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	-
Naphthalene	0.001	mg/L	< 0.001	< 0.001	-
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	-
Pyrene	0.001	mg/L	< 0.001	< 0.001	-
Total PAH*	0.001	mg/L	< 0.001	< 0.001	-
2-Fluorobiphenyl (surr.)	1	%	124	123	-
p-Terphenyl-d14 (surr.)	1	%	88	91	-
Organochlorine Pesticides					
Chlordanes - Total	0.002	mg/L	< 0.002	< 0.002	-
4,4'-DDD	0.0002	mg/L	< 0.0002	< 0.0002	-
4,4'-DDE	0.0002	mg/L	< 0.0002	< 0.0002	-
4,4'-DDT	0.0002	mg/L	< 0.0002	< 0.0002	-
a-HCH	0.0002	mg/L	< 0.0002	< 0.0002	-
Aldrin	0.0002	mg/L	< 0.0002	< 0.0002	-
b-HCH	0.0002	mg/L	< 0.0002	< 0.0002	-

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	MW4D-A Water M26- Fe0028398 Feb 07, 2026	MW5D-A Water M26- Fe0028399 Feb 07, 2026	20260207R1 Water M26- Fe0028400 Feb 07, 2026
Organochlorine Pesticides					
d-HCH	0.0002	mg/L	< 0.0002	< 0.0002	-
Dieldrin	0.0002	mg/L	< 0.0002	< 0.0002	-
Endosulfan I	0.0002	mg/L	< 0.0002	< 0.0002	-
Endosulfan II	0.0002	mg/L	< 0.0002	< 0.0002	-
Endosulfan sulphate	0.0002	mg/L	< 0.0002	< 0.0002	-
Endrin	0.0002	mg/L	< 0.0002	< 0.0002	-
Endrin aldehyde	0.0002	mg/L	< 0.0002	< 0.0002	-
Endrin ketone	0.0002	mg/L	< 0.0002	< 0.0002	-
g-HCH (Lindane)	0.0002	mg/L	< 0.0002	< 0.0002	-
Heptachlor	0.0002	mg/L	< 0.0002	< 0.0002	-
Heptachlor epoxide	0.0002	mg/L	< 0.0002	< 0.0002	-
Hexachlorobenzene	0.0002	mg/L	< 0.0002	< 0.0002	-
Methoxychlor	0.0002	mg/L	< 0.0002	< 0.0002	-
Toxaphene	0.005	mg/L	< 0.005	< 0.005	-
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002	< 0.0002	-
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002	< 0.0002	-
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002	< 0.002	-
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002	< 0.002	-
Dibutylchloroendate (surr.)	1	%	80	62	-
Tetrachloro-m-xylene (surr.)	1	%	108	111	-
Organophosphorus Pesticides					
Azinphos-methyl	0.002	mg/L	< 0.002	< 0.002	-
Bolstar	0.002	mg/L	< 0.002	< 0.002	-
Chlorfenvinphos	0.02	mg/L	< 0.02	< 0.02	-
Chlorpyrifos	0.002	mg/L	< 0.002	< 0.002	-
Chlorpyrifos-methyl	0.002	mg/L	< 0.002	< 0.002	-
Coumaphos	0.02	mg/L	< 0.02	< 0.02	-
Demeton-S	0.002	mg/L	< 0.002	< 0.002	-
Demeton-O	0.002	mg/L	< 0.002	< 0.002	-
Diazinon	0.002	mg/L	< 0.002	< 0.002	-
Dichlorvos	0.002	mg/L	< 0.002	< 0.002	-
Dimethoate	0.002	mg/L	< 0.002	< 0.002	-
Disulfoton	0.002	mg/L	< 0.002	< 0.002	-
EPN	0.002	mg/L	< 0.002	< 0.002	-
Ethion	0.002	mg/L	< 0.002	< 0.002	-
Ethoprop	0.002	mg/L	< 0.002	< 0.002	-
Ethyl parathion	0.002	mg/L	< 0.002	< 0.002	-
Fenitrothion	0.002	mg/L	< 0.002	< 0.002	-
Fensulfothion	0.002	mg/L	< 0.002	< 0.002	-
Fenthion	0.002	mg/L	< 0.002	< 0.002	-
Malathion	0.002	mg/L	< 0.002	< 0.002	-
Merphos	0.002	mg/L	< 0.002	< 0.002	-
Methyl parathion	0.002	mg/L	< 0.002	< 0.002	-
Mevinphos	0.002	mg/L	< 0.002	< 0.002	-
Monocrotophos	0.002	mg/L	< 0.002	< 0.002	-
Naled	0.002	mg/L	< 0.002	< 0.002	-
Omethoate	0.02	mg/L	< 0.02	< 0.02	-
Phorate	0.002	mg/L	< 0.002	< 0.002	-
Pirimiphos-methyl	0.02	mg/L	< 0.02	< 0.02	-

Client Sample ID			MW4D-A	MW5D-A	20260207R1
Sample Matrix			Water	Water	Water
Eurofins Sample No.			M26-Fe0028398	M26-Fe0028399	M26-Fe0028400
Date Sampled			Feb 07, 2026	Feb 07, 2026	Feb 07, 2026
Test/Reference	LOR	Unit			
Organophosphorus Pesticides					
Pyrazophos	0.002	mg/L	< 0.002	< 0.002	-
Ronnel	0.002	mg/L	< 0.002	< 0.002	-
Terbufos	0.002	mg/L	< 0.002	< 0.002	-
Tetrachlorvinphos	0.002	mg/L	< 0.002	< 0.002	-
Tokuthion	0.002	mg/L	< 0.002	< 0.002	-
Trichloronate	0.002	mg/L	< 0.002	< 0.002	-
Triphenylphosphate (surr.)	1	%	76	73	-
Polychlorinated Biphenyls					
Aroclor-1016	0.005	mg/L	< 0.005	< 0.005	-
Aroclor-1221	0.005	mg/L	< 0.005	< 0.005	-
Aroclor-1232	0.005	mg/L	< 0.005	< 0.005	-
Aroclor-1242	0.005	mg/L	< 0.005	< 0.005	-
Aroclor-1248	0.005	mg/L	< 0.005	< 0.005	-
Aroclor-1254	0.005	mg/L	< 0.005	< 0.005	-
Aroclor-1260	0.005	mg/L	< 0.005	< 0.005	-
Total PCB*	0.005	mg/L	< 0.005	< 0.005	-
Dibutylchlorendate (surr.)	1	%	80	62	-
Tetrachloro-m-xylene (surr.)	1	%	108	111	-
Phenols (Halogenated)					
2-Chlorophenol	0.003	mg/L	< 0.003	< 0.003	-
2,4-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	-
2,4,5-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	-
2,4,6-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	-
2,6-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	-
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01	< 0.01	-
Pentachlorophenol	0.01	mg/L	< 0.01	< 0.01	-
Tetrachlorophenols - Total	0.03	mg/L	< 0.03	< 0.03	-
Total Halogenated Phenol*	0.01	mg/L	< 0.01	< 0.01	-
Phenols (non-Halogenated)					
2-Cyclohexyl-4,6-dinitrophenol	0.1	mg/L	< 0.1	< 0.1	-
2-Methyl-4,6-dinitrophenol	0.03	mg/L	< 0.03	< 0.03	-
2-Nitrophenol	0.01	mg/L	< 0.01	< 0.01	-
2,4-Dimethylphenol	0.003	mg/L	< 0.003	< 0.003	-
2,4-Dinitrophenol	0.03	mg/L	< 0.03	< 0.03	-
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003	< 0.003	-
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006	< 0.006	-
Total cresols*	0.01	mg/L	< 0.01	< 0.01	-
4-Nitrophenol	0.03	mg/L	< 0.03	< 0.03	-
Dinoseb	0.1	mg/L	< 0.1	< 0.1	-
Phenol	0.003	mg/L	< 0.003	< 0.003	-
Phenol-d6 (surr.)	1	%	89	79	-
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	-
Ammonia (as N)	0.01	mg/L	< 0.01	0.03	-
Chemical Oxygen Demand (COD)	25	mg/L	< 25	28	-
Chloride	1	mg/L	100	510	-
Dissolved Organic Carbon	5	mg/L	31	18	-
Nitrate & Nitrite (as N)	0.05	mg/L	27	63	-

Client Sample ID			MW4D-A	MW5D-A	20260207R1
Sample Matrix			Water	Water	Water
Eurofins Sample No.			M26-Fe0028398	M26-Fe0028399	M26-Fe0028400
Date Sampled			Feb 07, 2026	Feb 07, 2026	Feb 07, 2026
Test/Reference	LOR	Unit			
Nitrate (as N)	0.02	mg/L	27	63	-
Nitrite (as N)	0.02	mg/L	< 0.02	< 0.02	-
Organic Nitrogen (as N)*	0.2	mg/L	2.1	3.67	-
Phosphate total (as P)	0.01	mg/L	0.02	< 0.01	-
Phosphorus reactive (as P)	0.01	mg/L	0.01	0.01	-
Sulphate (as SO ₄)	5	mg/L	82	420	-
Total Kjeldahl Nitrogen (as N)	0.2	mg/L	2.1	3.7	-
Total Nitrogen (as N)*	0.2	mg/L	29	67	-
Total Suspended Solids Dried at 103°C to 105°C	5	mg/L	1000	1500	-
Alkalinity (speciated)					
Bicarbonate Alkalinity (as CaCO ₃)	20	mg/L	320	140	-
Carbonate Alkalinity (as CaCO ₃)	10	mg/L	< 10	< 10	-
Total Alkalinity (as CaCO ₃)	20	mg/L	320	140	-
Alkali Metals					
Calcium	0.5	mg/L	30	150	-
Magnesium	0.5	mg/L	17	92	-
Potassium	0.5	mg/L	26	41	-
Sodium	0.5	mg/L	180	280	-
Heavy Metals					
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	-
Arsenic (filtered)	0.001	mg/L	< 0.001	0.001	< 0.001
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Chromium (filtered)	0.001	mg/L	< 0.001	0.001	< 0.001
Copper (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001
Iron (filtered)	0.05	mg/L	< 0.05	< 0.05	-
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	< 0.005	< 0.005	-
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	< 0.001	0.002	< 0.001
Selenium (filtered)	0.001	mg/L	0.004	0.011	-
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005

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
Suite B10C: M8filt/BTEX/TRH/PAH/Phenol/OCP/OPP/PCB			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Feb 11, 2026	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Feb 10, 2026	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Feb 11, 2026	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Feb 10, 2026	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Polycyclic Aromatic Hydrocarbons	Melbourne	Feb 11, 2026	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Feb 11, 2026	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Organophosphorus Pesticides	Melbourne	Feb 11, 2026	7 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Feb 11, 2026	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Feb 11, 2026	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Feb 11, 2026	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8 filtered	Melbourne	Feb 10, 2026	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B19E: Total N, TKN, NOx, NO2, NO3, NH3, Total P, Reactive P			
Ammonia (as N)	Melbourne	Feb 10, 2026	28 Days
- Method: LTM-INO-4450 Determination of Nitrogen Species by Discrete Analyser			
Nitrate & Nitrite (as N)	Melbourne	Feb 10, 2026	28 Days
- Method: LTM-INO-4450 Nitrogens by Discrete Analyser			
Nitrate (as N)	Melbourne	Feb 10, 2026	28 Days
- Method: LTM-INO-4450 Nitrogens by Discrete Analyser			
Nitrite (as N)	Melbourne	Feb 10, 2026	2 Days
- Method: LTM-INO-4450 Nitrogens by Discrete Analyser			
Phosphate total (as P)	Melbourne	Feb 10, 2026	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Phosphorus reactive (as P)	Melbourne	Feb 10, 2026	2 Days
- Method: APHA 4500-P			
Total Kjeldahl Nitrogen (as N)	Melbourne	Feb 10, 2026	28 Days
- Method: APHA 4500-Norg B,D Total Kjeldahl Nitrogen by FIA			
Chemical Oxygen Demand (COD)	Melbourne	Feb 10, 2026	28 Days
- Method: LTM-INO-4220 Determination of COD in Water			
Dissolved Organic Carbon	Melbourne	Feb 10, 2026	28 Days
- Method: APHA 5310B Dissolved Organic Carbon			
Total Suspended Solids Dried at 103°C to 105°C	Melbourne	Feb 10, 2026	7 Days
- Method: LTM-INO-4070 Analysis of Suspended Solids in Water by Gravimetry			
Heavy Metals (filtered)	Melbourne	Feb 10, 2026	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B11A			
Chloride	Melbourne	Feb 10, 2026	28 Days
- Method: LTM-INO-4090 Chloride by Discrete Analyser			
Sulphate (as SO4)	Melbourne	Feb 10, 2026	28 Days
- Method: LTM-INO-4110 Sulfate by Discrete Analyser			

Description	Testing Site	Extracted	Holding Time
Alkalinity (speciated) - Method: LTM-INO-4250 Alkalinity by Electrometric Titration	Melbourne	Feb 10, 2026	14 Days
Alkali Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Feb 10, 2026	180 Days

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 Site# 2370 & 2554

Company Name: Tierra Environmental Pty Ltd
Address: PO Box 360
 Mitcham
 SA 5062

Project Name: Yulara Landfill
Project ID: ASY 24 050.05

Order No.:
Report #: 1321755
Phone: 08 8373 2512
Fax: 08 8373 2515

Received: Feb 10, 2026 12:56 PM
Due: Feb 17, 2026
Priority: 5 Day
Contact Name: Daryl Burrows

Eurofins Analytical Services Manager : Karl Bulow

Sample Detail						Aluminium (filtered)	Chemical Oxygen Demand (COD)	Disolved Organic Carbon	HOLD*	Iron (filtered)	Manganese (filtered)	Selenium (filtered)	Split - External Lab*	Total Suspended Solids Dried at 103°C to 105°C	Eurofins Suite B11A	Eurofins Suite B6 (filtered metals)	Eurofins Suite B19E: Total N, TKN, NO _x , NO ₂ , NO ₃ , NH ₃ , Total P, Reactive P	Suite B10C: M8lit/BTEX/TH/P/AH/Phenol/OC/OPP/PC
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X	X		X	X	X	X	X
External Laboratory													X					
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID													
1	MW2D-Y	Feb 07, 2026		Water	M26-Fe0028393								X					
2	MW1D-A	Feb 07, 2026		Water	M26-Fe0028394	X	X	X		X	X	X		X	X		X	X
3	MW2D-A	Feb 07, 2026		Water	M26-Fe0028395	X	X	X		X	X	X		X	X		X	X
4	MW2D-X	Feb 07, 2026		Water	M26-Fe0028396	X	X	X		X	X	X		X	X		X	X
5	MW3D-A	Feb 07, 2026		Water	M26-Fe0028397	X	X	X		X	X	X		X	X		X	X
6	MW4D-A	Feb 07, 2026		Water	M26-Fe0028398	X	X	X		X	X	X		X	X		X	X
7	MW5D-A	Feb 07, 2026		Water	M26-Fe0028399	X	X	X		X	X	X		X	X		X	X
8	20260207R1	Feb 07, 2026		Water	M26-Fe0028400											X		
9	20260207FB1	Feb 07, 2026		Water	M26-Fe0028401				X									
Test Counts						6	6	6	1	6	6	6	1	6	6	1	6	6



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 (<i>bis</i> -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/L	< 0.02			0.02	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
Naphthalene	mg/L	< 0.01			0.01	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							
Nitrate & Nitrite (as N)	mg/L	< 0.05			0.05	Pass	
Nitrate (as N)	mg/L	< 0.02			0.02	Pass	
Nitrite (as N)	mg/L	< 0.02			0.02	Pass	
Phosphate total (as P)	mg/L	< 0.01			0.01	Pass	
Sulphate (as SO ₄)	mg/L	< 5			5	Pass	
Total Kjeldahl Nitrogen (as N)	mg/L	< 0.2			0.2	Pass	
Total Suspended Solids Dried at 103°C to 105°C	mg/L	< 5			5	Pass	
Method Blank							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	< 20			20	Pass	
Carbonate Alkalinity (as CaCO ₃)	mg/L	< 10			10	Pass	
Total Alkalinity (as CaCO ₃)	mg/L	< 20			20	Pass	
Method Blank							
Nitrate & Nitrite (as N)	mg/L	< 0.05			0.05	Pass	
Nitrate (as N)	mg/L	< 0.02			0.02	Pass	
Nitrite (as N)	mg/L	< 0.02			0.02	Pass	
Phosphorus reactive (as P)	mg/L	< 0.01			0.01	Pass	
Method Blank							
Heavy Metals							
Aluminium (filtered)	mg/L	< 0.05			0.05	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0002			0.0002	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Iron (filtered)	mg/L	< 0.05			0.05	Pass	
Lead (filtered)	mg/L	< 0.001			0.001	Pass	
Manganese (filtered)	mg/L	< 0.005			0.005	Pass	
Mercury (filtered)	mg/L	< 0.0001			0.0001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals							
Calcium	mg/L	< 0.5			0.5	Pass	
Magnesium	mg/L	< 0.5			0.5	Pass	
Potassium	mg/L	< 0.5			0.5	Pass	
Sodium	mg/L	< 0.5			0.5	Pass	
Method Blank							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons							
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 >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							
Chloride	mg/L	< 1			1	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
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 >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							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g,h,i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a,h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1,2,3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/L	< 0.002			0.002	Pass	
4,4'-DDD	mg/L	< 0.0002			0.0002	Pass	
4,4'-DDE	mg/L	< 0.0002			0.0002	Pass	
4,4'-DDT	mg/L	< 0.0002			0.0002	Pass	
a-HCH	mg/L	< 0.0002			0.0002	Pass	
Aldrin	mg/L	< 0.0002			0.0002	Pass	
b-HCH	mg/L	< 0.0002			0.0002	Pass	
d-HCH	mg/L	< 0.0002			0.0002	Pass	
Dieldrin	mg/L	< 0.0002			0.0002	Pass	
Endosulfan I	mg/L	< 0.0002			0.0002	Pass	
Endosulfan II	mg/L	< 0.0002			0.0002	Pass	
Endosulfan sulphate	mg/L	< 0.0002			0.0002	Pass	
Endrin	mg/L	< 0.0002			0.0002	Pass	
Endrin aldehyde	mg/L	< 0.0002			0.0002	Pass	
Endrin ketone	mg/L	< 0.0002			0.0002	Pass	
g-HCH (Lindane)	mg/L	< 0.0002			0.0002	Pass	
Heptachlor	mg/L	< 0.0002			0.0002	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor epoxide	mg/L	< 0.0002			0.0002	Pass	
Hexachlorobenzene	mg/L	< 0.0002			0.0002	Pass	
Methoxychlor	mg/L	< 0.0002			0.0002	Pass	
Toxaphene	mg/L	< 0.005			0.005	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/L	< 0.002			0.002	Pass	
Bolstar	mg/L	< 0.002			0.002	Pass	
Chlorfenvinphos	mg/L	< 0.02			0.02	Pass	
Chlorpyrifos	mg/L	< 0.002			0.002	Pass	
Chlorpyrifos-methyl	mg/L	< 0.002			0.002	Pass	
Coumaphos	mg/L	< 0.02			0.02	Pass	
Demeton-S	mg/L	< 0.002			0.002	Pass	
Demeton-O	mg/L	< 0.002			0.002	Pass	
Diazinon	mg/L	< 0.002			0.002	Pass	
Dichlorvos	mg/L	< 0.002			0.002	Pass	
Dimethoate	mg/L	< 0.002			0.002	Pass	
Disulfoton	mg/L	< 0.002			0.002	Pass	
EPN	mg/L	< 0.002			0.002	Pass	
Ethion	mg/L	< 0.002			0.002	Pass	
Ethoprop	mg/L	< 0.002			0.002	Pass	
Ethyl parathion	mg/L	< 0.002			0.002	Pass	
Fenitrothion	mg/L	< 0.002			0.002	Pass	
Fensulfothion	mg/L	< 0.002			0.002	Pass	
Fenthion	mg/L	< 0.002			0.002	Pass	
Malathion	mg/L	< 0.002			0.002	Pass	
Merphos	mg/L	< 0.002			0.002	Pass	
Methyl parathion	mg/L	< 0.002			0.002	Pass	
Mevinphos	mg/L	< 0.002			0.002	Pass	
Monocrotophos	mg/L	< 0.002			0.002	Pass	
Naled	mg/L	< 0.002			0.002	Pass	
Omethoate	mg/L	< 0.02			0.02	Pass	
Phorate	mg/L	< 0.002			0.002	Pass	
Pirimiphos-methyl	mg/L	< 0.02			0.02	Pass	
Pyrazophos	mg/L	< 0.002			0.002	Pass	
Ronnel	mg/L	< 0.002			0.002	Pass	
Terbufos	mg/L	< 0.002			0.002	Pass	
Tetrachlorvinphos	mg/L	< 0.002			0.002	Pass	
Tokuthion	mg/L	< 0.002			0.002	Pass	
Trichloronate	mg/L	< 0.002			0.002	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/L	< 0.005			0.005	Pass	
Aroclor-1221	mg/L	< 0.005			0.005	Pass	
Aroclor-1232	mg/L	< 0.005			0.005	Pass	
Aroclor-1242	mg/L	< 0.005			0.005	Pass	
Aroclor-1248	mg/L	< 0.005			0.005	Pass	
Aroclor-1254	mg/L	< 0.005			0.005	Pass	
Aroclor-1260	mg/L	< 0.005			0.005	Pass	
Total PCB*	mg/L	< 0.005			0.005	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/L	< 0.003			0.003	Pass	
2,4-Dichlorophenol	mg/L	< 0.003			0.003	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2,4,5-Trichlorophenol	mg/L	< 0.01			0.01	Pass	
2,4,6-Trichlorophenol	mg/L	< 0.01			0.01	Pass	
2,6-Dichlorophenol	mg/L	< 0.003			0.003	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.01			0.01	Pass	
Pentachlorophenol	mg/L	< 0.01			0.01	Pass	
Tetrachlorophenols - Total	mg/L	< 0.03			0.03	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	mg/L	< 0.1			0.1	Pass	
2-Methyl-4,6-dinitrophenol	mg/L	< 0.03			0.03	Pass	
2-Nitrophenol	mg/L	< 0.01			0.01	Pass	
2,4-Dimethylphenol	mg/L	< 0.003			0.003	Pass	
2,4-Dinitrophenol	mg/L	< 0.03			0.03	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.003			0.003	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.006			0.006	Pass	
4-Nitrophenol	mg/L	< 0.03			0.03	Pass	
Dinoseb	mg/L	< 0.1			0.1	Pass	
Phenol	mg/L	< 0.003			0.003	Pass	
Method Blank							
Ammonia (as N)	mg/L	< 0.01			0.01	Pass	
Method Blank							
Dissolved Organic Carbon	mg/L	< 5			5	Pass	
Nitrite (as N)	mg/L	< 0.02			0.02	Pass	
Sulphate (as SO4)	mg/L	< 5			5	Pass	
LCS - % Recovery							
Chemical Oxygen Demand (COD)	%	108			70-130	Pass	
Nitrate & Nitrite (as N)	%	125			70-130	Pass	
Phosphate total (as P)	%	110			70-130	Pass	
Phosphorus reactive (as P)	%	83			70-130	Pass	
Total Kjeldahl Nitrogen (as N)	%	112			70-130	Pass	
Total Suspended Solids Dried at 103°C to 105°C	%	115			70-130	Pass	
LCS - % Recovery							
Alkalinity (speciated)							
Carbonate Alkalinity (as CaCO3)	%	118			70-130	Pass	
Total Alkalinity (as CaCO3)	%	121			70-130	Pass	
LCS - % Recovery							
Alkali Metals							
Calcium	%	94			80-120	Pass	
Magnesium	%	96			80-120	Pass	
Potassium	%	97			80-120	Pass	
Sodium	%	99			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	105			80-120	Pass	
Arsenic (filtered)	%	102			80-120	Pass	
Cadmium (filtered)	%	97			80-120	Pass	
Chromium (filtered)	%	103			80-120	Pass	
Copper (filtered)	%	100			80-120	Pass	
Iron (filtered)	%	106			80-120	Pass	
Lead (filtered)	%	102			80-120	Pass	
Manganese (filtered)	%	101			80-120	Pass	
Mercury (filtered)	%	111			80-120	Pass	
Nickel (filtered)	%	100			80-120	Pass	
Selenium (filtered)	%	107			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc (filtered)	%	107			80-120	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	105			70-130	Pass	
TRH C6-C10	%	103			70-130	Pass	
Naphthalene	%	112			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	95			70-130	Pass	
Toluene	%	100			70-130	Pass	
Ethylbenzene	%	102			70-130	Pass	
m&p-Xylenes	%	101			70-130	Pass	
Xylenes - Total*	%	101			70-130	Pass	
LCS - % Recovery							
Nitrate & Nitrite (as N)	%	116			70-130	Pass	
LCS - % Recovery							
Ammonia (as N)	%	100			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C10-C14	%	109			70-130	Pass	
TRH >C10-C16	%	108			70-130	Pass	
LCS - % Recovery							
Ammonia (as N)	%	99			70-130	Pass	
Sulphate (as SO4)	%	84			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C10-C14	%	102			70-130	Pass	
TRH >C10-C16	%	101			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	113			70-130	Pass	
Acenaphthylene	%	88			70-130	Pass	
Anthracene	%	97			70-130	Pass	
Benz(a)anthracene	%	84			70-130	Pass	
Benzo(a)pyrene	%	93			70-130	Pass	
Benzo(b&j)fluoranthene	%	75			70-130	Pass	
Benzo(g,h,i)perylene	%	98			70-130	Pass	
Benzo(k)fluoranthene	%	107			70-130	Pass	
Chrysene	%	99			70-130	Pass	
Dibenz(a,h)anthracene	%	82			70-130	Pass	
Fluoranthene	%	79			70-130	Pass	
Fluorene	%	98			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	126			70-130	Pass	
Naphthalene	%	119			70-130	Pass	
Phenanthrene	%	77			70-130	Pass	
Pyrene	%	108			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	104			70-130	Pass	
4,4'-DDD	%	100			70-130	Pass	
4,4'-DDE	%	115			70-130	Pass	
4,4'-DDT	%	81			70-130	Pass	
α-HCH	%	98			70-130	Pass	
Aldrin	%	114			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
b-HCH	%	120			70-130	Pass	
d-HCH	%	126			70-130	Pass	
Dieldrin	%	104			70-130	Pass	
Endosulfan I	%	107			70-130	Pass	
Endosulfan II	%	108			70-130	Pass	
Endosulfan sulphate	%	107			70-130	Pass	
Endrin	%	108			70-130	Pass	
Endrin aldehyde	%	88			70-130	Pass	
Endrin ketone	%	92			70-130	Pass	
g-HCH (Lindane)	%	111			70-130	Pass	
Heptachlor	%	126			70-130	Pass	
Heptachlor epoxide	%	103			70-130	Pass	
Hexachlorobenzene	%	95			70-130	Pass	
Methoxychlor	%	84			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	91			70-130	Pass	
Dimethoate	%	95			70-130	Pass	
Ethion	%	104			70-130	Pass	
Fenitrothion	%	100			70-130	Pass	
Mevinphos	%	92			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	99			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	92			25-140	Pass	
2,4-Dichlorophenol	%	116			25-140	Pass	
2,4,5-Trichlorophenol	%	108			25-140	Pass	
2,4,6-Trichlorophenol	%	106			25-140	Pass	
2,6-Dichlorophenol	%	112			25-140	Pass	
4-Chloro-3-methylphenol	%	125			25-140	Pass	
Pentachlorophenol	%	105			25-140	Pass	
Tetrachlorophenols - Total	%	111			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	%	45			25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	72			25-140	Pass	
2-Nitrophenol	%	95			25-140	Pass	
2,4-Dimethylphenol	%	44			25-140	Pass	
2,4-Dinitrophenol	%	36			25-140	Pass	
2-Methylphenol (o-Cresol)	%	95			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	71			25-140	Pass	
4-Nitrophenol	%	38			25-140	Pass	
Dinoseb	%	57			25-140	Pass	
Phenol	%	105			25-140	Pass	
LCS - % Recovery							
Nitrate & Nitrite (as N)	%	109			70-130	Pass	
Nitrate (as N)	%	109			70-130	Pass	
Nitrite (as N)	%	83			70-130	Pass	
LCS - % Recovery							
Chloride	%	94			70-130	Pass	
Nitrite (as N)	%	80			70-130	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	M26-Fe0030744	NCP	%	126			70-130	Pass	
TRH C10-C14	M26-Fe0028477	NCP	%	88			70-130	Pass	
TRH C6-C10	M26-Fe0030744	NCP	%	122			70-130	Pass	
TRH >C10-C16	M26-Fe0028477	NCP	%	86			70-130	Pass	
Naphthalene	M26-Fe0030744	NCP	%	113			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M26-Fe0030744	NCP	%	125			70-130	Pass	
Toluene	M26-Fe0030744	NCP	%	112			70-130	Pass	
Ethylbenzene	M26-Fe0030744	NCP	%	114			70-130	Pass	
m&p-Xylenes	M26-Fe0030744	NCP	%	114			70-130	Pass	
o-Xylene	M26-Fe0030744	NCP	%	113			70-130	Pass	
Xylenes - Total*	M26-Fe0030744	NCP	%	114			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M26-Fe0027804	NCP	%	112			70-130	Pass	
Acenaphthylene	M26-Fe0027804	NCP	%	116			70-130	Pass	
Anthracene	M26-Fe0027804	NCP	%	104			70-130	Pass	
Benz(a)anthracene	M26-Fe0027804	NCP	%	101			70-130	Pass	
Benzo(a)pyrene	M26-Fe0027804	NCP	%	111			70-130	Pass	
Benzo(b&j)fluoranthene	M26-Fe0027804	NCP	%	83			70-130	Pass	
Benzo(g,h,i)perylene	M26-Fe0027804	NCP	%	94			70-130	Pass	
Benzo(k)fluoranthene	M26-Fe0027804	NCP	%	123			70-130	Pass	
Chrysene	M26-Fe0027804	NCP	%	120			70-130	Pass	
Dibenz(a,h)anthracene	M26-Fe0027804	NCP	%	102			70-130	Pass	
Fluoranthene	M26-Fe0027804	NCP	%	95			70-130	Pass	
Fluorene	M26-Fe0027804	NCP	%	121			70-130	Pass	
Indeno(1,2,3-cd)pyrene	M26-Fe0027804	NCP	%	114			70-130	Pass	
Naphthalene	M26-Fe0027804	NCP	%	94			70-130	Pass	
Phenanthrene	M26-Fe0027804	NCP	%	99			70-130	Pass	
Pyrene	M26-Fe0027804	NCP	%	99			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M26-Fe0027804	NCP	%	76			70-130	Pass	
4,4'-DDD	M26-Fe0027804	NCP	%	88			70-130	Pass	
4,4'-DDE	M26-Fe0027804	NCP	%	91			70-130	Pass	
4,4'-DDT	M26-Fe0027804	NCP	%	91			70-130	Pass	
a-HCH	M26-Fe0027804	NCP	%	96			70-130	Pass	
Aldrin	M26-Fe0027804	NCP	%	95			70-130	Pass	
b-HCH	M26-Fe0027804	NCP	%	98			70-130	Pass	
d-HCH	M26-Fe0027804	NCP	%	102			70-130	Pass	
Dieldrin	M26-Fe0027804	NCP	%	126			70-130	Pass	
Endosulfan I	M26-Fe0027804	NCP	%	89			70-130	Pass	
Endosulfan II	M26-Fe0027804	NCP	%	130			70-130	Pass	
Endosulfan sulphate	M26-Fe0027804	NCP	%	124			70-130	Pass	
Endrin	M26-Fe0027804	NCP	%	89			70-130	Pass	
Endrin aldehyde	M26-Fe0027804	NCP	%	77			70-130	Pass	
Endrin ketone	M26-Fe0027804	NCP	%	103			70-130	Pass	
g-HCH (Lindane)	M26-Fe0027804	NCP	%	96			70-130	Pass	
Heptachlor	M26-Fe0027804	NCP	%	105			70-130	Pass	
Heptachlor epoxide	M26-Fe0027804	NCP	%	129			70-130	Pass	
Hexachlorobenzene	M26-Fe0027804	NCP	%	119			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Methoxychlor	M26-Fe0027804	NCP	%	88		70-130	Pass	
Spike - % Recovery								
Organophosphorus Pesticides				Result 1				
Diazinon	M26-Fe0027804	NCP	%	128		70-130	Pass	
Dimethoate	M26-Fe0027804	NCP	%	122		70-130	Pass	
Ethion	M26-Fe0027804	NCP	%	117		70-130	Pass	
Fenitrothion	M26-Fe0027804	NCP	%	91		70-130	Pass	
Mevinphos	M26-Fe0027804	NCP	%	120		70-130	Pass	
Spike - % Recovery								
Polychlorinated Biphenyls				Result 1				
Aroclor-1016	M26-Fe0027804	NCP	%	87		70-130	Pass	
Aroclor-1260	M26-Fe0027804	NCP	%	93		70-130	Pass	
Spike - % Recovery								
Phenols (Halogenated)				Result 1				
2-Chlorophenol	M26-Fe0027804	NCP	%	120		30-130	Pass	
2,4-Dichlorophenol	M26-Fe0027804	NCP	%	89		30-130	Pass	
2,4,5-Trichlorophenol	M26-Fe0027804	NCP	%	87		30-130	Pass	
2,4,6-Trichlorophenol	M26-Fe0027804	NCP	%	89		30-130	Pass	
2,6-Dichlorophenol	M26-Fe0027804	NCP	%	127		30-130	Pass	
4-Chloro-3-methylphenol	M26-Fe0027804	NCP	%	107		30-130	Pass	
Pentachlorophenol	M26-Fe0027804	NCP	%	97		30-130	Pass	
Tetrachlorophenols - Total	M26-Fe0027804	NCP	%	97		30-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M26-Fe0027804	NCP	%	52		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M26-Fe0027804	NCP	%	82		30-130	Pass	
2-Nitrophenol	M26-Fe0027804	NCP	%	106		30-130	Pass	
2,4-Dimethylphenol	M26-Fe0027804	NCP	%	32		30-130	Pass	
2,4-Dinitrophenol	M26-Fe0027804	NCP	%	39		30-130	Pass	
2-Methylphenol (o-Cresol)	M26-Fe0027804	NCP	%	117		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M26-Fe0027804	NCP	%	85		30-130	Pass	
4-Nitrophenol	M26-Fe0027804	NCP	%	37		30-130	Pass	
Dinoseb	M26-Fe0027804	NCP	%	69		30-130	Pass	
Phenol	M26-Fe0027804	NCP	%	60		30-130	Pass	
Spike - % Recovery								
				Result 1				
Chloride	M26-Fe0021613	NCP	%	107		70-130	Pass	
Nitrate & Nitrite (as N)	M26-Fe0027804	NCP	%	98		70-130	Pass	
Nitrate (as N)	M26-Fe0027804	NCP	%	99		70-130	Pass	
Phosphate total (as P)	B26-Fe0020692	NCP	%	112		70-130	Pass	
Sulphate (as SO4)	M26-Fe0021613	NCP	%	76		70-130	Pass	
Total Kjeldahl Nitrogen (as N)	S26-Fe0020988	NCP	%	102		70-130	Pass	
Spike - % Recovery								
				Result 1				
Total Suspended Solids Dried at 103°C to 105°C	M26-Fe0028395	CP	%	84		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Aluminium (filtered)	M26-Fe0028395	CP	%	105		75-125	Pass	
Arsenic (filtered)	M26-Fe0028395	CP	%	99		75-125	Pass	
Cadmium (filtered)	M26-Fe0028395	CP	%	98		75-125	Pass	
Chromium (filtered)	M26-Fe0028395	CP	%	99		75-125	Pass	
Copper (filtered)	M26-Fe0028395	CP	%	96		75-125	Pass	
Iron (filtered)	M26-Fe0028395	CP	%	96		75-125	Pass	
Lead (filtered)	M26-Fe0028395	CP	%	98		75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Manganese (filtered)	M26-Fe0028395	CP	%	99			75-125	Pass	
Mercury (filtered)	M26-Fe0028395	CP	%	92			75-125	Pass	
Nickel (filtered)	M26-Fe0028395	CP	%	96			75-125	Pass	
Selenium (filtered)	M26-Fe0028395	CP	%	95			75-125	Pass	
Zinc (filtered)	M26-Fe0028395	CP	%	100			75-125	Pass	
Spike - % Recovery									
Alkali Metals				Result 1					
Calcium	M26-Fe0028396	CP	%	94			75-125	Pass	
Magnesium	M26-Fe0028396	CP	%	93			75-125	Pass	
Potassium	M26-Fe0028396	CP	%	92			75-125	Pass	
Sodium	M26-Fe0028396	CP	%	92			75-125	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	M26-Fe0028399	CP	%	72			70-130	Pass	
Nitrite (as N)	M26-Fe0028399	CP	%	70			70-130	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	M26-Fe0027912	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C10-C14	M26-Fe0028394	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	M26-Fe0028394	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	M26-Fe0028394	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C6-C10	M26-Fe0027912	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C10-C16	M26-Fe0028394	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Naphthalene	M26-Fe0027912	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH >C16-C34	M26-Fe0028394	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	M26-Fe0028394	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M26-Fe0027912	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	M26-Fe0027912	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	M26-Fe0027912	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	M26-Fe0027912	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	M26-Fe0027912	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	M26-Fe0027912	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&i)fluoranthene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g,h,i)perylene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a,h)anthracene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	M26-Fe0028394	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
4,4'-DDD	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
4,4'-DDE	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
4,4'-DDT	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
a-HCH	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Aldrin	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
b-HCH	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
d-HCH	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Dieldrin	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan I	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan II	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan sulphate	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endrin	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endrin aldehyde	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endrin ketone	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
g-HCH (Lindane)	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Heptachlor	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Heptachlor epoxide	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Hexachlorobenzene	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Methoxychlor	M26-Fe0028394	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Toxaphene	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Bolstar	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Chlorfenvinphos	M26-Fe0028394	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Chlorpyrifos	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Chlorpyrifos-methyl	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Coumaphos	M26-Fe0028394	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Demeton-S	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Demeton-O	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Diazinon	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Dichlorvos	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Dimethoate	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Disulfoton	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
EPN	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethion	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethoprop	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethyl parathion	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fenitrothion	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fensulfathion	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fenthion	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Malathion	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Merphos	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Methyl parathion	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Mevinphos	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Monocrotophos	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Naled	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Omethoate	M26-Fe0028394	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Phorate	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Pirimiphos-methyl	M26-Fe0028394	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Pyrazophos	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ronnel	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Terbufos	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass

Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Tetrachlorvinphos	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Tokuthion	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Trichloronate	M26-Fe0028394	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1221	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1232	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1242	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1248	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1254	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1260	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Total PCB*	M26-Fe0028394	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M26-Fe0028394	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2,4-Dichlorophenol	M26-Fe0028394	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2,4,5-Trichlorophenol	M26-Fe0028394	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,4,6-Trichlorophenol	M26-Fe0028394	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,6-Dichlorophenol	M26-Fe0028394	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
4-Chloro-3-methylphenol	M26-Fe0028394	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
Pentachlorophenol	M26-Fe0028394	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
Tetrachlorophenols - Total	M26-Fe0028394	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M26-Fe0028394	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M26-Fe0028394	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
2-Nitrophenol	M26-Fe0028394	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,4-Dimethylphenol	M26-Fe0028394	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2,4-Dinitrophenol	M26-Fe0028394	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
2-Methylphenol (o-Cresol)	M26-Fe0028394	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M26-Fe0028394	CP	mg/L	< 0.006	< 0.006	<1	30%	Pass
4-Nitrophenol	M26-Fe0028394	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
Dinoseb	M26-Fe0028394	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
Phenol	M26-Fe0028394	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chloride	M26-Fe0021584	NCP	mg/L	12000	12000	1.0	30%	Pass
Dissolved Organic Carbon	M26-Fe0028394	CP	mg/L	45	46	2.0	30%	Pass
Phosphate total (as P)	M26-Fe0021584	NCP	mg/L	0.01	0.01	9.0	30%	Pass
Sulphate (as SO4)	M26-Fe0021584	NCP	mg/L	3100	3500	13	30%	Pass
Total Kjeldahl Nitrogen (as N)	M26-Fe0028476	NCP	mg/L	10	11	1.0	30%	Pass
Total Suspended Solids Dried at 103°C to 105°C	M26-Fe0025397	NCP	mg/L	43	47	8.5	30%	Pass
Duplicate								
Alkalinity (speciated)				Result 1	Result 2	RPD		
Bicarbonate Alkalinity (as CaCO3)	M26-Fe0027804	NCP	mg/L	430	460	6.0	30%	Pass
Carbonate Alkalinity (as CaCO3)	M26-Fe0027804	NCP	mg/L	< 20	< 20	<1	30%	Pass
Total Alkalinity (as CaCO3)	M26-Fe0027804	NCP	mg/L	430	460	6.0	30%	Pass

Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C10-C14	M26-Fe0028395	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass
TRH C15-C28	M26-Fe0028395	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH C29-C36	M26-Fe0028395	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH >C10-C16	M26-Fe0028395	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass
TRH >C16-C34	M26-Fe0028395	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH >C34-C40	M26-Fe0028395	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Acenaphthylene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Anthracene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benz(a)anthracene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(a)pyrene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(b&j)fluoranthene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(g,h,i)perylene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(k)fluoranthene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chrysene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibenz(a,h)anthracene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Fluoranthene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Fluorene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Naphthalene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Phenanthrene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Pyrene	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
4,4'-DDD	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
4,4'-DDE	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
4,4'-DDT	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
a-HCH	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Aldrin	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
b-HCH	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
d-HCH	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Dieldrin	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan I	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan II	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan sulphate	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endrin	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endrin ketone	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
g-HCH (Lindane)	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Heptachlor	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Heptachlor epoxide	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Hexachlorobenzene	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Methoxychlor	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Toxaphene	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Bolstar	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Chlorfenvinphos	M26-Fe0028395	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Chlorpyrifos	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Chlorpyrifos-methyl	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Coumaphos	M26-Fe0028395	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass

Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Demeton-S	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Demeton-O	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Diazinon	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Dichlorvos	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Dimethoate	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Disulfoton	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
EPN	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethion	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethoprop	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethyl parathion	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fenitrothion	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fensulfotthion	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fenthion	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Malathion	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Merphos	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Methyl parathion	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Mevinphos	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Monocrotophos	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Naled	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Omethoate	M26-Fe0028395	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Phorate	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Pirimiphos-methyl	M26-Fe0028395	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Pyrazophos	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ronnel	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Terbufos	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Tetrachlorvinphos	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Tokuthion	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Trichloronate	M26-Fe0028395	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1221	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1232	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1242	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1248	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1254	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1260	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Total PCB*	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M26-Fe0028395	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2,4-Dichlorophenol	M26-Fe0028395	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2,4,5-Trichlorophenol	M26-Fe0028395	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,4,6-Trichlorophenol	M26-Fe0028395	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,6-Dichlorophenol	M26-Fe0028395	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
4-Chloro-3-methylphenol	M26-Fe0028395	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
Pentachlorophenol	M26-Fe0028395	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
Tetrachlorophenols - Total	M26-Fe0028395	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M26-Fe0028395	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M26-Fe0028395	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
2-Nitrophenol	M26-Fe0028395	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,4-Dimethylphenol	M26-Fe0028395	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass

Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2,4-Dinitrophenol	M26-Fe0028395	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
2-Methylphenol (o-Cresol)	M26-Fe0028395	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M26-Fe0028395	CP	mg/L	< 0.006	< 0.006	<1	30%	Pass
4-Nitrophenol	M26-Fe0028395	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
Dinoseb	M26-Fe0028395	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
Phenol	M26-Fe0028395	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Ammonia (as N)	M26-Fe0028395	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
Dissolved Organic Carbon	M26-Fe0028395	CP	mg/L	38	42	10	30%	Pass
Nitrate & Nitrite (as N)	M26-Fe0028395	CP	mg/L	18	20	7.0	30%	Pass
Nitrate (as N)	M26-Fe0028395	CP	mg/L	18	20	7.0	30%	Pass
Nitrite (as N)	M26-Fe0028395	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Aluminium (filtered)	M26-Fe0028395	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass
Arsenic (filtered)	M26-Fe0028395	CP	mg/L	0.001	< 0.001	17	30%	Pass
Cadmium (filtered)	M26-Fe0028395	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Chromium (filtered)	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Copper (filtered)	M26-Fe0028395	CP	mg/L	0.006	0.006	1.0	30%	Pass
Iron (filtered)	M26-Fe0028395	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass
Lead (filtered)	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Manganese (filtered)	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Mercury (filtered)	M26-Fe0028395	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Nickel (filtered)	M26-Fe0028395	CP	mg/L	0.002	0.002	2.0	30%	Pass
Selenium (filtered)	M26-Fe0028395	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Zinc (filtered)	M26-Fe0028395	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Duplicate								
Alkali Metals				Result 1	Result 2	RPD		
Calcium	M26-Fe0028396	CP	mg/L	50	48	5.0	30%	Pass
Magnesium	M26-Fe0028396	CP	mg/L	29	28	3.0	30%	Pass
Potassium	M26-Fe0028396	CP	mg/L	29	28	4.0	30%	Pass
Sodium	M26-Fe0028396	CP	mg/L	180	170	3.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chemical Oxygen Demand (COD)	M26-Fe0028399	CP	mg/L	28	32	14	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.
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

Authorised by:

Karl Bulow	Analytical Services Manager
Edward Lee	Senior Analyst-Organic
Emily Rosenberg	Senior Analyst-Inorganic
Emily Rosenberg	Senior Analyst-Metal
Joseph Edouard	Senior Analyst-Organic
Joseph Edouard	Senior Analyst-Volatile
Luke Holt	Senior Analyst-Inorganic
Mary Makarios	Senior Analyst-Inorganic
Mary Makarios	Senior Analyst-Metal
Sheha Prakash	Senior Analyst-Organic



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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CHAIN OF CUSTODY RECORD

CLIENT DETAILS

Page 1 of 1



A division of Envirolab Group



Company Name : Tierra Environment				Contact Name : Daryl Burrows				Purchase Order : NA				COC Number : T2159																							
Office Address :				Project Manager : Daryl Burrows				Project Number : ASY 24 050.05				QUOTE ID :																							
				Email for results : general@tierra.com.au				Project Name : Yulara Landfill				Esdat																							
Special Directions & Comments : Metals - (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Fe, Al, Mn, Se) 				Analytes								Laboratory Address Envirolab - Melbourne 25 Research Drive, Croydon South, VIC 3136 Phone: 03 9763 2500 Fax: 03 9763 2633 Email: adelaide@envirolab.com.au																							
				Sample ID				Date				Matrix				Containers				Sample Comments															
				500P				250A				50P				250A				VIAL				125mL A				Jar							
				1				MW2D-Y				07-Feb-26				Water				1				1				2				2			
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Relinquished By: Daryl Burrows				Received By:				Received By:				Turn around Time				Method Of Shipment																			
Date & Time : 9/2/26 11:30am				Date & Time :				Date & Time :				24 Hrs 48 Hrs				☐ Courier ☒ Hand Delivered ☐ Postal																			
Signature:				Signature:				Signature:				5 Days 10 Days																							
Report Number :				Report Number :				Report Number :																											
For samples which require transportation between internal laboratories				Departing				Date & Time				Upon Receipt				Date & Time																			
				Signature				Temperature				Signature				Temperature																			

Certificate of Analysis MHB0215

Client Details

Client	Tierra Environment
Contact	Daryl Burrows
Address	570 Goodwood Road, Daw Park, SA, 5041

Sample Details

Your Reference	ASY 24 050.05
Number of Samples	1 Water
Date Samples Received	11/02/2026
Date Instructions Received	11/02/2026

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details

Date Final Results Expected	18/02/2026
Date of Issue	19/02/2026

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Accredited for compliance with ISO/IEC 17025. Tests not covered by NATA are denoted with *.

Authorisation Details

Results Approved By	Chaminda Gunasekara, Inorganics Supervisor Chris De Luca, Lab Manager Jenny Xin He, Chemist Maggie Hu, Organics Supervisor Tara White, Metals Supervisor Tianna Milburn, Operations Manager
Laboratory Manager	Chris De Luca

Certificate of Analysis MHB0215

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
MHB0215-01	MW2D-Y	Water	07/02/2026	11/02/2026

Certificate of Analysis MHB0215

Volatile TRH and BTEX (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
TRH C6-C9	µg/L	10	<10
TRH C6-C10	µg/L	10	<10
TRH C6-C10 less BTEX (F1)	µg/L	10	<10
Methyl tert butyl ether (MTBE)	µg/L	1.0	<1.0
Benzene	µg/L	1.0	<1.0
Toluene	µg/L	1.0	<1.0
Ethylbenzene	µg/L	1.0	<1.0
meta+para Xylene	µg/L	2.0	<2.0
ortho-Xylene	µg/L	1.0	<1.0
Total +ve Xylenes	µg/L	1.0	<1.0
Naphthalene (value used in F2 calc)	µg/L	1.0	<1.0
Total +ve BTEX	µg/L	1.0	<1.0
Surrogate Dibromofluoromethane	%		105
Surrogate Toluene-D8	%		102
Surrogate 4-Bromofluorobenzene	%		110

Certificate of Analysis MHB0215

Semi-volatile TRH (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	100	<100
TRH C29-C36	µg/L	100	<100
Total +ve TRH C10-C36	µg/L	50	<50
TRH >C10-C16	µg/L	50	<50
TRH >C10-C16 less Naphthalene F2	µg/L	50	<50
TRH >C16-C34 (F3)	µg/L	100	<100
TRH >C34-C40 (F4)	µg/L	100	<100
Total +ve TRH >C10-C40	µg/L	50	<50
Surrogate o-Terphenyl	%		69.2

Certificate of Analysis MHB0215

Polycyclic Aromatic Hydrocarbons (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
Naphthalene	µg/L	0.10	<0.10
Acenaphthylene	µg/L	0.10	<0.10
Acenaphthene	µg/L	0.10	<0.10
Fluorene	µg/L	0.10	<0.10
Phenanthrene	µg/L	0.10	<0.10
Anthracene	µg/L	0.10	<0.10
Fluoranthene	µg/L	0.10	<0.10
Pyrene	µg/L	0.10	<0.10
Benzo(a)anthracene	µg/L	0.10	<0.10
Chrysene	µg/L	0.10	<0.10
Benzo(b,j,k)fluoranthene	µg/L	0.20	<0.20
Benzo(a)pyrene	µg/L	0.10	<0.10
Indeno(1,2,3-c,d)pyrene	µg/L	0.10	<0.10
Dibenzo(a,h)anthracene	µg/L	0.10	<0.10
Benzo(g,h,i)perylene	µg/L	0.10	<0.10
Total +ve PAH	µg/L	0.10	<0.10
Surrogate p-Terphenyl-D14	%		92.8

Certificate of Analysis MHB0215

Organochlorine Pesticides (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
alpha-BHC	µg/L	0.20	<0.20
Hexachlorobenzene	µg/L	0.20	<0.20
beta-BHC	µg/L	0.20	<0.20
gamma-BHC	µg/L	0.20	<0.20
delta-BHC	µg/L	0.20	<0.20
Heptachlor	µg/L	0.20	<0.20
Aldrin	µg/L	0.20	<0.20
Heptachlor epoxide	µg/L	0.20	<0.20
trans-Chlordane	µg/L	0.20	<0.20
cis-Chlordane	µg/L	0.20	<0.20
Endosulfan I	µg/L	0.20	<0.20
4,4'-DDE	µg/L	0.20	<0.20
Dieldrin	µg/L	0.20	<0.20
Endrin	µg/L	0.20	<0.20
4,4'-DDD	µg/L	0.20	<0.20
Endosulfan II	µg/L	0.20	<0.20
Endrin aldehyde	µg/L	0.20	<0.20
4,4'-DDT	µg/L	0.20	<0.20
Endosulfan sulfate	µg/L	0.20	<0.20
Endrin ketone	µg/L	0.20	<0.20
Methoxychlor	µg/L	0.20	<0.20
Mirex	µg/L	0.20	<0.20
Total +ve OCP	µg/L	0.20	<0.20
Surrogate 4-chloro-3-nitrobenzotrifluoride	%		87.5

Certificate of Analysis MHB0215

Organophosphorus Pesticides (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
Dichlorvos	µg/L	0.20	<0.20
Dimethoate	µg/L	0.20	<0.20
Diazinon	µg/L	0.20	<0.20
Chlorpyrifos-methyl	µg/L	0.20	<0.20
Ronnel	µg/L	0.20	<0.20
Fenitrothion	µg/L	0.20	<0.20
Malathion	µg/L	0.20	<0.20
Chlorpyrifos	µg/L	0.20	<0.20
Parathion	µg/L	0.20	<0.20
Bromophos-ethyl	µg/L	0.20	<0.20
Ethion	µg/L	0.20	<0.20
Coumaphos	µg/L	0.20	<0.20
Disulfoton	µg/L	0.20	<0.20
Fenamiphos	µg/L	0.20	<0.20
Fenthion	µg/L	0.20	<0.20
Methidathion	µg/L	0.20	<0.20
Mevinphos	µg/L	0.20	<0.20
Parathion-methyl	µg/L	0.20	<0.20
Phorate	µg/L	0.20	<0.20
Phosalone	µg/L	0.20	<0.20
Azinphos-methyl	µg/L	0.20	<0.20
Surrogate 4-chloro-3-nitrobenzotrifluoride	%		87.5

Certificate of Analysis MHB0215

Polychlorinated Biphenyls (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
Aroclor 1016	µg/L	2.0	<2.0
Aroclor 1221	µg/L	2.0	<2.0
Aroclor 1232	µg/L	2.0	<2.0
Aroclor 1242	µg/L	2.0	<2.0
Aroclor 1248	µg/L	2.0	<2.0
Aroclor 1254	µg/L	2.0	<2.0
Aroclor 1260	µg/L	2.0	<2.0
Total +ve PCB (1016-1260)	µg/L	2.0	<2.0
Surrogate 2-Fluorobiphenyl	%		86.1

Certificate of Analysis MHB0215

Speciated Phenols (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
Phenol	µg/L	1.0	<1.0
2-Chlorophenol	µg/L	1.0	<1.0
2-Methylphenol	µg/L	1.0	<1.0
3/4-Methylphenol	µg/L	2.0	<2.0
2-Nitrophenol	µg/L	1.0	<1.0
2,4-Dimethylphenol	µg/L	1.0	<1.0
2,4-Dichlorophenol	µg/L	1.0	<1.0
2,6-Dichlorophenol	µg/L	1.0	<1.0
4-Chloro-3-methylphenol	µg/L	5.0	<5.0
2,4,6-Trichlorophenol	µg/L	1.0	<1.0
2,4,5-Trichlorophenol	µg/L	1.0	<1.0
2,4-Dinitrophenol	µg/L	20	<20
4-Nitrophenol	µg/L	20	<20
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	µg/L	2.0	<2.0
4,6-Dinitro-2-methylphenol	µg/L	20	<20
Pentachlorophenol	µg/L	5.0	<5.0
Dinoseb	µg/L	20	<20
2-Cyclohexyl-4,6-Dinitrophenol	µg/L	20	<20
Surrogate 2-Fluorophenol	%		63.2
Surrogate Phenol-D6	%		47.4

Certificate of Analysis MHB0215

Acid Extractable Metals (Water)

Envirolab ID	Units	PQL	MHB0215-01
Your Reference			MW2D-Y
Date Sampled			07/02/2026
Phosphorus	mg/L	0.050	0.095

Certificate of Analysis MHB0215

Dissolved Low Level Metals (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
Aluminium	µg/L	10	<10
Arsenic	µg/L	1.0	<1.0
Cadmium	µg/L	0.10	0.24
Chromium	µg/L	1.0	<1.0
Copper	µg/L	1.0	<1.0
Iron	µg/L	10	<10
Mercury	µg/L	0.050	<0.050
Manganese	µg/L	1.0	2.3
Nickel	µg/L	1.0	1.9
Lead	µg/L	1.0	<1.0
Selenium	µg/L	1.0	<1.0
Zinc	µg/L	1.0	<1.0

Certificate of Analysis MHB0215

Inorganics - Physical Parameters (Water)

Envirolab ID	Units	PQL	MHB0215-01
Your Reference			MW2D-Y
Date Sampled			07/02/2026
Total Suspended Solids	mg/L	5.0	3400

Certificate of Analysis MHB0215

Inorganics - Ionic Balance and Indexes (Water)

Envirolab ID Your Reference Date Sampled	Units	PQL	MHB0215-01 MW2D-Y 07/02/2026
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	410
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	410
Chloride	mg/L	1.0	110
Sulfate	mg/L	1.0	43
Calcium	mg/L	0.50	47
Magnesium	mg/L	0.50	29
Potassium	mg/L	0.50	35
Sodium	mg/L	0.50	160
Hardness (calc) equivalent CaCO3	mg/L	3.0	240
Ionic Balance	%		0.68
Total Anions	mg/L	7.0	560
Anions as meq	meq/L	0.59	11
Total Cations	mg/L	2.0	270
Cations as meq	meq/L	0.10	13

Certificate of Analysis MHB0215

Inorganics - Carbon, Nitrogen and Sulfur Species (Water) - Analysed By Envirolab Services
Sydney

Envirolab ID	Units	PQL	MHB0215-01
Your Reference			MW2D-Y
Date Sampled			07/02/2026
Dissolved Organic Carbon	mg/L	1.0	1.3

Certificate of Analysis MHB0215

Inorganics - Nutrients (Water)

Envirolab ID	Units	PQL	MHB0215-01
Your Reference			MW2D-Y
Date Sampled			07/02/2026
Ammonia as N	mg/L	0.0050	0.013
Nitrate as N	mg/L	0.0050	<0.0050
Nitrate as NO3 by calculation	mg/L	0.020	<0.020
Nitrite as N	mg/L	0.0050	0.0096
Nitrite as NO2 by calculation	mg/L	0.020	<0.020
NOx as N	mg/L	0.0050	5.3
TKN as N	mg/L	0.10	0.22
Total Nitrogen as N by calculation	mg/L	0.10	5.5
Organic Nitrogen by calc	mg/L	0.10	0.21
Phosphate as P	mg/L	0.0050	0.0058

Certificate of Analysis MHB0215

Inorganics - Common Wastewater Parameters (Water)

Envirolab ID	Units	PQL	MHB0215-01
Your Reference			MW2D-Y
Date Sampled			07/02/2026
COD	mg O2/L	50	52

Certificate of Analysis MHB0215

Method Summary

Method ID	Methodology Summary
Calc	Calculation
Calc - ION	Calculation
INORG-006	Alkalinity - determined titrimetrically based on APHA latest edition 2320-B. Solids reported from a 1:5 water extract unless otherwise specified. Total Carbon Dioxide - determined by calculation in accordance with APHA latest edition, 4500-CO2 D.
INORG-019	Suspended Solids - determined gravimetrically by filtration of the sample. The solids are dried at 104±5°C
INORG-040	The concentrations of the major ions (mg/L) are converted to milliequivalents and summed. The ionic balance should be within +/- 15% i.e. total anions = total cations +/-15%.
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-057	Ammonia - determined colourimetrically. Water samples are filtered on receipt prior to analysis. Soils and OHS media are analysed following a water extraction. Alternatively, Ammonia can be extracted from soil using 1M KCl.
INORG-060	Phosphate - determined colourimetrically using APHA latest edition 4500 P E. Water samples are filtered on receipt prior to analysis. Soils are analysed from a water extract.
INORG-062	TKN - determined colourimetrically. Alternatively, TKN can be derived from calculation (Total N - NOx).
INORG-067	Samples are digested in acid with a known excess of potassium dichromate then the colour change is determined by discrete analyser or UV-VIS in accordance with APHA latest edition 5220 D.
INORG-079	Carbon forms (inorganic, organic, total) determined using a TOC/NDIR analyser via combustion. Dissolved aqueous forms require filtering prior to determination.
INORG-081	Anions determined by Ion Chromatography. Waters samples are filtered on receipt prior to analysis. Solids are analysed from a water extract. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
METALS-020	Determination of various metals by ICP-AES. Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically, there is no guarantee that the salt form is completely soluble in the acids used in the preparation. Where molecular anion forms are calculated from an element (e.g. SO4 from S or PO4 from P stoichiometrically), the assumption is that the element is only present in that molecular anion form. Submission of low masses of sample e.g. for dust samples, may result in raised PQLs.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS. Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements. Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.
ORG-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
ORG-021/022/025_P CB	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD and/or GC-MS/GC-MSMS.
ORG-022	Determination of semi-volatile organic compounds (SVOCs) by GC-MS. Water samples are extracted by LLE and soils using DCM/Acetone/Methanol.
ORG-022_OC	Determination of semi-volatile organic compounds (SVOCs) by GC-MS. Water samples are extracted by LLE and soils using DCM/Acetone/Methanol.
ORG-022_PAH	Determination of semi-volatile organic compounds (SVOCs) by GC-MS. Water samples are extracted by LLE and solids using DCM/Acetone/Methanol. For PAHs:- Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. 1. 'TEQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'TEQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'TEQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, for Total +ve calculations, the PQL is reflective of the lowest individual PQL and therefore, for example, "Total +ve PAHs" is simply a sum of the positive individual PAHs.
ORG-023_F1_TOT	Determination of volatile organic compounds (VOCs) by P&T-GC-MS. Water samples are analysed directly by purge and trap GC-MS. Solids are extracted with Methanol, diluted and analysed by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

Certificate of Analysis MHB0215

Result Definitions

Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)
##	Indicates a laboratory acceptance criteria outlier, for further details, see Result Comments and/or QC Comments

Quality Control Definitions

Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

Certificate of Analysis MHB0215

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria. Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction. Spikes for Physical and Aggregate Tests are not applicable. For VOCs in water samples, three vials are required for duplicate or spike analysis.

General Acceptance Criteria (GAC) - Analyte specific criteria applies for some analytes and is reflected in QC recovery tables.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% - see ELN-P05 QAQC tables for details (available on request); <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase. Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was typically insufficient in order to satisfy laboratory QA/QC protocols.

Miscellaneous Information

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached. We have taken the sampling date as being the date received at the laboratory.

Two significant figures are reported for the majority of tests and with a high degree of confidence, for results <10*PQL, the second significant figure may be in doubt i.e. has a relatively high degree of uncertainty and is provided for information only.

Measurement Uncertainty estimates can be downloaded from the [Envirolab Resources website](#) or obtained directly by contacting the laboratory.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS where sediment/solids are included by default.

Urine Analysis - The BEI values listed are taken from the 2022 edition of *TLVs and BEIs Threshold Limits by ACGIH*.

Air volumes are typically provided by customers (often as flow rate(s) and sampling time(s) and/or simply volume(s) sampled or exposure times (determines 'volume' passive badges are exposed to)). Hence in such circumstances the volume measurement is inevitably not covered by Envirolab's NATA accreditation. An exception may occur where Envirolab Newcastle does the sampling where accreditation exists for certain types of sampling and hence volume determination(s). Note air volumes are often used to determine concentrations for dust and/or analyses on filters, sorbents and in impingers. For canister sampling, the air volume is covered by Envirolab's NATA accreditation.

Data Quality Assessment Summary MHB0215

Client Details

Client	Tierra Environment
Your Reference	ASY 24 050.05
Date Issued	19/02/2026

Recommended Holding Time Compliance

Recommended holding time exceedances exist - See detailed list below

Quality Control and QC Frequency

QC Type	Compliant	Details
Blank	Yes	No Outliers
LCS	Yes	No Outliers
Duplicates	Yes	No Outliers
Matrix Spike	No	Matrix Spike Outliers Exist - See detailed list below
Surrogates / Extracted Internal Standards	Yes	No Outliers
QC Frequency	No	QC Frequency Outliers Exist - See detailed list below

Surrogates/Extracted Internal Standards, Duplicates and/or Matrix Spikes are not always relevant/applicable to certain analyses and matrices. Therefore, said QC measures are deemed compliant in these situations by default. See Laboratory Acceptance Criteria for more information

Data Quality Assessment Summary MHB0215

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
vTRH&MBTEXN Water	1	07/02/2026	16/02/2026	16/02/2026	Yes
sTRH Water	1	07/02/2026	12/02/2026	19/02/2026	Yes
PAH Water	1	07/02/2026	12/02/2026	13/02/2026	Yes
OCP Water	1	07/02/2026	12/02/2026	13/02/2026	Yes
OPP (21 list) Water	1	07/02/2026	12/02/2026	13/02/2026	Yes
PCB Water	1	07/02/2026	12/02/2026	13/02/2026	Yes
Speciated Phenols Water	1	07/02/2026	12/02/2026	13/02/2026	Yes
Total Phosphorus Water	1	07/02/2026	13/02/2026	16/02/2026	Yes
Dissolved Metals (LL) Water	1	07/02/2026	12/02/2026	13/02/2026	Yes
Dissolved Metals (LL)-Hg Water	1	07/02/2026	13/02/2026	16/02/2026	Yes
TSS Water	1	07/02/2026	16/02/2026	16/02/2026	No
Alkalinity Suite Water	1	07/02/2026	12/02/2026	12/02/2026	Yes
Chloride Water	1	07/02/2026	12/02/2026	12/02/2026	Yes
Dissolved Cations Water	1	07/02/2026	13/02/2026	16/02/2026	Yes
Ion Balance Water	1	07/02/2026	12/02/2026	19/02/2026	Yes
	1	07/02/2026	13/02/2026	16/02/2026	Yes
Sulfate Water	1	07/02/2026	12/02/2026	12/02/2026	Yes
Dissolved Organic Carbon Water	1	07/02/2026	13/02/2026	19/02/2026	Yes
Nitrogen - Ammonia Water	1	07/02/2026	16/02/2026	16/02/2026	Yes
Nitrogen - Nitrate Water	1	07/02/2026	12/02/2026	12/02/2026	Yes
Nitrogen - Nitrite Water	1	07/02/2026	11/02/2026	12/02/2026	No
Nitrogen - NOx Water	1	07/02/2026	11/02/2026	12/02/2026	Yes
Nitrogen - TKN Water	1	07/02/2026	12/02/2026	13/02/2026	Yes
Phosphate as P Water	1	07/02/2026	11/02/2026	18/02/2026	No
COD Water	1	07/02/2026	18/02/2026	18/02/2026	Yes

Data Quality Assessment Summary MHB0215

Outliers: Matrix Spike

INORG-055 | Inorganics - Nutrients (Water) | Batch BHB1862

Sample ID	Analyte	% Limits	% Recovery
BHB1862-MS1#	Nitrate as N	70 - 130	##[2]

INORG-062 | Inorganics - Nutrients (Water) | Batch BHB2035

Sample ID	Analyte	% Limits	% Recovery
BHB2035-MS1#	TKN as N	70 - 130	##[1]

METALS-022 | Dissolved Low Level Metals (Water) | Batch BHB1876

Sample ID	Analyte	% Limits	% Recovery
BHB1876-MS1#	Iron	70 - 130	##[1]

ORG-020 | Semi-volatile TRH (Water) | Batch BHB1896

Sample ID	Analyte	% Limits	% Recovery
BHB1896-MS1#	TRH >C10-C16	60 - 140	48.0[3]
BHB1896-MS1#	TRH C10-C14	60 - 140	50.0[3]

Data Quality Assessment Summary MHB0215

Outliers: QC Frequency

INORG-079 | Inorganics - Carbon, Nitrogen and Sulfur Species (Water) | Batch BHB2249

Analysis	QC Type	Expected	Reported
Dissolved Organic Carbon	Duplicate	1	0
	Matrix Spike	1	0

ORG-020 | Semi-volatile TRH (Water) | Batch BHB1896

Analysis	QC Type	Expected	Reported
sTRH	Duplicate	1	0

ORG-021/022/025_PCB | Polychlorinated Biphenyls (Water) | Batch BHB1896

Analysis	QC Type	Expected	Reported
PCB	Duplicate	1	0

ORG-022 | Organophosphorus Pesticides (Water) | Batch BHB1896

Analysis	QC Type	Expected	Reported
OPP (21 list)	Duplicate	1	0
Speciated Phenols	Duplicate	1	0

ORG-022_OC | Organochlorine Pesticides (Water) | Batch BHB1896

Analysis	QC Type	Expected	Reported
OCP	Duplicate	1	0

ORG-022_PAH | Polycyclic Aromatic Hydrocarbons (Water) | Batch BHB1896

Analysis	QC Type	Expected	Reported
PAH	Duplicate	1	0

Quality Control MHB0215

ORG-023_F1_TOT|Volatile TRH and BTEX (Water) | Batch BHB2379

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHB2379-DUP1# Samp QC RPD %	MHB0215-01 Samp QC RPD %		
TRH C6-C9	µg/L	10	<10	<10 <10 [NA]	<10 <10 [NA]	111	94.0
TRH C6-C10	µg/L	10	<10	<10 <10 [NA]	<10 <10 [NA]	110	93.5
Methyl tert butyl ether (MTBE)	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
Benzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	99.2	101
Toluene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	99.5	91.2
Ethylbenzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	98.4	90.2
meta+para Xylene	µg/L	2.0	<2.0	<2.0 <2.0 [NA]	<2.0 <2.0 [NA]	102	92.5
ortho-Xylene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	103	97.1
Naphthalene (value used in F2 calc)	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
Surrogate Dibromofluoromethane	%		103	103 / 103	105 / 105	99.7	116
Surrogate Toluene-D8	%		102	102 / 102	102 / 101	104	99.8
Surrogate 4-Bromofluorobenzene	%		109	109 / 109	110 / 110	102	108

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

ORG-020| Semi-volatile TRH (Water) | Batch BHB1896

Analyte	Units	PQL	Blank	LCS %	Spike %
					BHB1896-MS1#
TRH C10-C14	µg/L	50	<50	61.9	50.0[3]
TRH C15-C28	µg/L	100	<100	111	82.6
TRH C29-C36	µg/L	100	<100	135	86.8
TRH >C10-C16	µg/L	50	<50	64.4	48.0[3]
TRH >C16-C34 (F3)	µg/L	100	<100	118	89.1
TRH >C34-C40 (F4)	µg/L	100	<100	124	66.3
Surrogate o-Terphenyl	%		65.6	87.6	67.6

Batch QC Comments: [6]

ORG-022_PAH|Polycyclic Aromatic Hydrocarbons (Water) | Batch BHB1896

Analyte	Units	PQL	Blank	LCS %	Spike %
					MHB0215-01
Naphthalene	µg/L	0.10	<0.10	82.4	67.7
Acenaphthylene	µg/L	0.10	<0.10	[NA]	[NA]
Acenaphthene	µg/L	0.10	<0.10	80.1	71.2
Fluorene	µg/L	0.10	<0.10	77.4	72.0
Phenanthrene	µg/L	0.10	<0.10	82.5	79.4
Anthracene	µg/L	0.10	<0.10	[NA]	[NA]
Fluoranthene	µg/L	0.10	<0.10	87.1	91.0
Pyrene	µg/L	0.10	<0.10	89.2	94.0
Benzo(a)anthracene	µg/L	0.10	<0.10	[NA]	[NA]
Chrysene	µg/L	0.10	<0.10	97.8	95.9
Benzo(b,j,k)fluoranthene	µg/L	0.20	<0.20	[NA]	[NA]
Benzo(a)pyrene	µg/L	0.10	<0.10	101	91.5
Indeno(1,2,3-c,d)pyrene	µg/L	0.10	<0.10	[NA]	[NA]
Dibenzo(a,h)anthracene	µg/L	0.10	<0.10	[NA]	[NA]
Benzo(g,h,i)perylene	µg/L	0.10	<0.10	[NA]	[NA]
Surrogate p-Terphenyl-D14	%		75.1	83.7	83.0

Batch QC Comments: [6]

Quality Control MHB0215

ORG-022_OC | Organochlorine Pesticides (Water) | Batch BHB1896

Analyte	Units	PQL	Blank	LCS %	Spike % MHB0215-01
alpha-BHC	µg/L	0.20	<0.20	80.3	75.3
Hexachlorobenzene	µg/L	0.20	<0.20	[NA]	[NA]
beta-BHC	µg/L	0.20	<0.20	80.0	81.1
gamma-BHC	µg/L	0.20	<0.20	[NA]	[NA]
delta-BHC	µg/L	0.20	<0.20	[NA]	[NA]
Heptachlor	µg/L	0.20	<0.20	87.1	80.5
Aldrin	µg/L	0.20	<0.20	89.3	80.2
Heptachlor epoxide	µg/L	0.20	<0.20	86.2	86.2
trans-Chlordane	µg/L	0.20	<0.20	[NA]	[NA]
cis-Chlordane	µg/L	0.20	<0.20	[NA]	[NA]
Endosulfan I	µg/L	0.20	<0.20	[NA]	[NA]
4,4'-DDE	µg/L	0.20	<0.20	86.4	82.3
Dieldrin	µg/L	0.20	<0.20	85.7	88.5
Endrin	µg/L	0.20	<0.20	108	115
4,4'-DDD	µg/L	0.20	<0.20	103	98.5
Endosulfan II	µg/L	0.20	<0.20	[NA]	[NA]
Endrin aldehyde	µg/L	0.20	<0.20	[NA]	[NA]
4,4'-DDT	µg/L	0.20	<0.20	[NA]	[NA]
Endosulfan sulfate	µg/L	0.20	<0.20	93.3	95.7
Endrin ketone	µg/L	0.20	<0.20	[NA]	[NA]
Methoxychlor	µg/L	0.20	<0.20	[NA]	[NA]
Mirex	µg/L	0.20	<0.20	[NA]	[NA]
Surrogate 4-chloro-3-nitrobenzotrifluoride	%		62.4	78.2	60.3

Batch QC Comments: [6]

ORG-022 | Organophosphorus Pesticides (Water) | Batch BHB1896

Analyte	Units	PQL	Blank	LCS %	Spike % MHB0215-01
Dichlorvos	µg/L	0.20	<0.20	70.5	60.7
Dimethoate	µg/L	0.20	<0.20	[NA]	[NA]
Diazinon	µg/L	0.20	<0.20	[NA]	[NA]
Chlorpyrifos-methyl	µg/L	0.20	<0.20	78.8	77.9
Ronnel	µg/L	0.20	<0.20	79.6	80.0
Fenitrothion	µg/L	0.20	<0.20	82.3	84.3
Malathion	µg/L	0.20	<0.20	91.8	92.7
Chlorpyrifos	µg/L	0.20	<0.20	82.9	85.2
Parathion	µg/L	0.20	<0.20	88.3	87.6
Bromophos-ethyl	µg/L	0.20	<0.20	[NA]	[NA]
Ethion	µg/L	0.20	<0.20	91.9	90.8
Coumaphos	µg/L	0.20	<0.20	[NA]	[NA]
Disulfoton	µg/L	0.20	<0.20	[NA]	[NA]
Fenamiphos	µg/L	0.20	<0.20	[NA]	[NA]
Fenthion	µg/L	0.20	<0.20	[NA]	[NA]
Methidathion	µg/L	0.20	<0.20	[NA]	[NA]
Mevinphos	µg/L	0.20	<0.20	[NA]	[NA]
Parathion-methyl	µg/L	0.20	<0.20	[NA]	[NA]
Phorate	µg/L	0.20	<0.20	[NA]	[NA]
Phosalone	µg/L	0.20	<0.20	[NA]	[NA]
Azinphos-methyl	µg/L	0.20	<0.20	[NA]	[NA]
Surrogate 4-chloro-3-nitrobenzotrifluoride	%		62.4	78.2	60.3

Batch QC Comments: [6]

Quality Control MHB0215

ORG-021/022/025_PCB | Polychlorinated Biphenyls (Water) | Batch BHB1896

Analyte	Units	PQL	Blank	LCS %	Spike % MHB0215-01
Aroclor 1016	µg/L	2.0	<2.0	[NA]	[NA]
Aroclor 1221	µg/L	2.0	<2.0	[NA]	[NA]
Aroclor 1232	µg/L	2.0	<2.0	[NA]	[NA]
Aroclor 1242	µg/L	2.0	<2.0	[NA]	[NA]
Aroclor 1248	µg/L	2.0	<2.0	[NA]	[NA]
Aroclor 1254	µg/L	2.0	<2.0	[NA]	[NA]
Aroclor 1260	µg/L	2.0	<2.0	[NA]	[NA]
PCB C103	µg/L			66.8	65.1
Surrogate 2-Fluorobiphenyl	%		65.7	73.6	61.9

Batch QC Comments: [6]

ORG-022 | Speciated Phenols (Water) | Batch BHB1896

Analyte	Units	PQL	Blank	LCS %	Spike % MHB0215-01
Phenol	µg/L	1.0	<1.0	51.2	38.1
2-Chlorophenol	µg/L	1.0	<1.0	75.3	72.8
2-Methylphenol	µg/L	1.0	<1.0	[NA]	[NA]
3/4-Methylphenol	µg/L	2.0	<2.0	[NA]	[NA]
2-Nitrophenol	µg/L	1.0	<1.0	[NA]	[NA]
2,4-Dimethylphenol	µg/L	1.0	<1.0	[NA]	[NA]
2,4-Dichlorophenol	µg/L	1.0	<1.0	[NA]	[NA]
2,6-Dichlorophenol	µg/L	1.0	<1.0	77.6	64.2
4-Chloro-3-methylphenol	µg/L	5.0	<5.0	[NA]	[NA]
2,4,6-Trichlorophenol	µg/L	1.0	<1.0	[NA]	[NA]
2,4,5-Trichlorophenol	µg/L	1.0	<1.0	[NA]	[NA]
2,4-Dinitrophenol	µg/L	20	<20	[NA]	[NA]
4-Nitrophenol	µg/L	20	<20	[NA]	[NA]
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	µg/L	2.0	<2.0	[NA]	[NA]
4,6-Dinitro-2-methylphenol	µg/L	20	<20	[NA]	[NA]
Pentachlorophenol	µg/L	5.0	<5.0	[NA]	[NA]
Dinoseb	µg/L	20	<20	[NA]	[NA]
2-Cyclohexyl-4,6-Dinitrophenol	µg/L	20	<20	[NA]	[NA]
Surrogate 2-Fluorophenol	%		43.9	64.6	55.5
Surrogate Phenol-D6	%		32.2	45.9	36.3

Batch QC Comments: [6]

METALS-020 | Acid Extractable Metals (Water) | Batch BHB2169

Analyte	Units	PQL	Blank	DUP1 BHB2169-DUP1# Samp QC RPD %	DUP2 BHB2169-DUP2# Samp QC RPD %	LCS %	Spike % BHB2169-MS1#
Phosphorus	mg/L	0.050	<0.050	1.16 1.16 0.0862	59.6 58.4 1.96	102	101

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

Quality Control MHB0215

METALS-022 | Dissolved Low Level Metals (Water) | Batch BHB1876

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHB1876-DUP1#	BHB1876-DUP2#		
				Samp QC RPD %	Samp QC RPD %		
Aluminium	µg/L	10	<10	53.7 46.3 14.9	392 438 10.9	107	98.8
Arsenic	µg/L	1.0	<1.0	4.67 4.61 [NA]	10.2 10.0 1.97	102	103
Cadmium	µg/L	0.10	<0.10	<0.10 <0.10 [NA]	1.80 1.90 5.41	105	102
Chromium	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<2.0 <2.0 [NA] [4]	105	102
Copper	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	135 138 1.77	103	93.9
Iron	µg/L	10	<10	19300 19000 1.63	163 157 4.25	103	##[1]
Lead	µg/L	1.0	<1.0	1.36 1.38 [NA]	69.8 78.8 12.0	102	98.7
Manganese	µg/L	1.0	<1.0	2320 2290 1.35	112 113 0.728	104	109
Nickel	µg/L	1.0	<1.0	17.3 17.2 0.639	7.74 7.74 [NA]	103	97.3
Selenium	µg/L	1.0	<1.0	<1.0 1.49 [NA]	<2.0 <2.0 [NA] [4]	104	103
Zinc	µg/L	1.0	<1.0	290 281 2.84	1190 1180 0.887	101	102

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-021 | Dissolved Low Level Metals (Water) | Batch BHB2165

Analyte	Units	PQL	Blank	DUP1	LCS %	Spike %
				BHB2165-DUP1#		
				Samp QC RPD %		
Mercury	µg/L	0.050	<0.050	<0.050 <0.050 [NA]	113	116

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-019 | Inorganics - Physical Parameters (Water) | Batch BHB2394

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %
				MHB0215-01	BHB2394-DUP2#	
				Samp QC RPD %	Samp QC RPD %	
Total Suspended Solids	mg/L	5.0	<5.0	3420 3720 8.27	<5.0 <5.0 [NA]	94.0

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-081 | Inorganics - Ionic Balance and Indexes (Water) | Batch BHB1864

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHB1864-DUP1#	BHB1864-DUP2#		
				Samp QC RPD %	Samp QC RPD %		
Chloride	mg/L	1.0	<1.0	141 131 7.38	5.76 5.65 1.96	98.5	102
Sulfate	mg/L	1.0	<1.0	15.2 13.8 9.40	1.08 1.00 [NA]	100	92.4

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-006 | Inorganics - Ionic Balance and Indexes (Water) | Batch BHB1874

Analyte	Units	PQL	Blank	DUP1	LCS %
				BHB1874-DUP1#	
				Samp QC RPD %	
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	136 139 1.60	[NA]
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0 <5.0 [NA]	[NA]
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0 <5.0 [NA]	[NA]
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	136 139 1.60	97.8

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

Quality Control MHB0215

METALS-020 | Inorganics - Ionic Balance and Indexes (Water) | Batch BHB2168

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHB2168-DUP1#	BHB2168-DUP2#		
				Samp QC RPD %	Samp QC RPD %		
Calcium	mg/L	0.50	<0.50	12.7 12.7 0.0316	3.66 3.66 0.164	96.9	78.7
Magnesium	mg/L	0.50	<0.50	30.0 30.1 0.0832	1.51 1.50 [NA]	101	94.7
Potassium	mg/L	0.50	<0.50	5.92 5.91 0.203	3.49 3.47 0.431	105	101
Sodium	mg/L	0.50	<0.50	100 100 0.458	7.55 7.50 0.744	105	84.4
Hardness (calc) equivalent CaCO3	mg/L	3.0	<3.0	155 155 0.0598	15.4 15.3 0.473	[NA]	[NA]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-079 | Inorganics - Carbon, Nitrogen and Sulfur Species (Water) | Batch BHB2249

Analyte	Units	PQL	Blank	LCS %
Dissolved Organic Carbon	mg/L	1.0	<1.0	97.0

INORG-055 | Inorganics - Nutrients (Water) | Batch BHB1862

Analyte	Units	PQL	Blank	DUP1	LCS %	Spike %
				BHB1862-DUP1#		
				Samp QC RPD %		
Nitrate as N	mg/L	0.0050	<0.0050	<0.0050 <0.0050 [NA]	75.0	##[2]
Nitrate as NO3 by calculation	mg/L	0.020	<0.020		[NA]	[NA]
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050 <0.0050 [NA]	105	109
Nitrite as NO2 by calculation	mg/L	0.020	<0.020		[NA]	[NA]
NOx as N	mg/L	0.0050	<0.0050	<0.0050 <0.0050 [NA]	90.5	86.9

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-062 | Inorganics - Nutrients (Water) | Batch BHB2035

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHB2035-DUP1#	BHB2035-DUP2#		
				Samp QC RPD %	Samp QC RPD %		
TKN as N	mg/L	0.10	<0.10	23.5 23.5 0.348	0.172 0.106 [NA] [5]	105	##[1]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-057 | Inorganics - Nutrients (Water) | Batch BHB2367

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHB2367-DUP1#	BHB2367-DUP2#		
				Samp QC RPD %	Samp QC RPD %		
Ammonia as N	mg/L	0.0050	<0.0050	0.570 0.565 0.800	0.115 0.115 0.00434	105	86.0

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-060 | Inorganics - Nutrients (Water) | Batch BHB2772

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHB2772-DUP1#	MHB0215-01		
				Samp QC RPD %	Samp QC RPD %		
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050 <0.0050 [NA]	0.00580 0.00539 [NA]	91.0	96.2

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-067 | Inorganics - Common Wastewater Parameters (Water) | Batch BHB2903

Analyte	Units	PQL	Blank	DUP1	LCS %
				MHB0215-01	
				Samp QC RPD %	
COD	mg O2/L	50	<50	52.0 59.0 [NA]	112

Quality Control MHB0215

QC Comments

Identifier	Description
[1]	Spike recovery is not applicable due to the relatively high analyte background in the sample (>3* spike level). However, the LCS recovery is within acceptance criteria.
[2]	Spike recovery is outside routine acceptance criteria (70-130%), this may be due to suspected non-homogeneity and/or matrix interference effects. However, an acceptable recovery was achieved for the LCS.
[3]	Spike recovery is outside routine acceptance criteria (60-140%), this may be due to suspected non-homogeneity and/or matrix interference effects. However, an acceptable recovery was achieved for the LCS.
[4]	PQL has been raised due to matrix requiring dilution
[5]	Duplicate %RPD may be flagged as an outlier to routine laboratory acceptance, however, where one or both results are <10*PQL, the RPD acceptance criteria increases exponentially.
[6]	Unable to perform all QC according to our internal guidelines due to the limited amount of sample(s) available for testing.