2024 Annual Groundwater Monitoring Report

Lot 2 Banksia Road, Crooked Brook WA – Licence L8904/2015/1

14 March 2025

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GEOCONTAM RISK MANAGEMENT
GREENROAD GROUP

CLEANAWAY

2024 Annual Groundwater Monitoring Report

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EXECUTIVE SUMMARY

Geocontam Risk Management Pty Ltd (GRM) was commissioned by Cleanaway Solid Waste Pty Ltd (Cleanaway) to compile and evaluate the water quality monitoring results for groundwater, leachate ponds and stormwater dams collected during the 1 January to 31 December 2024 monitoring period for the Banksia Road Putrescible Waste Landfill (the site) located at Lot 2, Banksia Road, Crooked Brook, Western Australia (WA).

Water quality monitoring was undertaken by SLR Consulting Australia (SLR) in accordance with the requirements of Prescribed Premises Licence No. L8904/2015/1 issued by the Department of Water and Environment Regulation (DWER). It is noted that there were no changes to the 22 February 2024 licence amendment with comparison to the previous licence version (dated 27 February 2023) that affected the water quality monitoring requirements for 2024. The licence amendment dated 12 December 2024, resulted in minor changes to the reporting requirements for 2024. This report covers the groundwater monitoring events (GMEs) undertaken in March, September, June, and December 2024.

The objective of this water quality monitoring report is to provide an evaluation of impacts to water quality at the site and demonstrate Cleanaway's compliance with the water quality monitoring and reporting requirements outlined in L8094/2015/1.

The following scope of work was undertaken to meet the project objectives:

- Quarterly sampling in March, June, September, and December 2024 by SLR of groundwater in accordance with Section 57 of the Licence at up to 26 groundwater monitoring locations, four leachate ponds, and two stormwater dams was undertaken as per DWER licence L8904/2015/1.
- Submission of samples to a National Association of Testing Authorities (NATA) accredited laboratory for the analytical suite (Section 3) in accordance with Section 43(d) of the Licence.
- Undertake works in accordance with a site-specific health, safety and environmental assessment procedures and adherence to quality assurance (QA) and quality control (QC) procedures; and
- Preparation of this annual monitoring report in accordance with Conditions 65 and 66 of the licence.

Based on the 2024 monitoring events, the following key conclusions are drawn regarding water quality at the site:

- The groundwater sampling undertaken as per DWER licence L8904/2015/1 in March, June, September, and December 2024 was predominantly compliant with licence requirements noting that dry monitoring wells and ponds cannot be sampled. Additionally, dissolved metals were analysed in the leachate ponds instead of total metals;
- Groundwater elevations were consistent with previous water quality monitoring and groundwater flow direction in the shallow superficial aquifer was consistently to the northwest. In the Leederville aquifer, groundwater flow was generally to the west or southwest;

- Groundwater at the site is generally acidic and fresh with pH values below the lower pH range for drinking water. In contrast, groundwater in the leachate ponds is generally alkaline and saline.
- Time series plots indicate that most analytes were stable during 2024 monitoring and within previously observed historical ranges.
- Inconsistent and elevated water quality results reported in new monitoring wells SE3S-R and SE4S-R are interpreted to be associated with residual drilling fluid in the annulus of the monitoring well as elevated concentrations in these well are inconsistent with the chemical signature of the adjacent leachate ponds.
- PFAS congeners were identified in the leachate ponds (PLP, LEP1 and LEP3) with concentration sums above the ADWG and NPUG, however concentrations observed above the LOR in superficial aquifer monitoring wells were below the assessment criteria. PFAS congeners were only reported above the LOR in Leederville aquifer monitoring well GW7D-R in March 2024 but were below the assessment criteria.

In consideration of the 2024 and groundwater and leachate pond analysis, the minor assessment criteria exceedances are considered more likely to be representative of background conditions as opposed to representative of impacts from landfill leachate migration. It is concluded that there is insufficient evidence to suggest that the landfill operations have impacted the underlying groundwater aquifer.

The following recommendations are made with respect to the implementation of the monitoring program in 2025:

- Further development of monitoring wells SE3S-R and SE4S-R should be undertaken to flush out residual drill fluids, given the low groundwater flow rates in the aquifer at these locations;
- Both total and dissolved metals should be analysed in accordance with the extended licence suite for the leachate ponds to ensure alignment with the licence requirements (i.e. total metals) and facilitate comparison with historic metals data collected from the ponds (i.e. dissolved metals).

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1 INTRODUCTION

Geocontam Risk Management Pty Ltd (GRM) was commissioned by Cleanaway Solid Waste Pty Ltd (Cleanaway) to compile and evaluate the water quality monitoring results for the 1 January to 31 December 2024 monitoring period for the Banksia Road Putrescible Waste Landfill (the site) located at Lot 2, Banksia Road, Crooked Brook, Western Australia (WA) as presented in Figure 1.

Water quality monitoring is required in accordance with the requirements of Prescribed Premises Licence No. L8904/2015/1 issued by the Department of Water and Environment Regulation (DWER). It is noted that there were no changes to the 22 February 2024 licence amendment with comparison to the previous licence version (dated 27 February 2023) that affected the water quality monitoring requirements for 2024. The licence amendment dated 12 December 2024, resulted in minor changes to the reporting requirements for 2024. This report covers the groundwater monitoring events (GMEs) undertaken in March, September, June, and December 2024.

It is noted that although the licence refers to the preparation of an Annual Groundwater Report, this report also contains the results of the leachate and stormwater dam monitoring program for contextual purposes.

1.1 Objectives

The water quality monitoring program defined in L8094/2015/01 is undertaken with the primary objective of identifying if the operation of the landfill is resulting in impacts to the superficial and/or Leederville aquifers underlying the site.

The objective of this water quality monitoring report is to provide an evaluation of impacts to water quality at the site and demonstrate Cleanaway's compliance with the water quality monitoring requirements outlined in L8094/2015/1 (as amended 22 February 2024), namely:

- Conditions 43 to 46: General monitoring
- Condition 50 (Table 17): Leachate quality monitoring; and
- Condition 57 (Table 21 with reference to Figure 2): Groundwater monitoring.

The objective of this annual report is to address the reporting requirements detailed in L8094/2015/1 (as amended 22 December 2024), namely:

- Condition 71 (Table 23, relevant sections) and Condition 72: Groundwater monitoring report.

1.2 Scope of Work

The collection of water quality data in 2024 was undertaken by SLR Consulting Australia (SLR), and included the following scope of work:

- The completion of quarterly water quality sampling events in March, June, September and December 2024 at:
  - Up to 26 groundwater monitoring locations in accordance with licence Condition 57.
  - Four (4) leachate ponds and two (2) storm water ponds in accordance with licence Condition 50.

- Collection of standing water levels (SWL), and field stabilisation parameters including temperature, pH, electrical conductivity (EC), dissolved oxygen (DO) and oxidation-reduction potential (ORP).
- Submission of samples from each GME to a National Association of Testing Authorities (NATA) accredited laboratory for the analytical suite (Section 3) in accordance with licence Condition 57 (Table 21) for analysis of the following:
    - Physicochemical parameters: pH, EC, and total dissolved solids (TDS).
    - Major ions: calcium (Ca), magnesium (Mg), potassium (K), sodium (Na), alkalinity (total, bicarbonate (HCO_3), carbonate (CO_3) and hydroxide (OH^-)), chloride (Cl), sulfate (SO_4).
    - Nutrients: chemical oxygen demand (COD), total nitrogen (TN), nitrate (NO_3), total phosphorus (TP), total organic carbon (TOC).
    - Dissolved metals: aluminium (Al), arsenic (As), cadmium (Cd), chromium (CrIII+CrVI), copper (Cu), lead (Pb), manganese (Mn), mercury (Hg), nickel (Ni), selenium (Se), and zinc (Zn)
    - Total metals:
        - Groundwater – iron (Fe),
        - Leachate ponds – Al, As, barium (Ba), beryllium (Be), boron (B), Cd, CrIII, CrVI, cobalt (Co), Cu, Pb, Mn, Hg, molybdenum (Mo), nickel (Ni), selenium (Se), silver (Ag), vanadium (V), and Zn.
    - Organics: total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAH), atrazine, polychlorinated biphenyls (PCB), organochlorine pesticides (OCP) and organophosphate pesticides (OPP), trichloroethylene (TCE), and percholoroethylene (PCE).
    - Per- and poly-fluoroalkyl substances (PFAS): suite of 28 analytes.

1.3 Report Structure

The subsequent sections of this report are organised as follows:

- Section 2: Site description;
- Section 3: Methodology;
- Section 4: Quality assurance (QA) / quality control (QC) evaluation;
- Section 5: Water quality results;
- Section 6: Evaluation of results; and
- Section 7: Conclusions and recommendations.

Acronyms used in this report are summarised in Appendix A Presentation of the supporting data/documentation as required in Condition 66 of the licence are provided in the following appendices:

- Appendix B: Figures;
- Appendix C: Data summary tables;
- Appendix D: Time-series plots;
- Appendix E: Field documentation; and
- Appendix F: Laboratory certificates of analysis and chain of custody documentation.

2 SITE DESCRIPTION

2.1 Site Identification

The site is located approximately 180 km south of Perth, WA in Crooked Brook, WA (Appendix A – Figure 1). Key site identification details are provided in Table 1

Table 1: Site identification.

SITE IDENTIFICATION			
Primary address	Lot 2, Banksia Road, Crooked Brook, WA		
Property title	Lot 2 on Diagram D065861		
Local government authority	Shire of Dardanup		
Boundary coordinates [Geographical Datum Australia (GDA 1994 MGA Zone 50)]		Northing	Easting
	Northwest	6300803	386373
	Northeast	6300801	387488
	Southeast	6300211	388347
	Southwest	6300190	386379
Total site area	121 Ha		

2.2 Surrounding Land Use

The site is situated in a rural area bordered by the Dardanup Conservation Park (Appendix A– Figure 1: Site location), commercial/industrial premises and some residential housing as detailed in Table 2.

Table 2: Surrounding land use.

DIRECTION	LAND USES
North	Shire of Dardanup Class II landfill (received waste from 1999 – 2013). The site now operates as a waste transfer station.
South	Dardanup Conservation Park
East	Dardanup Conservation Park
West	Rural residential, cleared agricultural land

2.3 Site Operations and Layout

The Site is an operational prescribed premise licenced by DWER to accept the following waste categories:

- Category 64: Class II and III putrescible landfill – premise on which waste is accepted for burial;
- DWER Category 61: Liquid water facility – premise on which liquid waste (other than sewerage waste) produced on other premises is storage, reprocessed, treated or irrigated; and
- Category 5: Processing or beneficiation of metallic or non-metallic ore – premise on which tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.

Accordingly, the site contains liquid waste cells, solid waste cells, tailings cells stormwater collection dams and leachate collection ponds (Appendix A– Figure 2). The Site is configured to allow acceptance of domestic and putrescible wastes in the eastern portion of the site and waste from the nearby Tronox (formally Millenium Inorganic Chemicals (MIC) and Cristal Pigment) minerals sands mining operations in the central/western portion of the site.

Between 2000 and 2006, the site operated as a Class II landfill receiving waste into cells 1 and 2. From 2006, the landfill has received both Class II and Class III waste comprising a mixture of municipal, commercial, and industrial waste, as well as residues from Water Corporation wastewater treatment plants. There are currently 11 landfill waste disposal cells (of which 10 are being actively filled and one (cell 5) has been final capped), and two tailings waste disposal cells. Asbestos and quarantine waste placement currently occurs at Cells 4, 4b, 12 and 12a.

Tronox waste residue from the mining operations is disposed of into high-density polyethylene (HDPE) lined, purpose-built cells known within the licence as the TDS Cell 1 (formerly TP1) and TDS Cell 2. Receival of tailings into TDS Cell 2 commenced in 2020 and drains to the TDS Cell 1 Leachate Pond (formerly TLP).

Landfill leachate is piped from the landfill cells into dedicated, HDPE lined leachate ponds (PLP, LEP1, LEP2, and LEP3) in the central and southwestern portion of the site. Additionally, two stormwater dams (PSD1 and PSD2) collect diverted stormwater into lined dams in the western portion of the site.

2.4 Environmental Setting

Key components of the environmental site setting are summarised in Table 3.

Table 3: Environmental setting.

ATTRIBUTE	DETAILS
Topography	The region has an undulating topography with a topographic high in the east at an elevation of 226 m Australian Height Datum (mAHD) and decreases to an elevation of 27.9 mAHD in the west flowing into the Preston River. Onsite topography slopes from east to west with the natural surface elevation being approximately 110 m mAHD in the east to approximately 40 mAHD in the west.
Surface water protection areas	There are no surface water protection areas onsite or listed within 500 m of the site.
Surface water bodies	There are no natural surface water bodies onsite. A number of artificial surface water storage areas are present for the management of liquid waste and stormwater collection. An ephemeral watercourse, Crooked Brook, is located approximately 1 km south and southwest of the site. Crooked Brook flows in a north-westerly direction into the Preston River approximately 5.5 km to the west of the site. There are no natural surface water bodies within 500 m of the site, however a number of artificial bodies are present directly to the north of the site at the Shire of Dardanup waste transfer station
Wetlands and floodplains	According to the Department of Parks and Wetlands (2024) Geomorphic Wetlands GIS Dataset (accessed 2 January 2025), the site is not located within a registered wetland. The Swan Coastal Plain ‘multiple use’ wetland is located approximately 350 m west of the site.

ATTRIBUTE	DETAILS
Geology and soils	Published geological maps and surveys of the general site area indicate that both the Quaternary age superficial deposits and the Cretaceous Leederville Formation are present in the upper 100 m beneath the site (Geological Survey of Western Australia, 1987). The Superficial formations, in the general vicinity of the site, comprise: • Bassendean Sand – consisting of white quartz, with mineral sand deposits at its base. Depths vary from 1.9 mbgl to 4 mbgl. • Yoganup Formation – a sequence of shore-line deposits consisting of leached and ferruginised beach sand. Leederville Formation – consisting of dense dark grey to brown clays with occasional shell fragments and is located variable at depths of 20 mbgl to 45 mbgl across the site. Previous reports (360 Environmental, 2021, and Stass Environmental, 2016) indicate that drilling works onsite have confirmed the shallow geology as being mainly sandy clays and clayey sands overlain by a sandy topsoil and laterite (1 m to 4 m).
Hydrogeology (360 Environmental 2022b)	The uppermost lithology across the site is generally consistent with Bassendean sands with a thickness typically less than 4 m in the western portion of the site thickening up to 8 m in the east. Towards the western portion of the site a thin (20 cm) layer of gravel was observed, which is interpreted to be a remnant riverbed that formed in the axial centre of the syncline (Geology Sheet 2031 III – 2031 II) known to be located along the western boundary of the site. The gravel increases in thickness to the west to several metres. This unit appears to be continuous and thicken to the west where it is reported to outcrop and be up to 5.5 m thick at offsite bore WIN ID: 61110338 located 1 km east of the site. The Yoganup Formation underlies the surficial sands and is represented by a three-layer geological system starting with a layer of firm, stiff red/white mottled clay which thickens from east to west with the central portion of the site reporting the thinnest extent. The clay layer appears to pinch out roughly in line with the TDS Cell 1 Leachate Pond. It is considered that this upper layer of the Yoganup acts as an aquitard, restricting downward flow/infiltration of rainwater over most of the landfill and likely creates isolated lenses of perched groundwater within the overlying sands. Beneath the red/white clay is a series of dry interbedded sandy clays and clayey sands, generally orange/red overlying a deeper horizon of generally grey, fine to medium clayey sands with clay lenses. This portion of the Yoganup was observed to become siltier and finer grained towards the west. The basal layer of the Yoganup, the grey clayey sands, was generally observed to be moist with limited water bearing properties. The shallow groundwater appears to be thin and not very productive east of TDS Cell 1. Towards the west, where inflow from the western limb of the syncline may be feeding water into the aquifer enabling more rapid surface water recharge, a ponding effect is created in the western, unconfined portion of the Yoganup Formation aquifer. The upgradient recharge for the Yoganup Formation aquifer is considered to be located offsite to the east of the site where the shallow red/white clay has been eroded at surface revealing the underlying interbedded sandy clays/clayey sands. Considering the limited saturated aquifer thickness of the superficial aquifer above the Leederville Formation in the eastern portion of the site, it may be that the surface recharge zone is of small aerial extent, or the confining clay becomes leaky rather than absent, so recharge is limited, resulting in limited water volumes in the central and easterly portion of the site. The Yoganup Formation is underlain by the Leederville Formation, which was observed to comprise two layers to the termination depths of the deeper monitoring wells. The upper layer of the Leederville comprised a hard, firm, red/brown clay with maximum thickness of approximately 4 m. It is considered that this clay layer is acting as an aquitard and confining layer to the underlying saturated clayey sands of the Leederville Formation, which are described as generally grey with orange/red mottles and medium to coarse (occasionally medium to fine) with interbedded sandy clays. The groundwater reported in the Leederville formation is observed to become sub-artesian along the flow path to the west with the potentiometric head below the confining clay layer in the east and above the confining clay layer in the west.

ATTRIBUTE	DETAILS
Ecologic conservation	A Department of Biodiversity, Conservation and Attractions registered conservation park is located adjacent the site to the east and south. A Priority 4 rare flora is registered within the conservation park to the east and south of the site.

3 METHODOLOGY

The following sections provide details on the sampling events and methodology to demonstrate compliance with the requirements of licence Conditions 50, 57, and 59.

3.1 Sampling Locations

The locations of all wells and leachate ponds described in the following sections are presented in Appendix A– Figure 2.

3.1.1 Licence Monitoring Locations

The 2024 quarterly groundwater sampling programme undertaken by SLR covers the requirements for DWER Licence L8904/2015/1. During the GME, up to 26 groundwater monitoring wells and four (4) leachate ponds and two (2) storm water drains were sampled for the full monitoring suite inclusive of organics, hydrocarbons and PFAS were sampled in March and September. The reduced monitoring suite (exclusive of organics, hydrocarbons and PFAS) were analysed in June and December.

3.1.2 Monitoring Well Replacements

Four monitoring wells were redrilled in June/July 2024 to replace dry and destroyed monitoring wells GW13S, GW13D, SE3S, and SE4S. Key details of the redrilled wells are summarised in Table 4.

Table 4: Details of monitoring network replacement wells drilled in 2024.

ATTRIBUTE	SE3S-R	SE4S-R	GW13S	GW13D
Original licence well ID	SE3S	SE4S	GW13S	GW13D
Target aquifer	Superficial	Superficial	Superficial	Leederville
Easting (MGA94)	387241	387145	387319	387320
Northing (MGA94)	6300396	6300233	6300407	6300407
Surface elevation (mAHD)	71.824	71.208	76.445	76.437
Top of casing (mAHD)	72.391	72.046	76.902	77.119
Well depth (mbgl)	40	39	38.5	44.5
Screened interval (mbgl)	38 – 40	36 – 39	35.5 – 38.5	42.5 – 44.5

3.2 Sampling Methodology

The water quality sampling program was undertaken by SLR with reference to the following standards and guidance documents:

- Australian Standard (1998) 5667.11 Water Quality – Sampling, Part 11: Guidance on the Sampling of Groundwaters (AS 5667.11:1998)
- Australian Standard (1998) 5667.1 Water Quality – Sampling, Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples (AS 5667.1:1998)
- Department of Environment Regulation (now DWER, (2021) Assessment and management of contaminated sites – Contaminated Sites Guidelines (DWER, 2021)

- National Environment Protection Council (1999) National Environmental Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1) (NEPC, 1999).

The following general sampling procedure was used for groundwater sample acquisition at each monitoring well:

- SWL and depth of well were recorded using a dip tape prior to well purging;
- Wells were purged using a PFAS-free low-flow bladder pump system with a flow-through cell to record physicochemical parameters (temperature, pH, EC, DO and ORP). Sampling occurred when physicochemical parameters had stabilised within industry standard variance for at least three parameters over two consecutive stabilisation readings taken over an interval not less than five minutes.

Samples were collected from the leachate ponds and stormwater dams using a dedicated PFAS-free bailer with physicochemical parameters recorded.

3.3 Licence Compliance Evaluation

Table 5 summarises the implementation of the monitoring program for each quarterly event. Based on this evaluation it is considered that the groundwater monitoring undertaken at the site in 2024 is largely compliant with the licence requirements, noting that dry wells cannot be sampled. The replacement of buried wells GW13S and GW13D, and dry wells SE3S and SE4S in June/July 2024 was undertaken to ensure on-going compliance with the licence, however, these wells had not been fully installed/developed at the time of the June 2024 GME.

Several dry wells are present onsite within the superficial aquifer, particularly within the eastern portion of the site. Dry wells installed to the base of the aquifer at the site indicate an absence of water in the superficial aquifer within some areas and may provide useful information to indicate that landfill leachate has not migrated through the aquifer.

It is noted that the extended metals suite detailed in Condition 50 (Table 17) for the leachate ponds (PLP, LEP1, LEP3) were analysed as dissolved instead of total metals in 2024, consistent with previous monitoring undertaken since 2021. The collection of dissolved metals concentrations from the leachate ponds better supports the comparison with groundwater when assessing potential signatures of leachate migration, given the suspended solid component in the leachate would rapidly precipitate near surface in the event of leakage or overflow from the ponds.

Water quality data for the 2024 monitoring program are compiled in Appendix C– Table C1.

Table 5: Monitoring program summary.

LICENCE MONITORING COMPONENT	SAMPLED LOCATIONS	DRY/DAMAGED WELLS	MONITORING SUITES
Q1 GME – 25 to 27 March 2024			
Shallow Monitoring Wells	GW1S, GW7S, GW9S, GW11S, GW22S, GW23S, SE10S, SE6S-R	Dry: GW5S, SE3S, SE4S Buried: GW13S	• Physicochemical parameters • Nutrients • Major ions • Dissolved metals • Total metals - Fe • Organics • PFAS
Deep Monitoring Wells	GW3D, GW6D, GW7D-R, GW8D, GW9D, GW10D, GW11D, GW12D, GW22D, GW23D, SE4D	Dry: GW5D, GW1D Buried: GW13D	
Leachate Ponds	TDS Leachate Cell 1, PLP, LEP1, LEP3	NA	
Stormwater Drains	PSD1, PSD2	Dry: PSD2	
Q2 GME – 24 to 26 June 2024			
Shallow Monitoring Wells	GW1S, GW5S, GW7S, GW9S, GW11S, GW13S, GW22S, GW23S, SE10S, SE6S-R	Dry: SE3S, SE4S Buried: GW13S	• Physicochemical parameters • Nutrients • Major ions • Dissolved metals • Total metals - Fe
Deep Monitoring Wells	GW1D, GW3D, GW6D, GW7D-R, GW8D, GW9D, GW10D, GW11D, GW12D, GW22D, GW23D, SE4D	Dry: GW5D Buried: GW13D	
Leachate Ponds	TDS Leachate Cell 1, PLP, LEP1, LEP3	NA	
Stormwater Drains	PSD1, PSD2	NA	
Q3 GME – 24 to 27 September 2024			
Shallow Monitoring Wells	GW1S, GW5S, GW7S, GW9S, GW11S, GW13S, GW22S, GW23S, SE10S, SE3S-R, SE4S-R, SE6S-R	Dry: None	• Physicochemical parameters • Nutrients • Major ions • Dissolved metals • Total metals - Fe • Organics • PFAS
Deep Monitoring Wells	GW1D, GW3D, GW6D, GW7D-R, GW8D, GW9D, GW10D, GW11D, GW12D, GW22D, GW23D, SE4D	Dry: GW5D, GW13D	
Leachate Ponds	TDS Leachate Cell 1, PLP, LEP1, LEP3	NA	
Stormwater Drains	PSD1, PSD2	NA	
Q4 GME – 16 to 18 December 2024			
Shallow Monitoring Wells	GW1S, GW5S, GW7S, GW9S, GW11S, GW13S, GW22S, GW23S, SE10S, SE6S-R	Dry: None	• Physicochemical parameters • Nutrients • Major ions • Dissolved metals • Total metals - Fe
Deep Monitoring Wells	GW1D, GW3D, GW6D, GW7D-R, GW8D, GW9D, GW10D, GW11D, GW12D, GW13D, GW22D, GW23D, SE4D	Dry: GW5D	
Leachate Ponds	TDS Leachate Cell 1, PLP, LEP1, LEP3	NA	
Stormwater Drains	PSD1, PSD2	NA	

3.4 Assessment Criteria

The following assessment criteria have been adopted to assess the current groundwater quality in consideration of the potential local receptors.

- Australian Drinking Water Guidelines (ADWG) – NHMRC and NRMMC 2011 (v6 updated December 2024) on the basis that the Leederville aquifer serves as the primary domestic water supply for the Dardanup area.
- Long-term Irrigation Water Guidelines (LTIG) and Stock Water Guidelines (SWG) - ANZECC and ARMCANZ 2000. The land use to the west of the site is predominantly agricultural, including crop and livestock farming. The presence of elevated water storage tanks and windmills indicates that groundwater is abstracted by landowners for livestock water and irrigation purposes.
- Non-potable Groundwater Use Guidelines (NPUG) – Department of Health (DOH) 2014. Abstracted groundwater from surrounding land users may also potentially be used for non-potable uses.
- PFAS National Environmental Management Plan V 2.0 (January 2020). Applicable for the assessment of human health and ecological risks associated with PFAS compounds.

Comparison to freshwater guidelines as detailed in ANZG (2018) is not considered relevant for the site on the basis that the depth to groundwater is greater than 20 mbgl and therefore will not directly interact with any freshwater wetlands or groundwater dependent ecosystems.

4 QUALITY ASSURANCE/QUALITY CONTROL EVALUATION

The components of the QA / QC evaluation are presented in the following sections to assesses the suitability the field and analytical results with respect to accuracy, precision and representativeness of the data for assessment purposes, and identify any bias that may exist within the data set.

Laboratory analysis was undertaken by Eurofins|ARL located in Welshpool, WA.

4.1 Field QA Evaluation

Table 6 summarises the compliance with applicable field QA procedures. The field documentation for the sampling events is provided in Appendix D.

Table 6: Field QA compliance evaluation

FIELD QA/QC COMPONENT	REQUIREMENT	COMPLIANT?	COMMENTS
Equipment calibration	Field equipment requiring calibration was calibrated prior to sampling and complied with calibration checks.	✓	Equipment calibration was undertaken by the supplier. Calibration certificates are provided in Appendix E.
Sample collection	Standardised field documentation was used to record field activities.	✓	Samples were collected using 360/SLR Environmental Field Forms which include details commensurate with Condition 59(d) of the licence.
	Physicochemical parameter stabilisation achieved prior to sampling.	✓	Records of physicochemical parameter stabilisation are provided in Appendix E.
	PFAS-free sampling equipment used	✓	Care was taken to use field equipment and other consumables free from containing PFAS. This included: • Not wearing any new field clothing/PPE which could result in cross contamination. • Use of dedicated nitrile gloves between sampling locations and ensuring clean hands prior to glove changing. • Not using any sampling equipment which contained PFAS. This included using HPDE tubing for groundwater sampling.
	Decontamination of sample equipment undertaken between sampling events.	✓	Sampling equipment was decontaminated in accordance with SLR's Method of Statement for PFAS sampling, Equipment Handling and Decontamination including the non-use of PFAS containing products during the sampling.
Sample handling and transit	Samples transferred to containers with polypropylene/HDPE lids instead of Teflon.	✓	In accordance with SLR's Method Statement for PFAS sampling, SLR ensured that the laboratory supplied PFAS-free sampling containers, for sample recovery and transit. This ensured the absence of a PFAS source during storage and transit of the samples to the laboratory.
	Samples kept chilled following sample collection.	✓	Samples were transported with PFAS-free ice bricks. The laboratory Sample Receipt Notifications (SRNs) identifying that

FIELD QA/QC COMPONENT	REQUIREMENT	COMPLIANT?	COMMENTS
			samples were received in good condition are provided in Appendix F.
	Samples transported under chain of custody (COC).	✓	COC documentation is provided in Appendix F.
	Samples managed appropriately between field and laboratory and received in good condition by the laboratory.	✓	Samples were transported in dedicated eskies. Laboratory SRNs identifying that samples were received in good condition are provided in Appendix F.

4.2 Field QC Evaluation

Field QC procedures included the collection of blind duplicate samples and use of field blanks and rinsate blanks as defined in AS 5667.1:1998. Tabulated field QC data are provided in Appendix C– Table C2 and Table C3. Table 7 summarises the field QC samples collected with evaluation of compliance against standard data quality indicators (DQIs). The adopted DQIs were defined as:

- Duplicate samples analysed at minimum frequency of 1:20 samples (5%) for sampling events that excluded analysis for PFAS, and 1:10 samples (10%) for sampling events that included PFAS.
- Field blanks and rinsate blanks were collected at a frequency of two (of each type) per monitoring event.
- A relative percent difference (RPD) less than 30% to be achieved for analytes that report concentrations at greater than 10 times the limit of reporting (LOR).
- Analyte concentrations for field blanks and trip blanks should be less than the LOR.

Table 7: Field QC sample compliance

QC SAMPLE TYPE	PRIMARY SAMPLE ID	QC SAMPLE ID	QC SAMPLE FREQUENCY[1,2]	DQI	DQI NON-COMPLIANCES
March 2024					
Duplicate	GW7D-R	QC01	8.3%	RPD<30%	Total Fe (60%), Ca (110%)
	GW11S	QC02			Ni (40%), Na (159%), SO_4 (38%)
Rinsate Blank	---	RS01	1/event	[Analyte] <LOR	None
Field Blank	---	FB01	1/event		
Trip Blank	---	TB01	1/event		
June 2024					
Duplicate	GW7D-R	QC01	7.4%	RPD<30%	Total alkalinity (61%), HCO_3 (61%), Zn (60%), total Fe (147%), K (33%)
	GW11S	QC02			Mn (132%)
Rinsate Blank	---	RS01	1/event	[Analyte] <LOR	None
Field Blank	---	FB01	1/event		

QC SAMPLE TYPE	PRIMARY SAMPLE ID	QC SAMPLE ID	QC SAMPLE FREQUENCY[1,2]	DQI	DQI NON-COMPLIANCES
September 2024					
Duplicate	GW7D-R	QC01	6.7%	RPD<30%	P (67%), Ni (67%), Ca (36%), Mg (36%), Na (38%)
	GW11S	QC03			Mn (111%), Ni (67%), total Fe (60%)
Triplicate	GW7D-R	QC02	6.7%		Zn (67%), K (35%)
	GW11S	QC04			Total alkalinity (40%), HCO_3 (40%), Mn (109%), Ni (67%)
Rinsate Blank	---	RS01	2/event	[Analyte] <LOR	None
	---	RS02			
Field Blank	---	FB01	2/event		
	---	FB02			
Trip Blank	---	TB01	1/event		
December 2024					
Duplicate	GW7D-R	QC01	6.7%	RPD<30%	NO_3-N (91%), NO_x-N (91%), TN (76%), TP (86%), Cu (120%), Mn (129%), Ni (67%)
	GW11S	QC03			NO_3-N (39%), NO_x-N (39%), TN (39%), Ni (67%), total Fe (67%), a (78%)
Triplicate	GW7D-R	QC02	6.7%	RPD<30%	NO_3-N (96%), NO_x-N (96%), TN (76%), total alkalinity (141%), Cu (100%), Mn (129%), Ni (40%) total iron (120%),
	GW11S	QC04			NO_3-N (37%), NO_x-N (37%), TOC (158%), Ni (67%), Cl (31%)
Rinsate Blank	---	RS01	1/event	[Analyte] <LOR	None
	---	FB01	1/event		

1. *Acceptable QC sample frequency >1:20 samples (5%) for duplicate samples*
2. *Acceptable QC frequency of 1/monitoring event for rinsate blanks and field blanks*

4.3 Laboratory QA/QC Evaluation

The laboratory QA/QC evaluation includes assessment of analytical components including holding times, LORs, laboratory QC frequency and RPDs, and the results of laboratory surrogates, matrix spikes, method blanks and control samples. Table 8 summarises the compliance of the laboratory QC/QC components against standard DQIs. The adopted laboratory DQIs were defined as:

- Samples to be analysed within the laboratory-defined holding times.
- Laboratory duplicates to be analysed at a frequency of 1:20 samples.
- Analyte concentrations in method blanks were below the LOR.

- Laboratory surrogates, matrix spikes and control samples reported concentrations within the method defined QC limits for the analytes.

Table 8: Laboratory QA/QC evaluation

LABORATORY QA/QC COMPONENT	NON-COMPLIANCES	DATA USEABILITY EVALUATION
Analyte Holding Times	Lab pH, CrVI, NO_2-N	Holding times for these analytes range from 1 to 2 days. Given the sampling program was undertaken over a period of 2 days, holding times may have been exceeded for these parameters for samples collected on the first 2 days of the monitoring program. Field pH was recorded and has been used as a priority for interpretation however reasonable field and lab correlation is noted in the samples. The oxidised state of the majority of the samples, as measured in the flow-through cell during stabilisation, suggests that NO_2-N would largely be absent and therefore is unlikely to have been lost during transport. Within achievable outcomes for the program in consideration, the analyte holding times are considered acceptable.
Limits of Reporting (LORs)	March 2024 – PFAS compounds September 2024 – TRH, BTEXN	LORs were not noted to be raised due to interference in any of the groundwater samples. LORs for several PFAS compounds were raised in PLP in March 2024 due to matrix interference. The raised LORs may impact identification of assessment criteria exceedances. LORs for TRH and BTEXN in PLP, LEP1 and LEP3 were raised in September 2024 due to matrix interference. The raised LORs did not impact the identification of assessment criteria exceedances.
QC (Frequency)	None	QC frequency undertaken by the laboratory was compliant with defined frequencies for NATA-accredited analysis.
Duplicates	None	Laboratory duplicate results were all reported within the specified RPDs.
Surrogates	None	Surrogate recoveries were all within the method designated QC limits.
Matrix Spikes	March 2024 – Ag June 2024 – Na	The matrix spike recovery was outside the recommended acceptance criteria for Ag in the QC sample on COA 1083260. The matrix spike concentration was less than five times the background concentration in the QC sample for Na therefore the spike recovery could not be determined on COA 112682. Acceptable results for the laboratory control samples were obtained for Na.
Method Blanks	None	Method blanks all reported concentrations below the established LORs.
Laboratory Control Samples	None	Percent recoveries of the laboratory control samples were all within the method designated QC limits.

4.4 Data Useability Evaluation

All field QA procedures implemented were compliant with the industry standards required by the licence.

Most field duplicate and triplicate exceedances reported in Table 7 are considered significant as the elevated RPDs are associated with low concentrations less than 10x the LOR and therefore do not represent significant differences in analytical results. The exceptions include Na (March 2024), Mn, Zn,

and total Fe (June 2024), Ni (September 2024), and Mn and Na (December 2024). In all cases where the RPD was outside the adopted 30% RPD, there were no instances where the concentration change resulted in a change in exceedances of the assessment criteria therefore the impact on the interpretation of the results is considered to be negligible.

The non-compliances reported in the laboratory QA/QC checks presented in Table 8 are not considered significant as control samples, blanks and surrogates are all acceptable and the exceedances were still considered compliant within the laboratory's QC NATA requirements.

Based on the QA/QC evaluation, it is considered that the data collected in 2024 are suitable to be relied upon for the purpose of this assessment with no notable bias or uncertainty introduced.

5 WATER QUALITY RESULTS

The following sections detail the results of the groundwater, leachate pond, and stormwater monitoring undertaken in 2024.

5.1 Groundwater

5.1.1 Elevation and Flow Direction

Groundwater level observations recorded in 2024 are presented in Appendix C– Table C1. It is noted that water levels reported for the superficial aquifer reflect actual groundwater levels beneath the site. Water levels for the Leederville aquifer represent a potentiometric head, which is the hypothetical surface representing the level to which groundwater would rise if not trapped in a confined aquifer; the recorded water level is only observed where the confining layer is pierced by a properly installed groundwater monitoring well.

Groundwater levels and flow direction results are summarised in Table 9 and presented in Figure 3 (March 2024), Figure 4 (June 2024), Figure 5 (September 2024) and Figure 6 (December 2024) provided in Appendix A.

Table 9: Groundwater levels and flow direction

MONITORING EVENT	GROUNDWATER LEVEL (mbgl)		GROUNDWATER ELEVATION (mAHD)	
	MIN	MAX	MIN	MAX
Superficial Aquifer				
March 2024	17.25 (GW23S)	36.38 (GW1S[1])	33.82 (GW23S)	38.92 (SE10S[1])
June 2024	17.60 (GW23S)	49.41 (GW5S)	33.47 (GW23S)	56.66 (GW5S)
September 2024	16.26 (GW23S)	49.38 (GW5S)	34.42 (GW22S)	56.59 (GW5S)
December 2024	19.60 (GW23S)	49.47 (GW5S)	31.47 (GW23S)	56.50 (GW5S)
Leederville Aquifer				
March 2024	23.20 (GW23D)	43.62 (GW12D)	27.91 (GW23D)	34.42 (GW3D)
June 2024	22.73 (GW23D)	43.80 (GW12D)	28.38 (GW23D)	39.38 (GW3D)
September 2024	21.69 (GW23D)	43.74 (GW12D)	29.42 (GW23D)	34.98 (GW13D)
December 2024	22.15 (GW23D)	45.17 (GW12D)	28.96 (GW23D)	34.80 (GW1D)

1. *It is noted that GW5S was reported as dry at ~51.6 mbgl and therefore was not included in the data statistics, however this well would represent the maximum depth to groundwater/maximum elevation.*

Consistent with the understanding of the groundwater depth and flow beneath the site from previous groundwater monitoring events, the following groundwater conditions are present:

- The deepest groundwater is reported in the central and eastern portions of the site where topography rises. Groundwater is shallowest in the northwest corner of the site.
- Groundwater levels were observed to be generally shallowest in September 2024 following seasonal winter rainfall and deepest in December 2024 following very low rainfall during the last three months of the year. Except for SE3S-R and GW3D, which exhibited a very slight (<0.1 m) upward pressure from the Leederville aquifer, the piezometric head in the Leederville aquifer is lower than the groundwater level in the superficial aquifer indicating downward pressure from the superficial aquifer on the Leederville aquifer.

- The interpreted groundwater flow direction for the shallow aquifer for the four GMEs was predominantly towards the northwest in the western portion of the site. This is generally consistent with the historic flow direction observed at the site.
- The interpreted groundwater flow direction in the confined Leederville aquifer is generally to the west or west-southwest, consistent with historic flow direction observed at the site.

The dry conditions reported in GW5S, GW5D, GW13S, GW13D, SE3S, SE4S were not unexpected and have intermittently been observed in previous GMEs. The dry state of the shallow wells at the based of the superficial aquifer in the central and eastern portion of the site was explained through the revised conceptual hydrogeologic model (360 Environmental, 2022), whereby the upgradient recharge for the superficial aquifer is located offsite to the east of the site where the shallow red/white clay has been eroded at surface revealing the underlying interbedded sandy clays/clayey sands. Considering the limited saturated aquifer thickness of the superficial aquifer above the Leederville Formation in the eastern portion of the site, it may be that the surface recharge zone is of small aerial extent, or the confining clay becomes leaky rather than absent, so recharge is limited, resulting in limited water volumes in the central and easterly portion of the site.

5.1.2 Physicochemical Parameters

Physicochemical field parameters for the groundwater in 2024 are presented in Appendix C– Table C1 and summarised as follows:

- Most groundwater was colourless or light brown, odourless and having low turbidity. Exceptions were GW13D (brown), SE4S-R and SE4D (both milky white). GW13D and SE4S-R are new monitoring wells that have been slow to recharge following drilling. Higher turbidity was reported in association with monitoring wells such as GW5S, which has low water levels and sediment at the base of the well. A sulfur odour was reported in SE3S-R and SE4S-R in September 2024 following drilling; these bores were both reported as odourless in December 2024.
- Temperature ranged from 14.4^{o}C (GW22D, June 2024) to 29^{o}C (GW11D, December 2024). Average groundwater temperatures were lowest in June (18.4^{o}C) and highest in March (23.3^{o}C). Temperatures on average were 0.7 to 0.8 degrees warmer in the Leederville aquifer in March and December 2024 compared to the superficial aquifer; in contrast temperatures between the two aquifers varied by less than 0.3 degrees between the aquifers during June and September 2024. The temperature results reflect seasonal variations despite the significant depth to groundwater.
- Slightly to moderately acidic pH values were reported in the groundwater ranging from 4.0 (GW5S, June 2024) to 6.5 (SE4S-R, December 2024). On average, groundwater in the superficial aquifer is slightly more acidic (up to 0.2 pH units) than in the Leederville aquifer.
- Electrical conductivity (EC) ranged from 174.3 μS/cm (GW22D, March 2024) to 2,228 μS/cm (GW5S, June 2024). Most groundwater monitoring wells exhibit freshwater conditions (EC <1500 μS/cm), with only GW1D, GW5S, SE3S-R, SE4S-R, and GW12D reporting EC values >1,000 μS/cm. Commensurate with the reported EC, TDS ranged from 100 mg/L (GW11S, September 2024) to 1,400 mg/L (GW5S, June 2024).

- Dissolved oxygen (DO) was variable within and between sampling locations ranging from 0.49 mg/L (SE4S-R, December 2024) to 11.7 mg/L (GW11D, June 2024) with average DO of 5.1 mg/L over all monitoring events indicating generally oxic conditions in both the superficial and Leederville aquifers. Anoxic conditions were only recorded in new monitoring SE4S-R, GW13S, and GW13D in December 2024.
- Redox potential (ORP) ranged from -105 mV (SE4S-R, December 2024) to 670 mV (GW9D, September 2024). Most of the monitoring wells exhibit a positive ORP indicative of oxidising conditions. A notable number of low negative ORP and low positive (<100 mV) ORP readings were reported during March 2024 that were not reflected in future monitoring events, suggesting a potential bias in the ORP calibration for this monitoring event. Except for SE4S-R, which reported reducing conditions in September and December 2024, all monitoring wells typically exhibit oxidising conditions. ORP values on average are similar between the superficial and Leederville aquifers.

5.1.3 Major Ions

Major ions (Ca, Mg, Na, K, Cl, SO_4, HCO_3) are typically present in all groundwater and reflect the composition of the geologic environment of origin as well as the chemical composition of recharge water. The major cation composition of the groundwater is summarised as follows:

- Calcium (Ca) concentrations are similar between the superficial and Leederville aquifers ranging from <0.5 mg/L (SE10S, GW11S) to 85 mg/L (SE4S-R, September) in the superficial aquifer and <0.5 mg/L (GW8D, September) to 68 mg/L (GW13D, December) in the Leederville aquifer. The mean Ca concentration in the superficial aquifer is 7.1 mg/L compared to 6.0 mg/L in the Leederville aquifer monitoring wells;
- Total and dissolved magnesium (Mg) concentrations reported similar concentrations in both the superficial and Leederville aquifers within the same monitoring wells. Total Mg concentrations ranged from 3.3 mg/L (GW11S, December) to 49 mg/L (GW5S, September and December) in the superficial aquifer and 3 mg/L (GW11D, September) to 35 mg/L (GW12D, September) in the Leederville aquifer. The mean Mg concentration in the superficial aquifer is 12 mg/L compared to 9.3 mg/L in the Leederville aquifer;
- Potassium (K) concentrations are depleted with comparison to other major cations ranging from <0.5 mg/L in both aquifers to a maximum concentration of 14 mg/L (SE4S-R, September) in the superficial aquifer and 9.9 mg/L (GW13D, December) in the Leederville aquifer. The mean K concentration in the superficial aquifer is 3.9 mg/L compared to 2.2 mg/L in the Leederville aquifer; and
- Sodium (Na) concentrations in the superficial aquifer ranged from 24 mg/L (SE10S, March) to 380 mg/L (GW5S, December) and 33 mg/L (GW11D, September) to 1,000 mg/L (GW13D, December) in the Leederville aquifer. The mean Na concentration in the superficial aquifer is 87 mg/L compared to 97 mg/L in the Leederville aquifer. Concentrations of Na exceeded the NPUG (180 mg/L) in superficial aquifer monitoring wells SE4S-R and GW5S, and Leederville aquifer monitoring wells GW1D, GW12D, and GW13D.

The major anion composition in the aquifers is described as follows:

- Chloride (Cl) concentrations in the superficial aquifer ranged from 25 mg/L (SE10S, September) to 760 mg/L (GW5S, December) and 5.6 mg/L (GW11D, September) to 510 mg/L (GW12D, December) in the Leederville aquifer. The mean Na concentration in the superficial aquifer is 120 mg/L compared to 130 mg/L in the Leederville aquifer. Concentrations of Na exceeded the NPUG (250 mg/L) in superficial aquifer monitoring wells GW5S, and Leederville aquifer monitoring wells GW1D, GW12D, and GW13D.
- Sulfate (SO_4) concentrations in the superficial aquifer ranged from <1 mg/L (SE3S-R, June) to 48 mg/L (GW5S, December) and 6.7 mg/L (GW23D, September) to 50 mg/L (GW12D, December) in the Leederville aquifer. The mean SO_4 concentration in the superficial aquifer is 13 mg/L compared to 15 mg/L in the Leederville aquifer. Concentrations of SO_4 were all below the NPUG (250 mg/L);
- Total alkalinity ranged from <5 mg/L (multiple sites) to 570 mg/L (SE4S-R, September) in the superficial aquifer and 66 mg/L (GW23D, March) in the Leederville aquifer and exclusively comprised HCO_3. Both hydroxide and carbonate alkalinity were below the LOR (5 mg/L) in all monitoring wells. Anomalous HCO_3 concentrations were reported in SE3S-R and SE4S-R compared to other superficial aquifer monitoring wells. Excluding SE3S-R and SE4S-R, the mean HCO_3 concentration in the superficial aquifer was 9.5 mg/L compared to 16 mg/L in the Leederville aquifer.

Piper plots are provided in Appendix D and plot the range of major ions in the shallow superficial, deep confined and the leachate ponds. The piper plots indicate that the majority of shallow superficial and Leederville groundwater generally plots in a grouping in the chloride/sodium range. At the western end of the site, GW22D and GW23D plot close to the boundary between the Na-Cl and mixed water type boundaries, which may reflect a longer migration time in the Leederville aquifer as water travels away from the interpreted recharge zone to the east of the site.

5.1.4 Landfill leachate indicators

Landfill leachate indicators COD, TDS, and TOC are evaluated to assist in identifying the presence of leachate in groundwater. Results for the superficial aquifer are summarised as follows:

- COD was predominantly reported below the LOR (25 mg/L) however intermittent detections above the LOR were reported in the superficial aquifer monitoring wells GW1S (September), SE3S-R, SE6S, SE10S, and GW13S (September), and SE4S-R and GW5S (September and December). Most reported COD concentrations in the superficial aquifer were below 100 mg/L. Notable exceptions were SE3S-R (1,900 mg/L), SE4S-R (1,300 to 1,600 mg/L) and GW5S (210 to 980 mg/L). It is noted that SE3S-R and SE4S-R were installed in June 2024 and may still reflect the presence of drilling fluids in the well annulus.
- TDS ranged from 100 mg/L (SE10S) to 1,400 mg/L (GW5S) with an average of 350 mg/L indicating predominantly freshwater conditions. GW5S is located in the eastern portion of the site and received little recharge compared to superficial monitoring wells in the western portion of the site; and

- TOC ranged from <5 mg/L (multiple locations) to 910 mg/L (SE3S-R), however only new monitoring wells SE3S-R, SE4S-R, and eastern monitoring well GW5S reported concentrations above 25 mg/L. The elevated TOC in SE3S-R and SE4S-R provides additional evidence that drilling fluids may still be present in the bore annulus.

Results for the Leederville aquifer are summarised as follows:

- COD was only reported above the LOR (25 mg/L) in SE4D (42 mg/L, December), GW6D (83 mg/L, March) and GW9D (66 mg/L, December);
- TDS ranged from 130 mg/L (GW11D) to 920 mg/L (GW1D) with an average of 300 mg/L indicating freshwater conditions;
- TOC ranged from <5 mg/L (multiple locations) to 380 mg/L (SE4D). Most monitoring wells reported TOC concentrations less than 20 mg/L.

5.1.5 Metals

Metals can be both naturally occurring within the aquifer and be introduced to the environment from various land uses. Even within the natural environment, exceedances of water quality guidelines can occur.

Metals concentrations within the superficial aquifer are characterised as follows:

- Concentrations of CrVI, Hg, and Ti were reported below the LOR in all wells.
- Metals including As, Cd, and CrIII were reported below the LOR in all wells except SE3S-R, SE4S-R and/or GW5S. The maximum concentration of As (0.025 mg/L) reported in SE3S-R (December) exceeded the ADWG (0.01 mg/L). The maximum concentration of Cd (0.0003 mg/L) was reported in SE4S-R (December) was below adopted assessment criteria. The maximum concentration of CrIII (0.004 mg/L) was reported in SE3S-R and GW3S (December) was below adopted assessment criteria;
- Aluminium (Al) concentrations ranged from <0.05 mg/L (multiple sites) to 5 mg/L (GW5S) Concentrations exceeded the NPUG (0.2 mg/L) in GW1S, SE3S-R, SE4S-R, GW5S, and GW13S and exceeded the LTIG and SWG (both 5 mg/L) in GW5S (December);
- Copper (Cu) concentrations ranged from <0.001 mg/L (multiple sites) and 0.04 mg/L (SE3S-R, December) but were below adopted assessment criteria;
- Lead (Pb) concentrations were below the <0.001 mg/L at all monitoring wells except GW1S, SE3S-R, SE4S-R and GW5S and reported a maximum concentration of 0.031 mg/L (GW5S, December). Concentrations of Pb exceeded the ADWG in GW5S in June and December;
- Manganese (Mn) concentrations ranged from <0.005 mg/L (multiple sites) to 9.3 mg/L (SE4S-R, September). Concentrations of Mn exceeded the LTIV in GW1S, SE3S-R, and SE4S-R, the ADWG in SE3S-R and SE4S-R, and the NPUG in SE4S-R, only;
- Nickel (Ni) concentrations ranged from <0.001 mg/L (multiple sites) to 0.096 mg/L (SE4S-R, September) with a mean concentration of 0.007 mg/L. Concentrations in SE4S-R exceeded the ADWG (0.02 mg/L), only;

- Selenium (Se) was reported above the LOR (0.001 mg/L) in GW5S (0.006 mg/L, December) only but was below adopted assessment criteria;
- Zinc (Zn) concentrations ranged from <0.005 mg/L (multiple sites) to 0.92 mg/L (SE4S-R) with a mean of 0.088 mg/L but was below adopted assessment criteria;
- Total Fe concentrations ranged from <0.01 (multiple sites) to 400 mg/L (SE4S-R, December) and exceeded the LTIG (0.2 mg/L) in GW9S and SE10S only, and both the LTIG and NPUG (0.3 mg/L) in GW1S, SE3S-R, SE4S-R, GW5S, SE6S, and GW13S.
- Monitoring wells GW1S, SE3S-R, SE4S-R and GW5S-R are the most impacted wells in the superficial aquifer, noting that SE4S-R and GW5S are located upgradient of the landfill operations.

Metals concentrations within the Leederville aquifer are characterised as follows:

- Concentrations of As, Cd, CrIII, CrVI, Hg, Pb, Se, and Ti were reported at or below the LOR in all wells except for GW13D (December) which reported trace concentrations of total Cr and Pb at 0.003 mg/L, and As at a concentration of 0.16 mg/L, which exceeded the ADWG;
- Aluminium (Al) concentrations ranged from <0.05 mg/L (multiple sites) to 0.69 mg/L (SE4D, December). Concentrations exceeded the NPUG in GW1D, GW6D, and GW11D (June), GW10D and GW11D (December), and SE4D (June and December);
- Copper (Cu) concentrations ranged from <0.001 (multiple sites) to 0.008 mg/L (SE4D, June) with no assessment criteria exceedances;
- Manganese (Mn) concentrations ranged from <0.005 mg/L (multiple sites) to 2.7 mg/L (GW13D, December) and exceeded the LTIG (0.2 mg/L) in GW3D, GW6D, and GW13D. GW13D also exceeded the ADWG (0.5 mg/L);
- Nickel (Ni) concentrations ranged from <0.001 (multiple sites) to 0.012 mg/L (GW3D, December) with no assessment criteria exceedances;
- Zinc (Zn) concentrations ranged from <0.005 mg/L (multiple sites) to 0.33 mg/L (GW13D, December) with no assessment criteria exceedances; and
- Total iron (Fe) concentrations ranged from <0.01 mg/L (multiple sites) to 190 mg/L (GW13D, December). Concentrations exceeded the NPUG (0.3 mg/L) and LTIG (0.2 mg/L) in GW1D, SE4D, GW6D, GW10D, GW11D, and GW13D. Concentrations exceeded the LTIG only in GW3D, GW8D, and GW9D.
- New monitoring well GW13D was the most impacted Leederville aquifer well with respect to metals.

5.1.6 Nutrients

Nutrient concentrations in the superficial aquifer are characterised as follows:

- Total nitrogen (TN) ranged from 1.5 mg/L to 18 mg/L (GW13S, September) with a mean concentration of 4.4 mg/L. Concentrations of TN in GW13S (September) are anomalous with

respect to all other wells and are elevated due to an elevated concentration of TKN (10 mg/L) predominantly comprising organic nitrogen (Org-N).

- Ammonia (NH_3-N) concentrations ranged from <0.02 mg/L (multiple sites) to 1.7 mg/L (SE3S-R, September) with a mean of 0.52 mg/L. Concentrations of NH_3-N in SE3S-R and SE4S-R in both September and December exceed both the NPUG and ADWG. As with other constituents reported in these new monitoring wells, the results are anomalous compared to other superficial aquifer monitoring wells and may reflect influences of drilling fluid in these new wells.
- Nitrogen oxides (NO_x-N) ranged from 0.11 mg/L (SE4S-R, September) to 11 mg/L (GW13S, December) with a mean concentration of 3.65 mg/L. Nitrate (NO_3-N) is the predominant component of NO_x-N with concentrations ranging from 0.08 mg/L (SE4S-R, September) to 11 mg/L (GW13S) with a mean concentration of 3.63 mg/L. Nitrite (NO_2-N) is reported at concentrations below the LOR (0.01 mg/L) in most monitoring wells with a maximum concentration of 0.07 mg/L reported in SE3S-R (September).
- Total phosphorus (TP) concentrations are relatively low in the superficial aquifer ranging from <0.01 mg/L (multiple sites) to 0.68 mg/L (GW5S) with a mean concentration of 0.07 mg/L.

Nutrient concentrations in the Leederville aquifer are characterised as follows:

- Total nitrogen (TN) ranged from <0.2 mg/L (multiple sites) to 5.1 mg/L (GW8D, December) with a mean concentration of 1.5 mg/L.
- TKN concentrations relatively low ranging from <0.2 mg/L (most wells) to 0.08 mg/L (SE4D, December). Where reported above the LOR, TKN predominantly comprises Org-N, with NH_3-N reported below the LOR (0.02 mg/L) in most samples and reporting a maximum concentration of 0.1 mg/L (GW9D, March).
- Nitrogen oxides (NO_x-N) ranged from 0.03 mg/L (GW10D, September) to 5.1 mg/L (GW8D, December) with a mean concentration of 1.3 mg/L. Nitrate (NO_3-N) is the predominant component of NO_x-N with concentrations ranging 0.03 mg/L (GW10D, September) to 5.1 mg/L (GW8D, December) with a mean concentration of 1.3 mg/L. Nitrite (NO_2-N) is only reported above the LOR in GW9D (June) with a concentration of 0.02 mg/L.
- Total phosphorus (TP) concentrations are relatively low in the Leederville aquifer ranging from <0.01 mg/L (multiple sites) to 0.3 mg/L (SE4D) with a mean concentration of 0.05 mg/L.

5.1.7 Hydrocarbons

Trace concentrations of TPH/TRH hydrocarbons were only detected above the LOR in three superficial aquifer monitoring wells in September 2024, as follows:

- SE3S-R reported a total TRH concentration of 22 mg/L comprising TRH C6 – C10 (0.04 mg/L), C10 – C16 (22 mg/L) fractions;
- SE4S-R reported a total TRH concentration of 0.62 mg/L entirely comprising TRH C10 – C16 fractions (0.62 mg/L); and
- SE10S reported a total TRH concentration of 0.53 mg/L comprising TRH C10 – C16 (0.02 mg/L) and TRH C16 – C34 (0.51 mg/L) fractions.

It is noted that SE3S-R and SE4S-R were drilled in July 2024 and TRH fractions identified in these well may be reflective of residual drilling fluids around the annulus of the wells.

Other hydrocarbon compounds including BTEXN, MAHs, PAHs, and chlorinated hydrocarbons (TCE/PCE) were reported below the LORs in all superficial and Leederville aquifer monitoring wells in March and September 2024.

5.1.8 PFAS compounds

PFAS congeners were reported above the LOR in a few superficial aquifer monitoring wells March and/or September 2024, as follows:

- SE3S-R reported the sum of PFAS at a concentration of 0.16 μg/L in March, comprising PFHxA (0.08 μg/L), PFPeA (0.06 μg/L) and PFOA (0.02 μg/L);
- SE4S-R reported the sum of PFAS at a concentration of 0.18 μg/L in March, comprising PFBS (0.02 μg/L), PFOS (0.01 μg/L), PFHxA (0.06 μg/L), PFPeA (0.07 μg/L) and PFOA (0.02 μg/L);
- SE6S reported the sum of PFAS concentrations ranging from 0.11 μg/L (March) to 0.14 μg/L (September). PFAS concentrations in both March and September comprised PFBS (0.01 to 0.02 μg/L), PFPeA (0.06 to 0.07 μg/L), and PFHxA (0.04 to 0.05 μg/L);
- GW7S reported the sum of PFAS at a concentration of <1 μg/L with trace detections of PFPeA (0.02 μg/L) and PFHxA (0.01 μg/L);
- GW13S reported the sum of PFAS at a concentration of 0.55 μg/L in September, comprising PFBS (0.15 μg/L), PFHxS (0.01 μg/L), PFBA (0.09 μg/L), PFPeA (0.17 μg/L), and PFHxA (0.13 μg/L).

The only Leederville aquifer monitoring well that reported PFAS congeners above the LOR was GW7D-R (March 2024), which reported 6:2 FTS at a concentration of 0.14 μg/L.

5.1.9 Other chemical compounds

The presence of anthropogenic chemical compounds in groundwater, pesticides and herbicides (including OCP/OPP), phenols, PCBs and solvents, may have been introduced as a result of the generation of leachate from licence-approved waste acceptance to the landfill. On-going monitoring of these compounds, in accordance with the licence, assists in determining whether there have been any adverse impacts from the licence-approved landfill activities.

- Except for a singular trace detection of phenol (0.002 μg/L) in GW10D in September 2024, all other chemical compounds were reported below the LORs in the monitoring wells located within the superficial aquifer.
- None of the aforementioned chemical compounds were reported at concentrations above the LOR in the monitoring wells located within the superficial aquifer.

5.2 Leachate Ponds

A summary of the leachate pond analytical results from the 2024 GMEs are presented below for the TDS Cell 1, PLP, LEP1 and LEP3.

5.2.1 Physicochemical Parameters

Physicochemical field parameters for the leachate ponds in 2024 are summarised as follows:

- Leachate within the PLP, LEP1, and LEP3 is described as dark brown to red or black, with high turbidity. Odour associated with the leachate ponds varied seasonally from sulfurous (March 2024) or organic (December 2024) to odourless (June and September 2024). In contrast leachate from TDS Cell 1 is reported as colourless and odourless with low turbidity.
- Temperature ranged from 11.4°C (LEP1, June 2024) to 30.4°C (LEP1, March 2024) and generally reflected seasonal ambient temperature conditions.
- Near neutral to slightly alkaline pH values were reported in the leachate ponds ranging from 7.0 (LEP1, June 2024) to 8.2 (PLP, March 2024). In contrast, leachate from TDS Cell 1 is slightly acidic to neutral, ranging from 5.7 (March 2024) to 7.4 (June 2024).
- EC of the leachate ranged from 21109 µS/cm (PLP, June 2024) to 276,018 µS/cm (PLP, December 2024) reflecting saline to hypersaline conditions from both the landfill cells and TDS Cell 1.
- DO was variable within and between sampling locations ranging from 0 mg/L (PLP, March 2024) to 7.85 (TDS Cell 1, December 2024), which is indicative of a range of anoxic and oxic conditions. Leachate from TDS Cell 1 was typically oxic except in December 2024.
- ORP of the leachate ranged from -146 mV (PLP, December 2024) to 268 mV (LEP1, December 2024). Both oxidising and reducing conditions were reported in the leachate ponds whereas the TDS Cell 1 leachate was consistently oxidising.

5.2.2 Major Ions

Leachate collected within PLP, LEP1 and LEP3 exhibited the following major ion characteristics:

- In March and September 2024, PLP, LEP1 and LEP3 were characterised as a Na-Cl type water with concentrations of Na ranging from 4,000 mg/L (PLP, September) to 87,000 mg/L (LEP1, March) and Cl ranging from 6,200 mg/L (PLP, September) to 140,000 mg/L (LEP1, March). Potassium (K) concentrations were also elevated at all leachate ponds compared to other major ions with concentrations ranging from 1,100 mg/L (PLP, September) to 20,000 mg/L (LEP1, March). Lesser concentrations of Ca, Mg, and SO_4 were present in the leachate.
- In both March and September 2024, total alkalinity was present in the form of HCO_3 with concentrations ranging from 960 mg/L as $CaCO_3$ (LEP3, September) to 5,200 mg/L as $CaCO_3$ (PLP, September).
- Concentrations of all major ions were generally highest in LEP1, marginally lower in LEP3, and lowest in PLP.
- Concentrations of Na and Cl exceeded the NPUG guidelines for both monitoring events in all leachate ponds.

Leachate from TDS Cell 1 exhibited the following major ion characteristics:

- In March and September 2024, TDS Cell 1 was characterised as a Ca-Cl type water with concentrations of Ca greater than 5,000 mg/L and Cl greater than 9,000 mg/L. Sodium (Na) concentrations were also relatively elevated compared to other major ions with concentrations greater than 2800 mg/L. Lesser concentrations of Mg and SO_4 were present in the leachate and potassium and alkalinity were largely depleted.
- In both March and September 2024, total alkalinity was present in the form of HCO_3 with concentrations of 16 and 21 mg/L as $CaCO_3$, respectively.
- Concentrations of Na and Cl and SO_4 exceeded the NPUG guidelines for both monitoring events.

5.2.3 Landfill Leachate Indicators

Landfill leachate indicators COD, TDS, and TOC were notably elevated in PLP, LEP1, LEP3, and TDS Cell 1 compared to groundwater as follows:

- Chemical oxygen demand (COD) ranged from 680 mg/L (TDS Cell 1, September) to 30,000 mg/L (LEP1 March);
- Total dissolved solids (TDS) ranged from 17,000 mg/L (PLP, September) to 120,000 mg/L (LEP1, March);
- Total organic carbon (TOC) ranged from 190 mg/L (LEP3, March) to 11,000 mg/L (LEP1, March) in PLP, LEP1 and LEP3. TDS Cell 1 reported comparatively low TOC concentrations of <5 mg/L (March and 8.5 mg/L (September).

5.2.4 Metals

Metals concentrations within PLP, LEP1 and LEP3 are described as follows:

- Total iron concentrations ranged from 2.5 mg/L (LEP1 and LEP3, September) to 44 mg/L (LEP1, March) and exceeded both the NPUG (0.3 mg/L) and LTIG (0.2 mg/L) in all three ponds during both monitoring events.
- PLP reported dissolved As, Ba, B, CrIII, CrVI, Mo, Ni, Pb, Ti and Zn at concentrations above the LOR in both monitoring events and Al, Co, Mn, and V above the LOR in March, only. The highest dissolved metal concentrations were reported in March. The following exceedances were noted in PLP during one or both events:
    - NPUG: Al, B, Ni, and total Fe;
    - ADWG: As, B, Co, Pb, Ni, total Fe;
    - LTIG: CrVI + CrIII, and Mn; and
    - SWG: CrVI + CrIII, and Ni.
- LEP1 and/or LEP3 variably reported total Fe and all dissolved metals above the LOR except for Ag, Be, and CrVI. The highest reported metals concentrations were reported in March. The following exceedances were noted for LEP1 and LEP3:

  - NPUG: Al, B, As, CrVI, and total Fe;
  - ADWG: Al As, B, Ba, As, Co, CrVI, Mn, Mo, Ni, Pb, Se and total Fe;
  - LTIG: CrVI + CrIII, and Mn; and
  - SWG: CrVI + CrIII, Ni, and Se.
- Dissolved Al concentrations in both ponds exceeded the NPUG (0.2 mg/L) in both monitoring events.
- All other metals (Ag, Be, Cd, Co CrIII, CrVI, Hg, Ti, and V) were reported at concentrations less than the LOR.

Lower metals concentrations were reported in TDS Cell 1 leachate compared to the leachate ponds. Concentrations are described as follows:

- In March, only Ba (1.5 mg/L), B (1.4 mg/L), Mn (9.7 mg/L), Mo (1.3 mg/L), and Ni (0.063 mg/L) were reported above the LOR. Concentrations of Mn and Mo exceeded the NPUG and ADWG, and the Ni concentration exceeded the ADWG, only; and
- In September, total Fe (0.02 mg/L) and dissolved As (0.002 mg/L), Ba (0.47 mg/L), Cd (0.0001 mg/L), CrVI (0.10 mg/L), Mn (1.3 mg/L), Mo (0.45 mg/L), N (0.02 mg/L), and V (0.015 mg/L) were reported above the LOR. Hexavalent chromium (CrVI) exceeded the ADWG and LTIG, and Mn, Mo, and Ni exceeded the ADWG.

5.2.5 Nutrients

Nitrogenous compounds and total phosphorus were reported above the LOR in PLP, LEP1 and LEP3 in both March and September:

- Total nitrogen (TN) concentrations ranged from 500 mg/L (LEP3, September) to 1,500 mg/L (LEP1) and predominantly comprised TKN;
- Ammonia (NH_3-N) concentrations ranged from 370 mg/L (LEP3, September) to 1,400 mg/L (LEP1, March). Concentrations exceeded the NPUG (0.41 mg/L) and ADWG (0.5 mg/L) in all samples;
- Concentrations of NO_x-N predominantly comprised NO_3-N (<0.01 mg/L to 4.0 mg/L). Nitrite (NO_2-N) was only reported above the LOR in LEP3 (2.9 mg/L, September) where it exceeded the ADWG (0.91 mg/L).
- Concentrations of TN, NO_3-N and NO_x-N exceeded the ADWG but were below NPUG.
- Total phosphorus (TP) concentrations ranged from <0.01 to 0.15 mg/L.

Nutrient concentrations in TDS Leachate Cell 1 were lower than in the leachate ponds with TN reported at 2.7 mg/L in March, comprising predominantly NH_3-N (2.2 mg/L) and a TP concentration of 0.04 mg/L. All nutrient concentrations except NH_3-N (1.1 mg/L) were reported below the LOR in September 2024.

5.2.6 Hydrocarbons

No hydrocarbon compounds were reported above the LOR in TDS Cell 1 however, trace concentrations of TRH were reported in the PLP (March), LEP1 (March) and LEP3 (March and September) as follows:

- TRH C6 – C10 fractions were reported below the LOR in both monitoring events;
- TRH C10 – C16 fractions ranged from 3.3 μg/L (LEP3, March) to 40 μg/L (PLP, March);
- TRH C16 – C34 fractions ranged from 2.9 μg/L (LEP3, March) to 80 μg/L (LEP1, March);
- TRH C34 – C40 fractions were reported at concentrations of 0.59 μg/L (PLP, March) and 0.36 μg/L (LEP3, March) only; and
- Total TRH concentrations ranged from 11.5 μg/L (LEP3, September) to 92.59 μg/L (PLP, March).

Other hydrocarbon compounds including BTEXN, MAHs, PAHs, and chlorinated hydrocarbons (TCE/PCE) were reported below the LORs in all leachate ponds and TDS Cell 1 in March and September 2024.

5.2.7 PFAS compounds

Several PFAS congeners were reported above the LOR in the PLP, LEP1 and LEP3 in March and September 2024, as follows:

- PFOS concentrations across all three ponds ranged from 0.17 μg/L (LEP1, September) to <8 μg/L (raised LOR) (PLP, September) and exceeded the NPUG in the PLP;
- PFOA concentrations across all three ponds ranged from 0.49 μg/L (LEP1, September) to 8.9 μg/L (LEP1, March) and exceeded the NPUG in all three ponds during one monitoring event;
- PFHxS concentrations across all three ponds ranged from 0.39 μg/L (LEP1, September) to 14 μg/L (LEP1, March) and exceeded the NPUG in LEP1 in March 2024;
- The sum of PFHxS and PFOS ranged from 0.56 μg/L (LEP1, September) to 14 μg/L (LEP1, March) and exceeded the NPUG in PLP, LEP1 and LEP3 during at least one monitoring event;
- Sum of PFAS in PLP was reported at 79 μg/L (March) and 29.07 μg/L (September). Other PFAS congeners present in PLP included PFBS, PFPeS, PFBA, PFPeA, PFHxA, PFHpA, PFNA, PFDA, 4:2 FTs, 6:2 FTS, 8:2 FTS, and N-MeFOSE;
- Sum of PFAS in LEP1 was reported at 1029.9 μg/L (March) and 29.07 μg/L (September). Other PFAS congeners present in LEP1 included PFBS, PFPeS, PFBA, PFPeA, PFHxA, PFHpA, PFNA, PFDA, 4:2 FTs, 6:2 FTS, and 8:2 FTS;
- Sum of PFAS in LEP2 was reported at 299 μg/L (March) and 44.53 μg/L (September). Other PFAS congeners present in LEP1 included PFBS, PFPeS, PFBA, PFPeA, PFHxA, PFHpA, PFNA, 4:2 FTS, 6:2 FTS, and 8:2 FTS;

All PFAS concentrations in TDS Cell 1 were reported at concentrations below the LOR for both the March and September 2024 monitoring events.

5.2.8 Other chemical compounds

Except for a singular trace detection of 4,4-DDE (0.003 μg/L) in the PLP in September 2024, all other chemical compounds including OC/OP pesticides, atrazine, phenols, and PCBs were reported below the LORs in both primary stormwater dams in March and September 2024.

5.3 Primary Stormwater Dams

A summary of the primary stormwater dam analytical results from the 2024 GMEs are presented below for PSD1 and PSD2.

5.3.1 Physicochemical Parameters

Physicochemical field parameters for the primary stormwater dams in 2024 are summarised as follows:

- PSD1 and PSD2 are described as being colourless and odourless with low turbidity across both events.
- Temperature ranged from 11.8°C (PSD1, June 2024) to 25.9°C (PSD2, December 2024) and generally reflected seasonal ambient temperature conditions.
- Near neutral to slightly alkaline pH values were reported ranging from 7.1 (PSD1, March 2024) to 8.9 (PSD1, December 2024).
- Electrical conductivity (EC) ranged from 314 µS/cm (PSD2, December 2024) to 1,019 µS/cm (PSD1, September 2024) reflecting fresh to brackish conditions.
- Dissolved oxygen (DO) ranged from 6.7 mg/L (PSD1, March 2024) to 8.7 (PSD1, December 2024), which is indicative oxic conditions.
- Redox potential (ORP) ranged from -23.8 mV (PSD1, March 2024) to 120.8 mV (PSD1, December 2024). Conditions were oxidising except at PSD1 in March 2024.

5.3.2 Major Ions

Surface water runoff and stormwater collected within the PSD1 and PSD2 exhibited the following major ion characteristics:

- In March 2024, PSD1 was characterised as a Na-Cl water with lesser but balanced Ca, SO_4, and HCO_3 components and only minor concentrations of Mg and K. The Na-Cl dominance likely reflects the accumulation of salts in PSD1 associated with summer evaporation.
- In September 2024, PSD1 and PSD2 both presented as mixed type water exhibited balanced concentrations of Na, Cl, Ca, SO_4, and HCO^3, with Mg and K both present as minor concentrations (<10 mg/L). These more balanced major ion concentrations are likely reflective of the contribution of rainwater to the PSDs over winter.
- In both March and September 2024, total alkalinity in both PSD1 and PSD2 was present in the form of HCO_3 with concentrations in PSD1 ranging from 75 to 85 mg/L as $CaCO_3$ and at 59 mg/L as $CaCO_3$ in PSD2.
- All major ion concentrations were below the NPUG guidelines for Na, Cl and SO_4.

5.3.3 Metals

Metals concentrations within PSD1 and PSD2 are described as follows:

- Total iron concentrations ranged from 0.4 mg/L (PSD1, March) to 1.7 mg/L (PSD1, September) and exceeded both the NPUG (0.3 mg/L) and LTIG (0.2 mg/L) in both PSD1 and PSD2 during both monitoring events.
- PSD1 reported dissolved Al, As, B, Ba, Cu, Pb, Mn, Mo, Ni, and Zn at trace concentrations above the LOR in at least one monitoring event. The highest dissolved metal concentrations reported were Al (0.57 mg/L, September), Ba (0.14 mg/L, March), Cu (0.012 mg/L, September), Zn (0.14 mg/L, September) with all other metals reported at concentrations less than 0.01 mg/L.
- PSD2 only reported dissolved Al, Ba, Cu, Zn at trace concentrations above the LOR with only Al (0.32 mg/L) and Zn (0.018 mg/L) reported at concentrations greater than 0.01 mg/L.
- Dissolved Al concentrations in both ponds exceeded the NPUG (0.2 mg/L) in both monitoring events.
- All other metals (Ag, Be, Cd, Co CrIII, CrVI, Hg, Ti, and V) were reported at concentrations less than the LOR.

5.3.4 Nutrients

Nitrogenous compounds and total phosphorus were reported above the LOR in the primary stormwater dams in both March and September:

- Total nitrogen (TN) concentrations ranged from 1.7 to 5.9 mg/L and predominantly comprised TKN (1.1 to 3.3 mg/L) and NO_3-N (0.6 to 2.4 mg/L)
- Lesser concentrations of NO_2-N (<0.01 to 0.18 mg/L) and NH_4-N (<0.02 to 0.23 mg/L) were present reflecting the oxidising conditions within PSD1 and PSD2.
- Concentrations of TN, NO_3-N and NO_x-N exceeded the ADWG but were below NPUG.
- Total phosphorus (TP) concentrations ranged from <0.01 to 0.15 mg/L.

5.3.5 Hydrocarbons

Hydrocarbon compounds including TRH, BTEXN, MAHs, PAHs, and chlorinated hydrocarbons (TCE/PCE) were reported below the LORs in both ponds in March and September 2024.

5.3.6 PFAS compounds

A few PFAS congeners were reported above the LOR in PSD1 and PSD2 in March and September 2024, including PFBS (0.01 μg/L), PFOS (0.02 to 0.06 μg/L), PFPeA (0.05 to 0.09 μg/L), PFHxA (0.04 to 0.1 μg/L), PFOA (0.02 to 0.03 μg/L) and PFNA (0.01 μg/L). The sum of PFAS ranged from 0.12 to 0.3 μg/L. Concentrations of all PFAS congeners were below all adopted assessment criteria.

5.3.7 Other chemical compounds

Other chemical compounds including OC/OP pesticides, atrazine, phenols, and PCBs were reported below the LORs in both primary stormwater dams in March and September 2024.

6 EVALUATION OF RESULTS

6.1 Groundwater, Leachate Pond and Stormwater Dam Comparison

A comparison of key landfill analytes and other COPCs in provided in Table 10.

Table 10: Groundwater, leachate pond and stormwater dam comparison.

ANALYTE (UNIT)	GROUNDWATER	LEACHATE PONDS	STORMWATER DAMS
Landfill Leachate Indicators			
pH (unitless)	3.8 – 6.5	5.7 – 8.2	6.5 – 7.4
TDS (mg/L)	100 – 1,400	17,000 – 120,000	200 – 400
COD (mg/L)	<25 – 1,900	680 – 30,000	<25 – 54
TOC (mg/L)	<5 – 910	<5 – 11,000	<5 – 12
Na (mg/L)	24 – 1000	2,800 – 87,000	27 – 75
Cl (mg/L)	25 – 760	6,200 – 140,00	32 – 140
TN (mg/L)	<0.2 – 18	500 – 1,400	1.7 – 5.9
NH_3-N (mg/L)	<0.02 – 1.7	1.1 – 1,400	<0.02 – 0.23
Contaminants Exceeding Assessment Criteria			
pH	NPUG & ADWG: All	NPUG & ADWG: TDS Cell 1,	None
Al	NPUG: GW1S, GW1D, SE3S-R, SE4S-R, GW5S, GW13S, SE4D, GW10D, GW11D, GW13D	NPUG: PLP, LEP1, LEP3	NPUG: PSD1, PSD2
As	ADWG: SE3S-R, GW13D	ADWG: PLP, LEP1, LEP3 NPUG: LEP1, LEP3	None
Cl	NPUG: GW5S, GW1D, GW12D	NPUG: TDS Cell 1, PLP, LEP1, LEP3	None
Total Fe	LTIG: GW1S, SE3S-R, SE4S-R, GW5S, SE6S, GW9S, SE10S, GW13S, GW1D, GW3D, SE4D, GW6D, GW8D, GW9D, GW10D, GW11D, GW13D NPUG: GW1S, SE3S-R, SE4S-R, GW5S, SE6S, GW13S, GW1D, SE4D, GW6D, GW10D, GW11D, GW13D	LTIG & NPUG: PLP, LEP1, LEP3	LTIG & NPUG: PSD1, PSD2
Na	NPUG: SE4S-R, GW5S, GW1D, GW12D, GW13D	NPUG: TDS Cell 1, PLP, LEP1, LEP3	None
SO_4	None	NPUG: TDS Cell 1	None
Cr (III+VI)	None	LTIG: TDS Cell 1, PLP, LEP1, LEP3 SWG: LEP1, LEP3	None
Mn	LTIG: GW1S, SE3S-R, SE4S-R, GW3D, GW6D, GW13D ADWG: SE3S-R, SE4S-R, GW13D NPUG: SE4S-R	ADWG: TDS Cell 1, LEP1, LEP3 LTIG: TDS Cell 1, PLP NPUG: TDS Cell 1	None

ANALYTE (UNIT)	GROUNDWATER	LEACHATE PONDS	STORMWATER DAMS
Ni	None	SWG: PLP, LEP1, LEP3 NPUG & LTIG: PLP, LEP1, LEP3 ADWG: TDS Cell 1, PLP, LEP1, LEP3	None
Pb	None	ADWG: PLP. LEP1, LEP3	None
NH_3-N	ADWG & NPUG: SE3S-R, SE4S-R	ADWG & NPUG: TDS Cell 1, PLP, LEP1, LEP3	None
PFOA	None	ADWG & NPUG: PLP, LEP1, LEP3	None
PFOS	None	ADWG & NPUG: PLP	None
PFHxS	None	ADWG & NPUG: LEP1	None
Sum of PFHxS and PFOS	None	ADWG & NPUG: PLP, LEP1, LEP3	None

The comparative results between the groundwater, leachate ponds and stormwater dams indicate the following:

- PSD1 and PSD2 appear to be unimpacted by landfill leachate, which is to be expected. Comparatively low-level NPUG exceedances for Al, and total Fe in the ponds likely reflects the migration of stormwater across lateritic soils and is not considered an indicator of contamination from landfill operations;
- TDS Cell 1 which captures leachate from the Tronox tailings cell has a different composition than the other leachate ponds. Leachate in TDS Cell 1 exhibits lower COD, TOC, NH_3-N, TN, and metals concentrations compared to PLP, LEP1 and LEP3;
- There are significant differences between the leachate ponds and the groundwater with respect to the key landfill leachate indicators. Concentrations of TDS, COD and TOC were higher in the leachate ponds compared to the groundwater monitoring wells. Groundwater pH was more acidic than the leachate ponds;
- There are significant differences between the major ion between the leachate ponds and groundwater, in particular with respect to Na and Cl. The piper plots (Figure 7and Figure 8) highlight the differences in water composition, which suggest a lack of impacts from the leachate ponds into groundwater;
- The leachate ponds exhibit multiple orders of magnitude concentration differences to maximum groundwater concentrations with respect to NH_3-N, and TN;
- A much broader range of metals, and higher concentrations are reported in the leachate ponds than in the groundwater monitoring wells. The unique metals associated with the leachate ponds (e.g. As, CrIII, Hg, Pb, Se) would be stronger indicators of the presence of landfill leachate migrating into groundwater if identified at significant concentrations in groundwater (of which currently they are not);

It is noted that higher TDS, COD and TOC concentrations observed in groundwater are associated with newly installed monitoring wells SE3S-R (adjacent to the PLP) and SE4S-R (upgradient of LEP1). Despite similarities with these leachate indicators, and exhibiting elevated concentrations of nutrients

and metals compared to the other groundwater monitoring wells, there are significant differences between the water quality observed in these wells compared to the leachate ponds, including:

- Total nitrogen (TN), TKN, and NH_3-N concentrations three orders of magnitude lower than the leachate ponds;
- Low concentrations of Na and Cl, which given their abundance in the leachate ponds would be a key indicator of impacts from the ponds to groundwater;
- Notably higher concentrations of Fe and Mn compared to the leachate ponds; and
- A different hydrocarbon fractionation and PFAS signature compared to the leachate ponds, suggesting a different hydrocarbon source.
- PFAS compounds were reported in the leachate ponds and groundwater, however the leachate ponds reported higher concentrations and a higher number of individual species than the groundwater concentrations.

The different signatures suggest that the observed concentrations reported in SE3S-R and SE4S-R may be associated with residual drill fluids/muds in the bore annulus as opposed to the migration of landfill leachate.

6.2 Spatial Trends

The following spatial trends are noted within the site:

- New monitoring wells SE3S-R and SE4S-R, located adjacent to the PLP and LEP1 respectively, exhibit relatively higher concentrations of many analytes compared to other superficial aquifer monitoring wells and exhibit relatively comparable concentrations of analytes to each other. The concentrations of elevated analytes in the groundwater at these monitoring wells, however, has a different signature to the leachate contained in the PLP and LEP1. In particular:
    - Fe and Mn in SE3S-R and SE4S-R are notably elevated compared to the leachate ponds, and metals such as CrIII, Pb, and Ni are elevated in the leachate ponds but below or near the LOR in these monitoring wells;
    - The TRH signature in PLP and LEP1 is dominated by C15 – C36 hydrocarbon chains, whereas SE3S-R and SE4S-R comprise C10 – C14 hydrocarbon chains; and
    - A much smaller range of PFAS congeners is present in the groundwater monitoring wells compared to the leachate ponds.

    The differing composition of elevated analytes between the leachate ponds and these new groundwater monitoring wells, and the comparable composition of analytes within these new monitoring wells, suggest that the source of elevated concentrations of analytes is more likely associated with residual drilling fluids within the monitoring well annulus of these wells than the migration of impacts into the superficial aquifer from the leachate ponds;
- Metals concentrations monitoring well pairs GW1S/GW1D, SE3S-R/GW3D, SE4S-R/SE4D, and SE6S/GW6D located on a north-south orientation in the centre of site, and GW5S, located

upgradient of operations in the south-eastern corner of the site, generally exhibit higher metals concentrations compared to other monitoring wells. These relatively elevated metals concentrations do not appear to have laterally migrated towards the downgradient western boundary over the life of the landfill and therefore may be geologically related;

- Except for Fe, metals concentrations within the Leederville aquifer monitoring wells are generally lower than in the superficial aquifer. Metals concentrations within the Leederville aquifer also exhibit less concentration variance across the site than within the superficial aquifer.

6.3 Temporal Trends

Time-series plots for key analytes for which concentrations are reported above the LOR are presented in Appendix D. The following temporal trends are observed for the site:

- Between monitoring events, most analytes within a given monitoring well exhibited stable concentrations suggesting limited seasonal variability;
- Acidic, but stable pH values have generally been observed in both shallow and deep monitoring wells and the leachate ponds since December 2021. The observed pH in PSD1 and PSD2 is alkaline but has gradually been decreasing since December 2022;
- Total dissolved solid (TDS) concentrations have remained stable in all shallow and deep monitoring wells despite fluctuating concentrations in the leachate ponds, stormwater dams and TDS Cells;
- Potassium (K) concentrations have generally been stable in all monitoring wells since 2019 despite fluctuating concentrations in the leachate ponds, stormwater dams and TDS Cells. The higher concentration reported in GW13D in December 2024 is associated with the redrilling of the well in a new location;
- Chloride (Cl) concentrations have gradually risen in SE4D, GW6D, GW12D and GW13D, with all other monitoring wells exhibiting stable or seasonally fluctuating trends. Seasonal fluctuations in Cl concentrations are evident in the leachate and stormwater dams, likely associated with evaporation and precipitation cycles;
- Although NH_3-N concentrations have fluctuated in PLP, LEP1, LEP3, and TDS Cell 1, concentrations have decreased in MSD1 and PSD2 and remained close to the LOR and stable in all groundwater monitoring wells, with elevated concentrations reported in December 2023 associated with a raised LOR;
- Gradually rising TN trends are observed in shallow monitoring wells GW1S, SE6S-R, SE10S, and GW22S and deep monitoring well GW6D although increasing concentrations are more gradual following steeper increases observed in 2021. GW8 has exhibited fluctuating TN concentrations since its installation in 2020. Seasonally fluctuating TN concentrations are observed in the leachate ponds with a slight rising trend observed in the stormwater dams;
- Nitrate (NO_3-N) concentrations have remained relatively low in PLP, TDS Cell 1, PSD1 and PSD2. LEP1 exhibited a rising concentration in 2024. Gradually rising trends are observed in

shallow monitoring wells GW1S, SE6S-R, GW9S, and SE10S, and deep monitoring well GW6D although increasing concentrations are more gradual following steeper increases observed in 2021;

- Total phosphorus (TP) has been stable or exhibited a decreasing concentration trend since 2022. Stable and low TP concentrations are observed in the TDS Cells and stormwater dams, with seasonally fluctuation concentrations observed in the leachate ponds;
- Aluminium (Al) concentrations have been relatively stable in most monitoring wells except for GW1S which appears to seasonally fluctuate, and SE4D where concentrations have been rising since December 2023 despite stable concentrations in LEP1 and LEP3 (the higher concentration reported in September 2023 in LEP3 is due to a raised LOR from matrix interference). New monitoring well SE4S-R (installed July 2024) also exhibited an increase in Al concentrations between the September and December 2024 monitoring events. Concentrations of Al have also been rising in PSD2 since June 2023;
- Lead (Pb) concentrations have remained low and stable in all groundwater monitoring wells except GW5S. GW5S is intermittently sampled due to low water recovery and located upgradient of operational landfill cells. Concentrations in Pb in leachate cells have slightly fluctuated but remained low; and
- Zinc (Zn) concentrations have remained stable and at or close to the LOR in all groundwater monitoring wells since 2022 suggesting higher concentrations observed in 2021 were anomalous. Concentrations in the PLP, TDS Cells and stormwater dams have also been low with only LEP1 exhibiting higher and fluctuating concentrations that have attenuated by the time leachate reaches LEP3.

6.4 Comparison of Hydrogeological Model Inputs to Tailings Leachate Composition

LandSIM hydrogeologic modelling (Golder, 2023) probabilistically quantified the future risks to groundwater beneath the landfill with respect to key contaminants of concern identified in leachate from both the landfill disposal cells and the tailings leachate cells. The inputs to the hydrogeologic LandSIM model from TDS Cell 1 and TDS Cell 2, which receive Tronox tailings, were incorporated into the model using 2018 monitoring data from the tailings leachate collection point CP1 (now TLP). Table 11 provides a comparison of the model inputs from the LandSIM hydrogeologic risk assessment with respect to the 2024 data obtained as part of the expanded tailings leachate characterisation monitoring program.

Table 11: Comparison of 2023 LandSIM model inputs to 2024 TDS Cell 1 monitoring results.

2024 LICENCE MONITORING SUITE[1]	MODELLED INPUT?	CP1 (2018)	TDS CELL 1 (2024)	COMPARABILITY OF 2024 RESULTS TO MODEL INPUTS
pH (unitless)	No	----	5.7 – 6.2	NA
EC (µs/cm)	No	----	32,710 – 57,770	NA
TDS	Yes	8,030	20,000 – 34,000	2024 results > model input
Major cations and anions				
Ca	Yes	1,710	5,200 – 8,900	2024 results > model input
Mg	Yes	89	540 – 740	2024 results > model input

2024 LICENCE MONITORING SUITE[1]	MODELLED INPUT?	CP1 (2018)	TDS CELL 1 (2024)	COMPARABILITY OF 2024 RESULTS TO MODEL INPUTS
K	Yes	22	34 – 68	2024 comparable to input
Na	Yes	769	2,800 – 4,600	2024 results > model input
Cl	Yes	4,620	9,200 – 27,000	2024 results > model input
HCO_3	No	21	16 – 21	2024 comparable to input
SO_4	Yes	126	440 – 730	2024 results > model input
Metals (dissolved)				
Ag	No	----	<0.001 – <0.05	NA
Al	Yes	0.07	<0.05	2024 comparable to input
As	Yes	<0.001	<0.01 – 0.002	2024 comparable to input
Ba	No	----	0.47 – 1.5	NA
Be	No	----	<0.001 – <0.01	NA
B	No	----	0.54 – 1.4	NA
Cd	Yes	0.0002	0.0001 – <0.002	2024 comparable to input
Co	No	----	<0.001 – <0.01	2024 comparable to input
CrIII	Yes	<0.001	<0.002 – 0.7	2024 results > model input
CrVI			<0.002 – 0.1	2024 results > model input
Cu	Yes	0.037	<0.001 – <0.01	Model input > 2024 results
Fe[2]	Yes	0.51	0.02 – 14	2024 comparable to input
Hg	No	----	<0.0001 – <0.001	NA
Mn	Yes	6.14	1.3 – 9.7	2024 comparable to input
Mo	No	----	0.45 – 1.3	NA
Ni	Yes	0.085	0.02 – 0.063	Model input > 2024 results
Pb	Yes	0.004	<0.001 – <0.01	Model input > 2024 results
Se	Yes	0.01	<0.001 – <0.01	2024 comparable to input
Ti	No	----	<0.005 – <0.05	NA
V	No	----	0.015 – <0.05	NA
Zn	Yes	0.073	<0.005 – <0.05	Model input > 2024 results
Radionuclides[3]				
Thorium	No	----	<0.05	NA
Uranium	No	----	0.002 – <0.05	NA
Radium-226 (Bq/L)	No	----	0.15 – 1.35	NA
Radium-228 (Bq/L)	No	----	0.11 – 0.38	NA

1. *Concentrations provided in mg/L except where otherwise denoted.*
2. *Reported as total concentration*
3. *Radionuclide results reported separately in the Annual Radionuclide Monitoring Report (GRM, 2025)*
4. *NA – not applicable, analyte not included in LandSIM model*

7 CONCLUSIONS AND RECOMMENDATIONS

Based on the 2024 water quality monitoring, the following key conclusions are drawn:

- The groundwater sampling undertaken as per DWER licence L8904/2015/1 in March, June, September, and December 2024 was predominantly compliant with licence requirements noting that dry monitoring wells and ponds cannot be sampled. Additionally, dissolved metals were analysed in the leachate ponds instead of total metals;
- Groundwater elevations were consistent with previous water quality monitoring and groundwater flow direction in the shallow superficial aquifer was consistently to the northwest. In the Leederville aquifer, groundwater flow was generally to the west or southwest;
- Groundwater at the site is generally acidic and fresh with pH values below the lower pH range for drinking water. In contrast, groundwater in the leachate ponds is generally alkaline and saline;
- Time series plots indicate that most analytes were stable during 2024 monitoring and within previously observed historical ranges;
- Inconsistent and elevated water quality results reported in new monitoring wells SE3S-R and SE4S-R are interpreted to be associated with residual drilling fluid in the annulus of the monitoring well as elevated concentrations in these well are inconsistent with the chemical signature of the adjacent leachate ponds; and
- PFAS congeners were identified in the leachate ponds (PLP, LEP1 and LEP3) with concentration sums above the ADWG and NPUG, however concentrations observed above the LOR in superficial aquifer monitoring wells were below the assessment criteria. PFAS congeners were only reported above the LOR in Leederville aquifer monitoring well GW7D-R in March 2024 but were below the assessment criteria.

In consideration of the 2024 and groundwater and leachate pond analysis, the minor assessment criteria exceedances are considered more likely to be representative of background conditions as opposed to representative of impacts from landfill leachate migration. It is concluded that there is insufficient evidence to suggest that the landfill operations have impacted the underlying groundwater aquifer.

The following recommendations are made with respect to the implementation of the monitoring program in 2025:

- Further development of monitoring wells SE3S-R and SE4S-R should be undertaken to flush out residual drill fluids, given the low groundwater flow rates in the aquifer at these locations;
- Both total and dissolved metals should be analysed in accordance with the extended licence suite for the leachate ponds to ensure alignment with the licence requirements (i.e. total metals) and facilitate comparison with historic metals data collected from the ponds (i.e. dissolved metals).

8 REFERENCES

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9 LIMITATIONS

Attention is drawn to the document “Limitations”, which is included in Appendix C of this report. The statements presented in this document are intended to provide advice on what the realistic expectations of this report should be, and to present recommendations on how to minimise the risks associated with this project. The document is not intended to reduce the level of responsibility accepted by Mine Waste Management, but rather to ensure that all parties who may rely on this report are aware of the responsibilities each assumes in doing so.

APPENDIX A ABBREVIATIONS

ABBREVIATION	DEFINITION
ADWG	Australian drinking water guidelines
ANZG	Australia and New Zealand governments
COA	Certificate of analysis
COC	Chain of custody
DQI	Data quality indicator
DWER	Department of Water and Environmental Regulation
GME	Groundwater monitoring event
GRM	Geocontam Risk Management Pty Ltd
HDPE	High-density polyethylene
LEP	Leachate evaporation pond
LOR	Limit of reporting
LTIG	Long-term irrigation water guidelines
mAHD	metres Australian Height Datum
mbgl	metres below ground level
MIC	Millenium Inorganic Chemicals
NPUG	Non-potable groundwater use guideline
PLP	Primary leachate pond
PPE	Personal protective equipment
PSD	Primary stormwater dam
QA/QC	Quality assurance and quality control
RPD	Relative percent difference
SLR	SLR Consulting Australia
SRN	Sample receipt notification
SWG	Stock water guideline
SWL	Standing water level
WA	Western Australia

ABBREVIATION	CHEMICAL
Ag	silver
4:2 FTS	4:2 fluorotelomer sulfonic acid
4,4-DDE	4,4 dichlorodiphenyldichloroethylene
6:2 FTS	6:2 fluorotelomer sulfonic acid
8:2 FTS	8:2 fluorotelomer sulfonic acid

ABBREVIATION	CHEMICAL
Al	aluminium
As	arsenic
B	boron
Ba	barium
Be	beryllium
BTEXN	benzene, toluene, ethylbenzene, xylenes, and naphthalene
Ca	calcium
Cd	cadmium
Cl	chloride
Co	cobalt
CO_3	carbonate
COD	chemical oxygen demand
Cr	chromium
CrIII	trivalent chromium
CrVI	hexavalent chromium
Cu	copper
DO	dissolved oxygen
EC	electrical conductivity
Fe	iron
HCO_3	bicarbonate
Hg	mercury
K	potassium
MAH	monocyclic aromatic hydrocarbons
Mg	magnesium
Mn	manganese
Mo	molybdenum
Na	sodium
Ni	nickel
N-MeFOSE	N-methyl perfluorooctane sulfonamidoethanol
NH_3-N	ammoniacal nitrogen
NO_3-N	nitrate reported as nitrogen
NO_x-N	nitrogen oxides
OCP	organochlorine pesticides
OH^-	hydroxide

ABBREVIATION	CHEMICAL
OPP	Organophosphate pesticides
Org-N	Organic nitrogen
ORP	redox potential
P	phosphorus
PAH	polycyclic aromatic hydrocarbons
Pb	lead
PCB	polychlorinated biphenyls
PCE	percholoroethylene
PFAS	per- and poly-fluoroalkyl substances
PFBS	perfluorobutane sulfonic acid
PFDA	perfluorodecanoic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFPeA	perfluoropentanoic acid
PFPeS	perfluoropentane sulfonic acid
PFOS	perfluorooctane sulfonic acid
SO_4	sulfate
Se	selenium
TCE	trichloroethylene
TDS	total dissolved solids
Ti	titanium
TN	total nitrogen
TKN	total Kjeldahl nitrogen
TOC	total organic carbon
TP	total phosphorus
TRH	total recoverable hydrocarbons
V	vanadium
Zn	zinc

APPENDIX B FIGURES

id	Easting	Northing
1	386373	6300803
2	388338	6300875
3	388352	6300208
4	386380	6300194

CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1

2024 Annual Groundwater Monitoring Report

FIGURE 1
Site Location

Legend

Site Boundary

NOTE:
COORDINATE SYSTEM GDA 2020 MGA Zone 50

0 100 200 300 m

PROJECT No.	CONTROL	REV	DATE
J-G-AU0010	001 R	1	09/02/2025

PREPARED	REVIEW	APPROVED
MTW	JP	JP

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2024 Annual Groundwater Monitoring Report

FIGURE 2
Sampling Locations

Legend

- Site Boundary

Surface Water Locations
- Leachate Ponds
- Primary Stormwater Dams
- Tronox Tailing Cells

Groundwater Monitoring Wells
- Shallow/Deep Groundwater Wells
- Dry Groundwater Wells

NOTE:
COORDINATE SYSTEM GDA 2020 MGA Zone 50

0 100 200 300 m

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PREPARED	REVIEW		APPROVED
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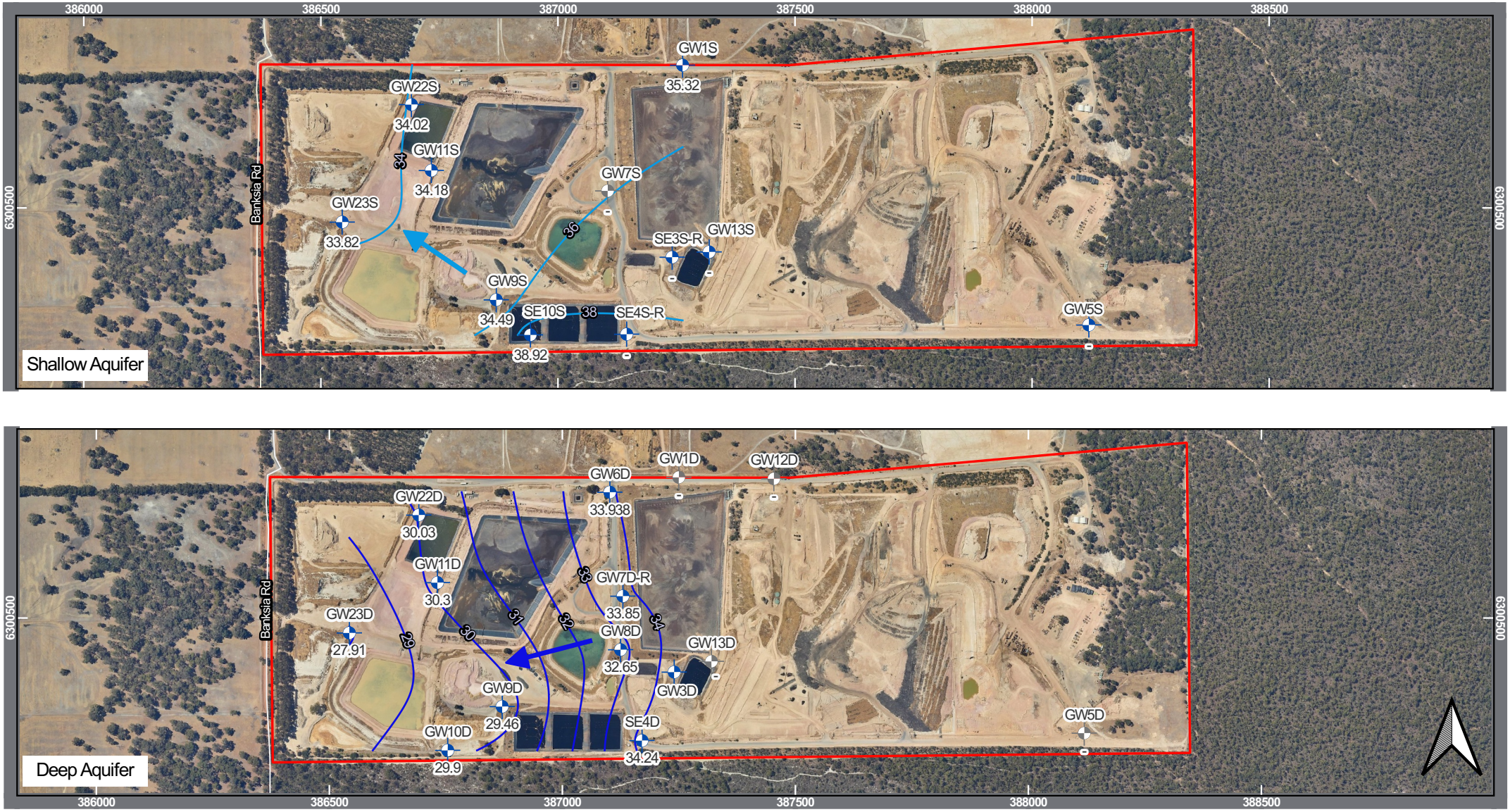

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Lot 2 Banksia Road, Crooked Brook, WA
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2024 Annual Groundwater Monitoring Report

FIGURE 3
March 2024 Groundwater Contours

Legend

- Site Boundary
- Shallow Groundwater Contours (mAHD)
- Deep Groundwater Contours (mAHD)
- 35.64 Groundwater Elevation (mAHD)
- Inferred Groundwater Flow Direction

Groundwater Monitoring Wells

- Shallow/Deep Groundwater Wells
- Dry Groundwater Well

NOTE:
COORDINATE SYSTEM GDA 2020 MGA Zone 50

0 100 200 300 m

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PREPARED	REVIEW		APPROVED
MTW	JP		JP

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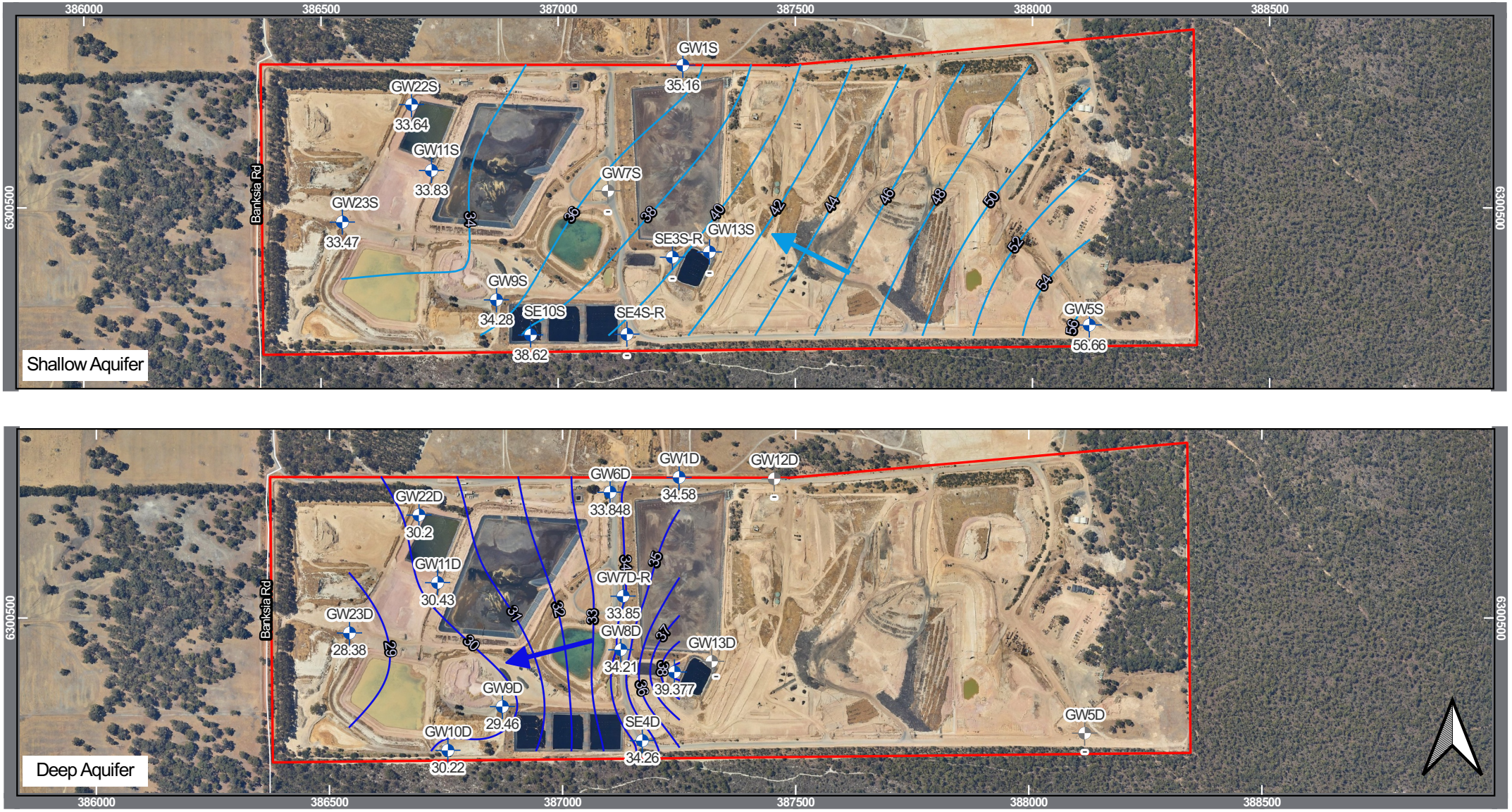

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Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1

2024 Annual Groundwater Monitoring Report

FIGURE 4
June 2024 Groundwater Contours

Legend

- Site Boundary
- Shallow Groundwater Contours (mAHD)
- Deep Groundwater Contours (mAHD)
- 35.64 Groundwater Elevation (mAHD)
- Inferred Groundwater Flow Direction

Groundwater Monitoring Wells

- Shallow/Deep Groundwater Wells
- Dry Groundwater Well

NOTE:
COORDINATE SYSTEM GDA 2020 MGA Zone 50

0 100 200 300 m

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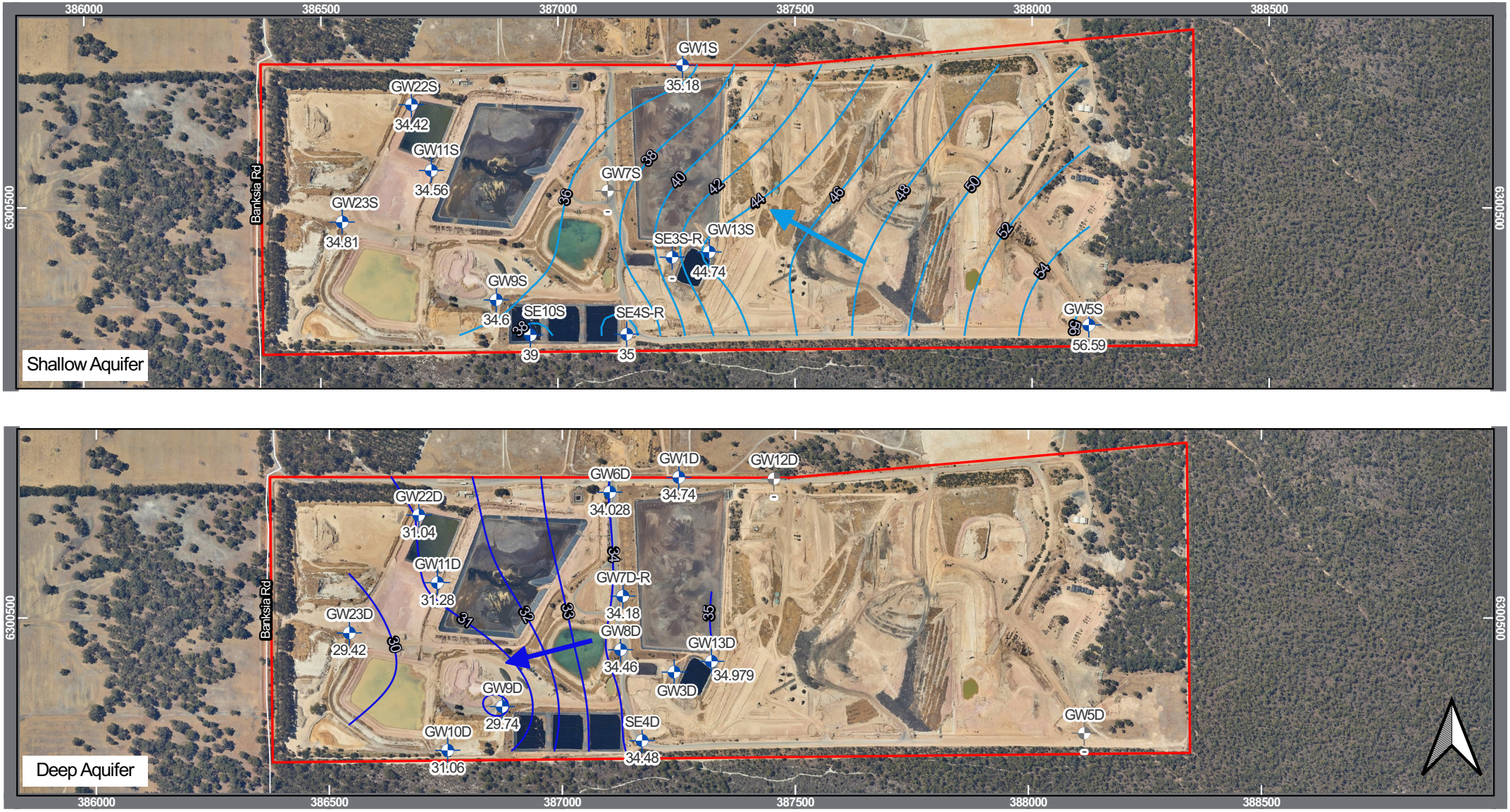

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Lot 2 Banksia Road, Crooked Brook, WA
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2024 Annual Groundwater Monitoring Report

FIGURE 5
September 2024 Groundwater Contours

Legend

- Site Boundary
- Shallow Groundwater Contours (mAHD)
- Deep Groundwater Contours (mAHD)
- 35.64 Groundwater Elevation (mAHD)
- Inferred Groundwater Flow Direction

Groundwater Monitoring Wells

- Shallow/Deep Groundwater Wells
- Dry Groundwater Well

NOTE:
COORDINATE SYSTEM GDA 2020 MGA Zone 50

0 100 200 300 m

PROJECT No.	CONTROL	REV	DATE
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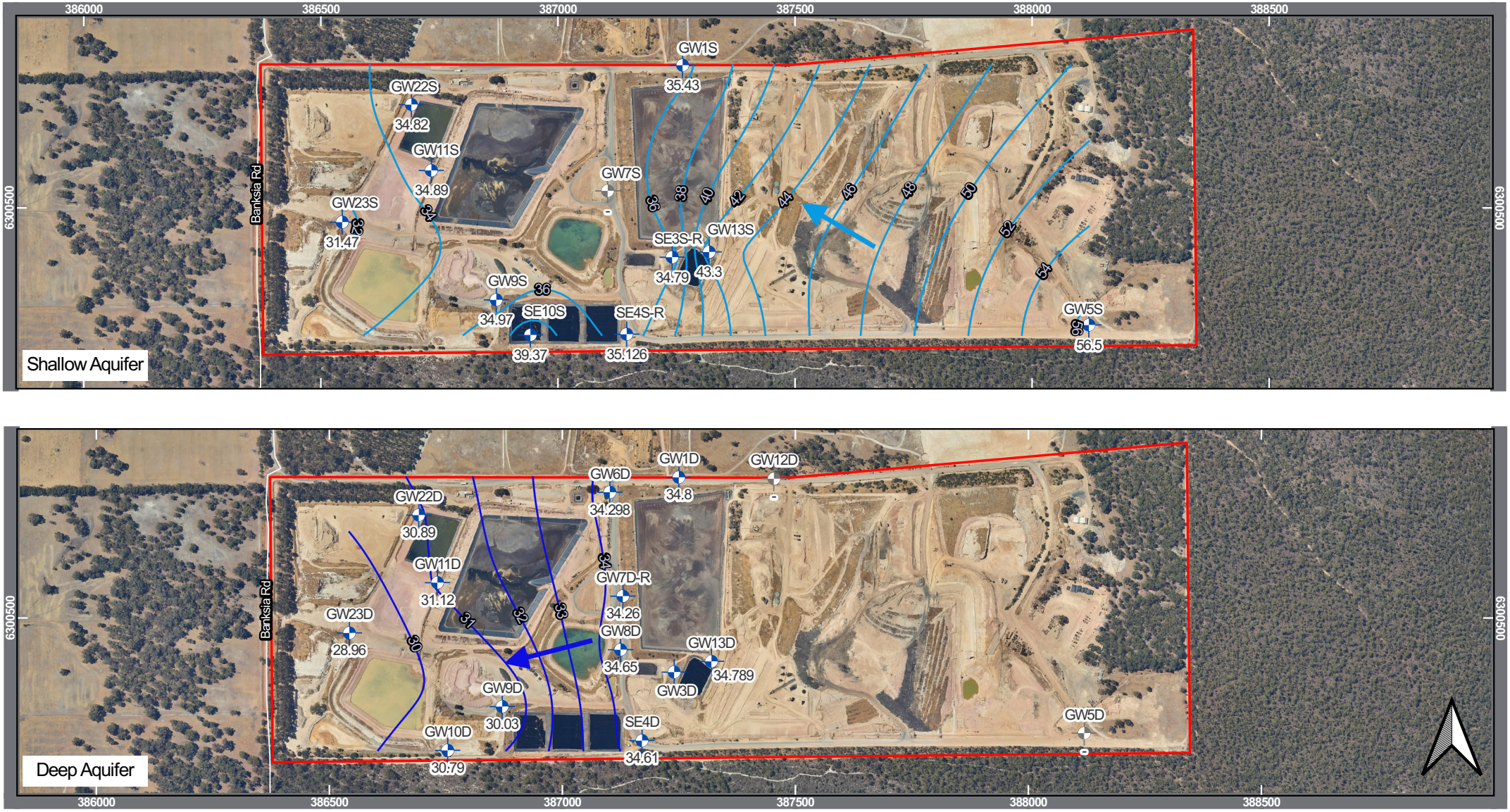

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Lot 2 Banksia Road, Crooked Brook, WA
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2024 Annual Groundwater Monitoring Report

FIGURE 6
December 2024 Groundwater Contours

Legend

- Site Boundary
- Shallow Groundwater Contours (mAHD)
- Deep Groundwater Contours (mAHD)
- 35.64 Groundwater Elevation (mAHD)
- Inferred Groundwater Flow Direction

Groundwater Monitoring Wells

- Shallow/Deep Groundwater Wells
- Dry Groundwater Well

NOTE:
COORDINATE SYSTEM GDA 2020 MGA Zone 50

0 100 200 300 m

PROJECT No.	CONTROL	REV	DATE
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PREPARED	REVIEW		APPROVED
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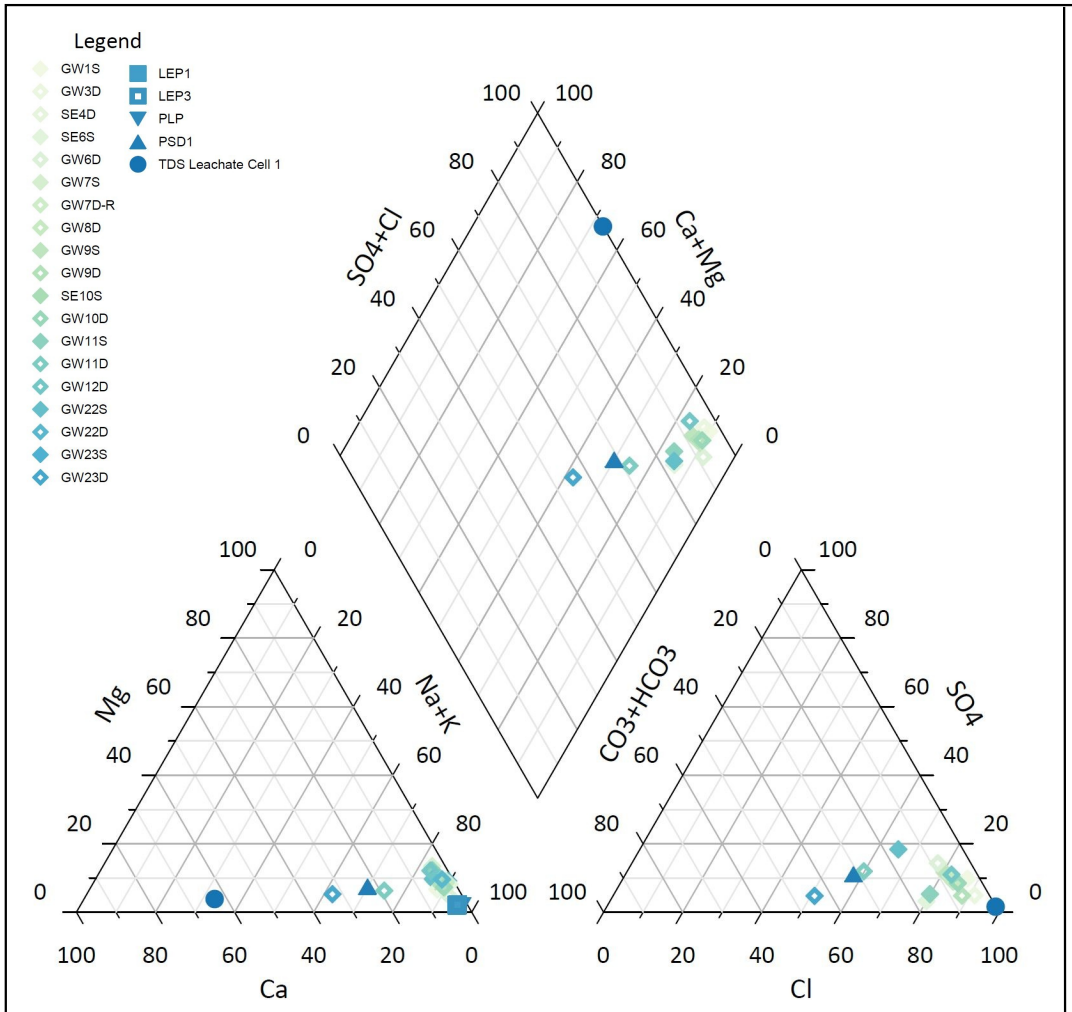

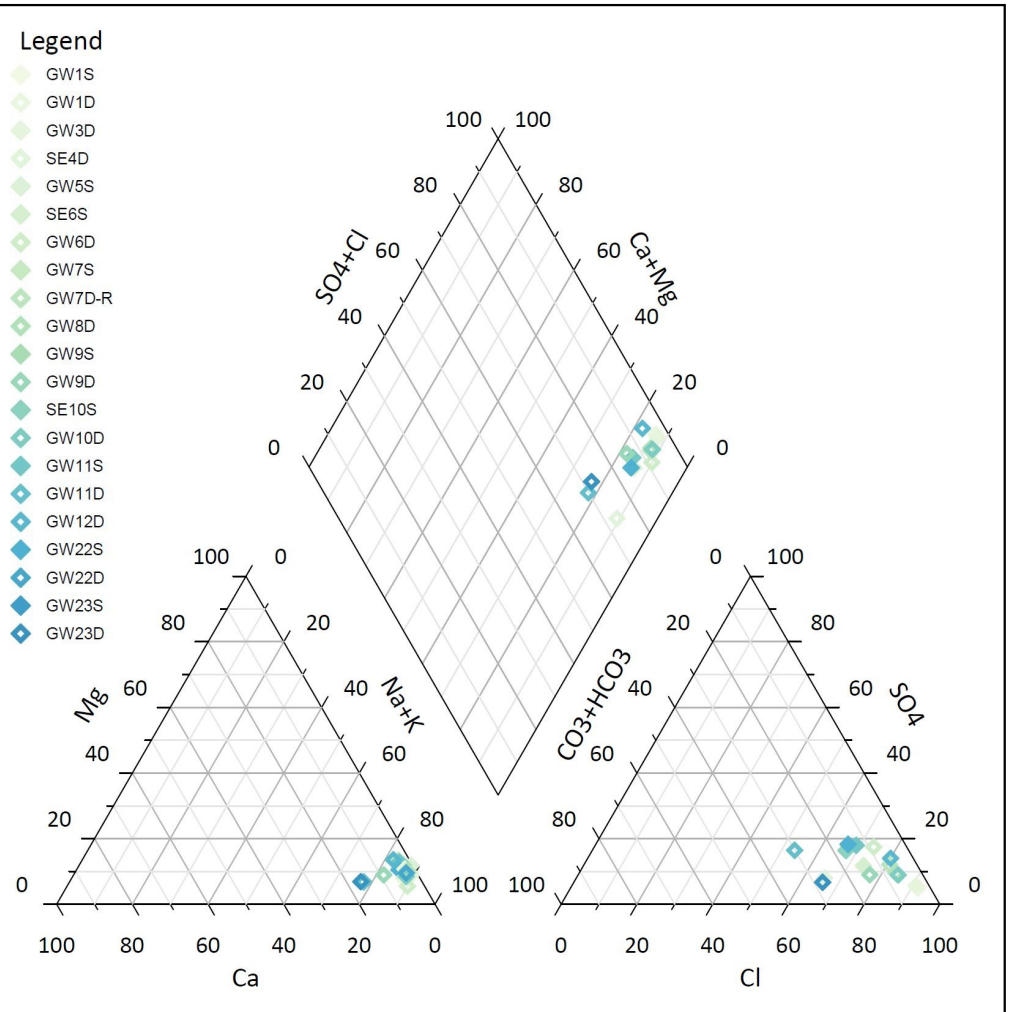

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Licence L8904/2015/1

2024 Annual Groundwater Monitoring Report

FIGURE 7
Piper Plots

PROJECT No.	CONTROL	REV	DATE
J-G-AU0010	001 R	1	16/02/2025

PREPARED	REVIEW	APPROVED
MTW	JP	JP

GEOCONTAM RISK MANAGEMENT

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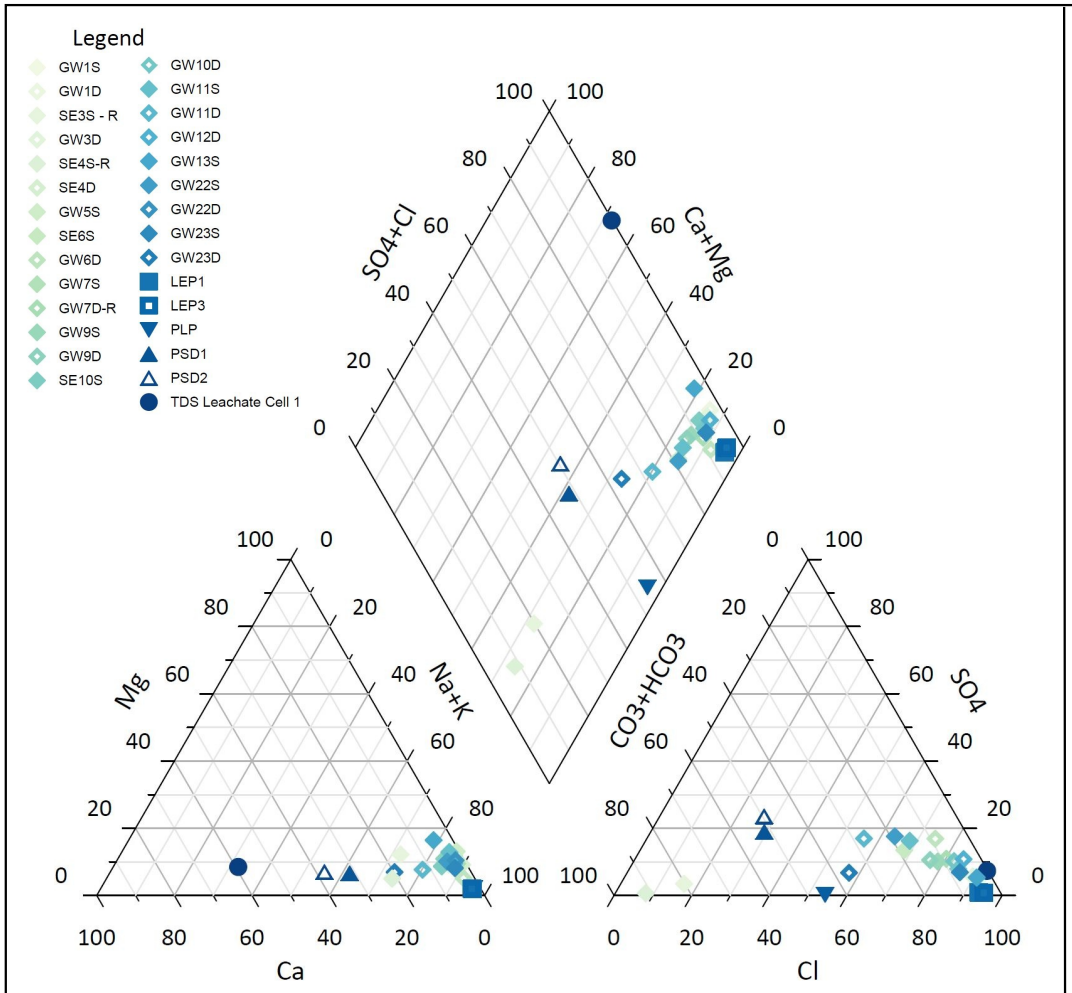
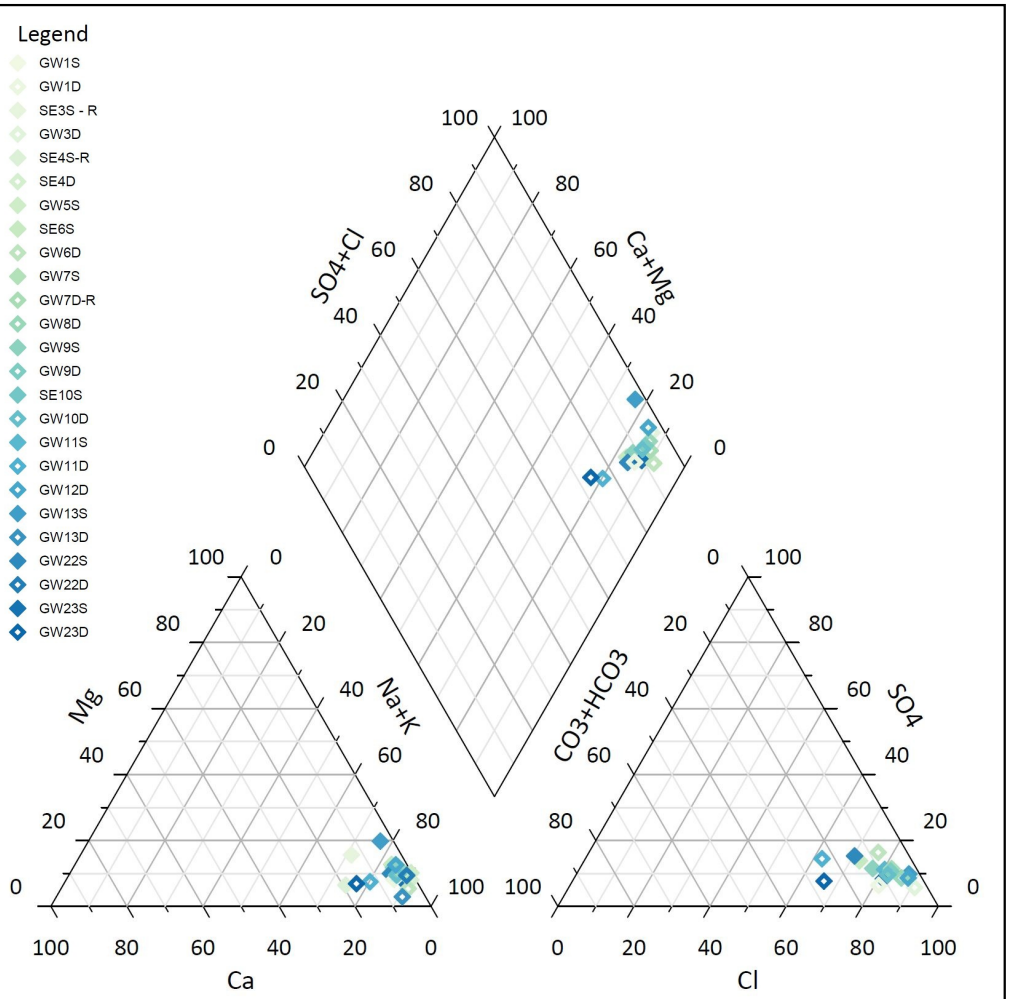


September 2024



December 2024

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Licence L8904/2015/1

2024 Annual Groundwater Monitoring Report

FIGURE 8
Piper Plots

PROJECT No.	CONTROL	REV	DATE
J-G-AU0010	001 R	1	16/02/2025

PREPARED	REVIEW	APPROVED
MTW	JP	JP

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APPENDIX C DATA TABLES

Table C1: Laboratory analysis results

ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES	SAMPLE NAME	GW1S	GW1S	GW1S	GW1S	GW1D	GW1D	GW1D	SE3S - R	SE3S - R	GW3D	GW3D	GW3D	GW3D	SE4S-R
							LAB REPORT NUMBER	1083237	1112682	1144109	1173105	1112682	1144109	1173105	1144109	1173105	1083237	1112682	1144109	1173105	1144109
							SAMPLE ID	L24-Ap0001461	L24-Jn0074081	L24-Se0073489	L24-De0050589	L24-Jn0074082	L24-Se0073490	L24-De0050590	L24-Se0073491	L24-De0050592	L24-Ap0001462	L24-Jn0074083	L24-Se0073492	L24-De0050591	L24-Se0073493
							LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
							SAMPLE DATE	27 Mar 2024	26 Jun 2024	26 Sep 2024	17 Dec 2024	26 Jun 2024	26 Sep 2024	17 Dec 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	24 Sep 2024
							MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Temperature	°C	---	---	---	---	---		21.5	19.5	20.3	22.1	20.1	20.5	24.2	19.4	22.1	23.5	19.4	19.4	21.8	21.1
Dissolved Oxygen	mg/L	---	---	---	---	---		3.78	8.9	4.3	8.1	5.31	9.1	8.6	1.66	1.76	4.46	3.64	4.99	7.9	4.41
Electrical Conductivity	uS/cm	---	---	---	---	---		563	375.2	652	620	1508	1045	880	1237	1470	760	805	854	730	1421
pH (Lab)	pH unit	---	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5		5.6	5.9	5.3	5.0	5.7	5.9	6.2	5.5	6.5	6	4.84	4.9	5.3	6.2
Oxygen Reduction Potential	mV	---	---	---	---	---		-4.6	86.5	106.3	550	152.7	141.3	490	113.3	-105.4	-19	142.2	189.9	480	-36.7
Top of Casing	mAHD	---	---	---	---	---		71.7	71.7	71.7	71.7	70.6	70.6	70.6	72.39	72.39	72.157	72.157	72.157	72.157	----
Well Depth	mbgl	---	---	---	---	---		39.5	39.46	39.876	----	49.79	49.15	----	41.39	----	37.74	32.78	37.43	----	37.05
Depth to Water (mbtoc)	mbgl	---	---	---	---	---		36.38	36.54	36.52	36.27	36.02	35.86	35.80	37.55	37.60	51.61	51.52	51.40	37.45	39.97
Groundwater Elevation	mAHD	---	---	---	---	---		35.32	35.16	35.18	35.43	34.58	34.74	34.80	34.84	34.79	34.42	39.38	34.73	34.71	----
Colour	---	---	---	---	---	---		Light Brown	Light brown	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Milky White	Colourless	Colourless	Colourless	Colourless	Colourless
Turbidity	---	---	---	---	---	---		Moderate	High	High	Low	Low	Low	Low	High	High	Low	Low	Low	Low	High
Odour	---	---	---	---	---	---		Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Sulfur	Odourless	Odourless	Odourless	Odourless	Odourless	Sulfur
Inorganics																					
COD	mg/L	25	---	---	---	---		< 25	< 25	28	< 25	< 25	< 25	< 25	< 25	1900	<25	< 25	< 25	< 25	1300
Ammonia as N	mg/L	0.02	0.41	0.5	---	---		0.07	<0.02	<0.02	< 0.02	< 0.02	< 0.02	< 0.02	1.2	1.7	0.05	< 0.02	< 0.02	< 0.02	1.6
Nitrate (as N)	mg/L	0.01	113	11.3	---	---		3	2.4	2.1	3	1.5	1.1	2.2	0.33	0.35	1.6	1.5	1.4	1.6	0.08
Nitrite (as N)	mg/L	0.01	9.1	0.91	---	---		0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.07	<0.01	< 0.01	< 0.01	< 0.01	0.03
Nitrite + Nitrate as N	mg/L	0.01	---	---	---	---		3	2.4	2.1	3	1.5	1.1	2.2	0.34	0.42	1.6	1.5	1.4	1.6	0.11
Nitrogen (Total)	mg/L	0.2	---	---	5,000	---		3	2.7	2.2	3	1.5	1.2	2.5	2.9	2.2	1.7	1.5	1.6	1.6	2.5
Kjeldahl Nitrogen Total	mg/L	0.2	---	---	---	---		0.5	0.3	< 0.2	< 0.2	< 0.2	< 0.2	0.3	2.6	1.8	<0.2	< 0.2	0.2	< 0.2	2.4
Phosphorus	mg/L	0.01	---	---	50[ns]	---		0.04	0.19	0.02	0.04	0.04	0.02	0.04	< 0.01	<0.01	0.03	0.04	0.02	0.02	< 0.01
Alkalinity total as CaCO3	mg/L as CaCO3	5	---	---	---	---		5.7	< 5	< 5	< 5	15	13	43	300	300	9.9	7.9	10	8.9	570
Alkalinity (Hydroxide)	mg/L as CaCO3	5	---	---	---	---		<5	< 5	< 5	< 5	< 5	< 5	< 5	<5	<5	<5	<5	<5	<5	<5
Alkalinity (Bicarbonate as HCO3)	mg/L as CaCO3	5	---	---	---	---		5.7	< 5	< 5	< 5	15	13	43	300	300	9.9	7.9	10	8.9	570
Alkalinity (Carbonate)	mg/L as CaCO3	5	---	---	---	---		<5	< 5	< 5	< 5	< 5	< 5	< 5	<5	<5	<5	<5	<5	<5	<5
TDS	mg/L	5	---	---	---	---		340	370	390	370	900	920	530	670	810	460	450	450	440	1100
Electrical Conductivity (Lab)	uS/cm	10	---	---	---	---		570	620	650	620	1500	1500	880	1100	1400	770	760	740	730	1800
Total Organic Carbon (TOC)	mg/L	5	---	---	---	---		<5	< 5	< 5	7.1	< 5	< 5	5.6	780	910	<5	< 5	< 5	16	750
Major ions																					
Calcium	mg/L	0.5	---	---	---	---		2.7	3.5	2.8	2.1	7.1	7.0	9.0	32	27	8.1	6.1	6.6	5.2	85
Magnesium	mg/L	0.5	---	---	---	---		11	12	12	11	30	33	14	24	32	14	12	12	10	26
Magnesium (filtered)	mg/L	0.5	---	---	---	---		8.6	11	11	9.9	29	35	13	25	30	10	11	13	11	20
Potassium	mg/L	0.5	---	---	---	---		2.0	2.3	2.1	1.8	5.3	5.0	7.1	8.6	6.5	2.4	2.6	1.9	1.8	14
Sulfate	mg/L	1	250	---	---	---		18	19	17	21	22	22	22	13	<1	13	13	12	15	4.0
Sodium	mg/L	0.5	180	---	---	---		98	99	100	90	230	250	130	140	140	130	120	120	100	280
Chloride (filtered)	mg/L	5	250	---	---	---		160	160	160	190	410	390	280	61	130	240	210	190	240	49
Metals																					
Aluminium (filtered)	mg/L	0.05	0.2	---	5	5		0.36	0.56	< 0.05	0.07	0.21	< 0.05	< 0.05	< 0.05	0.29	<0.05	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	mg/L	0.001	0.1	0.01	0.1	0.5[ef]		<0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.003	0.025	<0.001	< 0.001	< 0.001	< 0.001	0.008
Cadmium (filtered)	mg/L	0.0001	0.02	0.002	0.01	0.01		<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (hexavalent)	mg/L	0.002	0.5	0.05	---	---		<0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	<0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chromium (III+VI) (filtered)	mg/L	0.001	---	---	0.1	1		<0.001	< 0.001	< 0.001	< 0.001	----	< 0.001	< 0.001	< 0.001	0.004	<0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chromium (Trivalent) (filtered)	mg/L	0.002	---	---	0.1	---		<0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.004	<0.002	< 0.002	< 0.002	< 0.002	< 0.002
Copper (filtered)	mg/L	0.001	1	2	0.2	0.4[ef5]		0.002	0.008	0.002	< 0.001	0.003	0.004	0.001	< 0.001	0.04	0.002	< 0.001	0.002	0.002	< 0.001
Lead (filtered)	mg/L	0.001	0.1	0.01	2	0.1		0.002	0.004	< 0.001	< 0.001	0.003	0.001	< 0.001	< 0.001	0.005	<0.001	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	mg/L	0.005	5	0.5	0.2	---		0.075	0.46	0.037	0.015	0.005	0.007	0.005	0.94	1.3	0.3	0.3	0.25	0.24	9.3
Mercury (filtered)	mg/L	0.0001	0.01	0.001	0.002	0.002		<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	mg/L	0.001	0.2	0.02	0.2	1		0.005	0.006	0.005	0.002	0.002	0.004	0.006	0.006	0.006	0.004	0.004	0.012	0.012	0.096
Selenium (filtered)	mg/L	0.001	0.1	0.01	0.02	0.02		<0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	mg/L	0.005	3	---	2	20		0.13	0.2	0.049	0.064	0.008	0.011	0.028	0.049	0.11	0.007	0.006	0.011	0.016	0.043
Titanium (filtered)	mg/L	0.005	---	---	---	---		<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.01	0.3	---	0.2	---		0.56	3.8	1.6	1.5	0.22	0.5	0.15	140	310	0.09	0.08	0.24	0.06	330
Vanadium (filtered)	mg/L	0.05	---	---	---	---		---	---	---	---	---	---	---	---	---	---	----	---	---	---
Molybdenum (filtered)	mg/L	0.001	0.5	0.05	---	---		---	---	---	---	----	---	---	---	---	---	----	---	---	---
Silver (filtered)	mg/L	0.001	1	0.1	---	---		---	---	---	---	----	---	---	---	---	---	----	---	---	---
Barium (filtered)	mg/L	0.01	20	2	---	---		---	---	---	---	----	---	---	---	---	---	----	---	---	---
Beryllium (filtered)	mg/L	0.001	0.6	0.06	0.1	---		---	---	---	---	----	---	---	---	---	---	----	---	---	---
Boron (filtered)	mg/L	0.05	40	4	---	---		---	---	---	---	----	---	---	---	---	---	----	---	---	---
Cobalt (filtered)	mg/L	0.001	0.5	0.05	---	---		---	---	---	---	----	---	---	---	---	---	----	---	---	---
BTEXN																					
Naphthalene (VOC)	mg/kg	0.001	---	---	---	---		< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzene	mg/L	0.001	0.01	0.001	---	---		< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Toluene	mg/L	0.001	0.025	0.8	---	---		< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Ethylbenzene	mg/L	0.001	0.003	0.3	---	---		< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Xylene (m & p)	mg/L	0.002	0.02	---	---	---		< 0.002	----	< 0.002	----	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002
Xylene (o)	mg/L	0.001	0.02	---	---	---		< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Xylene Total	mg/L	0.003	---	0.6	---	---		< 0.003	----	< 0.003	----	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003
TPH																					
C6-C9	mg/L	0.02	---	---	---	---		< 0.02	----	< 0.02	----	----	< 0.02	----	0.03	----	< 0.02	----	< 0.02	----	< 0.02
C10-C14	mg/L	0.02	---	---	---	---		< 0.02	----	< 0.02	----	----	< 0.02	----	23	----	< 0.02	----	< 0.02	----	0.87
C15-C28	mg/L	0.04	---	---	---	---		< 0.04	----	< 0.04	----	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04
C29-C36	mg/L	0.04	---	---	---	---		< 0.04	----	< 0.04	----	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04
C10-C36 (Total)	mg/L	0.04	---	---	---	---		< 0.04	----	< 0.04	----	----	< 0.04	----	23	----	< 0.04	----	< 0.04	----	0.87

Table C1: Laboratory analysis results

						SAMPLE NAME	GW1S	GW1S	GW1S	GW1S	GW1D	GW1D	GW1D	SE3S - R	SE3S - R	GW3D	GW3D	GW3D	GW3D	SE4S-R
						LAB REPORT NUMBER	1083237	1112682	1144109	1173105	1112682	1144109	1173105	1144109	1173105	1083237	1112682	1144109	1173105	1144109
						SAMPLE ID	L24-Ap0001461	L24-Jn0074081	L24-Se0073489	L24-De0050589	L24-Jn0074082	L24-Se0073490	L24-De0050590	L24-Se0073491	L24-De0050592	L24-Ap0001462	L24-Jn0074083	L24-Se0073492	L24-De0050591	L24-Se0073493
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	27 Mar 2024	26 Jun 2024	26 Sep 2024	17 Dec 2024	26 Jun 2024	26 Sep 2024	17 Dec 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	24 Sep 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
TRH																				
C6-C10	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	----	< 0.02	----	**0.04**	----	< 0.02	----	< 0.02	----	< 0.02
C6-C10 (F1 minus BTEX)	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	----	< 0.02	----	**0.04**	----	< 0.02	----	< 0.02	----	< 0.02
C10-C16	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	----	< 0.02	----	**22**	----	< 0.02	----	< 0.02	----	**0.62**
C10-C16 (F2 minus Naphthalene)	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	----	< 0.02	----	**22**	----	< 0.02	----	< 0.02	----	**0.62**
C16-C34 (F3)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05
C34-C40 (F4)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05
C10-C40 (Total)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	----	< 0.05	----	**22**	----	< 0.05	----	< 0.05	----	**0.62**
PAH																				
Acenaphthene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Naphthalene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Acenaphthylene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Anthracene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benz(a)anthracene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(a) pyrene	µg/L	1	0.1	0.01	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Chrysene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Fluoranthene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Fluorene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Phenanthrene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Pyrene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
PAHs (Sum of total)	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	<1	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
MAH																				
Styrene	µg/L	0.5	4	30	---		<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	---	0.7	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,1-dichloroethane	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,1-dichloroethene	µg/L	0.5	300	30	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,2-dichloroethane	µg/L	0.5	30	3	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
Carbon tetrachloride	µg/L	0.5	30	3	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
Dichloromethane	µg/L	5	---	4	---	---	<5	----	< 5	----	----	< 5	----	< 5	----	< 5	----	< 5	----	< 5
Tetrachloroethene	µg/L	0.5	500	50	---	---	<0.5	----	---	----	----	---	----	---	----	---	----	---	----	---
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	<2	----	< 2	----	----	< 2	----	< 2	----	< 2	----	< 2	----	< 2
Trichloroethene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
Vinyl chloride	µg/L	0.2	3	0.3	---	---	<0.2	----	< 0.2	----	----	< 0.2	----	< 0.2	----	< 0.2	----	< 0.2	----	< 0.2
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	**0.02**
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.7	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01		---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	0.7	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	**0.01**
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	**0.06**	----	<0.01	----	< 0.01	----	**0.06**
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	**0.08**	----	<0.01	----	< 0.01	----	**0.07**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.56	0.56	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	**0.02**	----	<0.01	----	< 0.01	----	**0.02**
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
N-ethyl perfluorooctane sulfonamide	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05

Table C1: Laboratory analysis results

						SAMPLE NAME	GW1S	GW1S	GW1S	GW1S	GW1D	GW1D	GW1D	SE3S - R	SE3S - R	GW3D	GW3D	GW3D	GW3D	SE4S-R
						LAB REPORT NUMBER	1083237	1112682	1144109	1173105	1112682	1144109	1173105	1144109	1173105	1083237	1112682	1144109	1173105	1144109
						SAMPLE ID	L24-Ap0001461	L24-Jn0074081	L24-Se0073489	L24-De0050589	L24-Jn0074082	L24-Se0073490	L24-De0050590	L24-Se0073491	L24-De0050592	L24-Ap0001462	L24-Jn0074083	L24-Se0073492	L24-De0050591	L24-Se0073493
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	27 Mar 2024	26 Jun 2024	26 Sep 2024	17 Dec 2024	26 Jun 2024	26 Sep 2024	17 Dec 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	24 Sep 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----	< 0.05
Sum of PFAS	µg/L	0.1	---	---	---	---	<0.1	----	< 0.1	----	----	< 0.1	----	**0.16**	----	<0.1	----	< 0.1	----	**0.18**
Sum of PFHxS and PFOS	µg/L	0.01	0.7	0.07	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	**0.01**
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	**0.02**	----	<0.01	----	< 0.01	----	**0.03**
Sum of enHealth PFAS (PFHxS + PFOS +	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	**0.02**	----	<0.01	----	< 0.01	----	**0.03**
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	**0.16**	----	<0.05	----	< 0.05	----	**0.18**
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	---	---	---	---	<0.000001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
chlordane	µg/L	0.002	20	2	---	---	<0.002	----	< 0.002	----	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002
d-BHC	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
DDT	µg/L	0.001	90	9	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Heptachlor epoxide	µg/L	0.001	3,000	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
DDD	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Methoxychlor	µg/L	0.02	---	300[#Z]	---	---	<0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
Dieldrin	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Endrin	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
4,4-DDE	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
a-BHC	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Aldrin	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
g-BHC (Lindane)	µg/L	0.001	---	10	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
b-BHC	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Endosulfan I	µg/L	0.001	200	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Endosulfan II	µg/L	0.001	200	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Endosulfan sulphate	µg/L	0.001	200,000	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Heptachlor	µg/L	0.001	---	0.3	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	100	10	---	---	<0.005	----	< 0.005	----	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005
Diazinon	µg/L	0.01	40	4	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Ethion	µg/L	0.01	40	4	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Fenitrothion	µg/L	0.01	0.07	7[#Z]	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Parathion	µg/L	0.02	200	20	---	---	<0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
Methyl parathion	µg/L	0.02	7	0.7	---	---	<0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
Malathion	µg/L	0.01	700	70	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Pesticides																				
Bifenthrin	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05
Bromophos	mg/L	0.000005	---	---	---	---	<0.000005	----	< 0.005	----	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005
Atrazine	mg/L	0.1	---	---	---	---	<0.1	----	< 0.1	----	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1
Dinoseb	mg/L	0.002	---	---	---	---	<0.002	----	< 0.002	----	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002
Chlorothalonil	µg/L	0.01	---	50	---	---	<0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Vinclozolin	µg/L	0.02	---	---	---	---	<0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.4.6-Trichlorophenol	mg/L	0.001	2	20	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.4-Dichlorophenol	mg/L	0.001	0.3	200	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2-Chlorophenol	mg/L	0.001	0.1	300	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Pentachlorophenol	mg/L	0.001	100	10	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	< 0.003	----	< 0.003	----	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
4-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Phenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Total cresols*	mg/L	0.01	---	---	---	---	< 0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	< 0.1	----	< 0.1	----	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1
Fipronil	mg/L	0.00002		0.0007	---	---	<0.00002	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02

Table C1: Laboratory analysis results

						SAMPLE NAME	GW1S	GW1S	GW1S	GW1S	GW1D	GW1D	GW1D	SE3S - R	SE3S - R	GW3D	GW3D	GW3D	GW3D	SE4S-R
						LAB REPORT NUMBER	1083237	1112682	1144109	1173105	1112682	1144109	1173105	1144109	1173105	1083237	1112682	1144109	1173105	1144109
						SAMPLE ID	L24-Ap0001461	L24-Jn0074081	L24-Se0073489	L24-De0050589	L24-Jn0074082	L24-Se0073490	L24-De0050590	L24-Se0073491	L24-De0050592	L24-Ap0001462	L24-Jn0074083	L24-Se0073492	L24-De0050591	L24-Se0073493
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	27 Mar 2024	26 Jun 2024	26 Sep 2024	17 Dec 2024	26 Jun 2024	26 Sep 2024	17 Dec 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	24 Sep 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
PCBs																				
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	<0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,2-dichlorobenzene	µg/L	0.5	---	1,500	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
1,4-dichlorobenzene	µg/L	0.5	---	40	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
Chlorobenzene	µg/L	0.5	---	300	---	---	<0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5
Hexachlorobenzene	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001

Table C1: Laboratory analysis results

ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES	SAMPLE NAME	SE4S-R	SE4D	SE4D	SE4D	SE4D	GW5S	GW5S	GW5S	SE6S	SE6S	SE6S	SE6S	GW6D	GW6D
							LAB REPORT NUMBER	1173105	1083237	1112682	1144109	1173105	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682
							SAMPLE ID	L24-De0050593	L24-Ap0001463	L24-Jn0074086	L24-Se0073494	L24-De0050594	L24-Jn0074087	L24-Se0073495	L24-De0050595	L24-Ap0001464	L24-Jn0074089	L24-Se0073496	L24-De0050596	L24-Ap0001465	L24-Jn0074090
							LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
							SAMPLE DATE	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	27 Jun 2024	26 Sep 2024	18 Dec 2024	26 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	26 Jun 2024
							MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Temperature	°C	---	---	---	---	---		28.5	22.7	18.1	19.9	23	16.8	22.4	19.5	19.8	18.9	18.1	22.1	20.1	18.4
Dissolved Oxygen	mg/L	---	---	---	---	---		0.3	4.9	4.65	7.32	8	4.12	2.16	7.9	4.99	7.76	3.43	8	5.68	4.05
Electrical Conductivity	uS/cm	---	---	---	---	---		1200	351.9	425	526	390	2228	2139	2100	441.1	457.5	514	450	488.4	527
pH (Lab)	pH unit	---	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5		6.1	5.1	4.35	4.4	4.6	4.02	4.17	3.8	5.9	5.32	5.35	5.7	6.0	5.2
Oxygen Reduction Potential	mV	---	---	---	---	---		110	-1	170.7	226.7	500	162.6	129.4	600	91.7	155.8	95.9	470	-17.9	74.9
Top of Casing	mAHD	---	---	---	---	---		72.05	71.7	71.7	71.7	71.7	105.97	105.97	105.97	----	----	----	----	64.328	64.328
Well Depth	mbgl	---	---	---	---	---		----	37.46	37.44	37.22	----	49.31	49.38	----	29.31	30.09	29.96	29.56	51.65	51.94
Depth to Water (mbtoc)	mbgl	---	---	---	---	---		36.92	54.59	54.80	53.68	37.09	51.70	51.64	49.47	41.30	41.13	41.05	----	30.39	30.48
Groundwater Elevation	mAHD	---	---	---	---	---		35.13	34.24	34.26	34.48	34.61	54.27	54.33	56.50	----	----	----	----	33.94	33.85
Colour	---	---	---	---	---	---		Milky White	Colourless	Light Brown	Colourless	Milky White	Brown	Light Brown	Brown	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
Turbidity	---	---	---	---	---	---		High	Low	High	Low	High	High	Low	High	Low	Moderate	Low	Low	High	High
Odour	---	---	---	---	---	---		Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless
Inorganics																					
COD	mg/L	25	---	---	---	---		1600	<25	< 25	< 25	42	26	980	210	<25	< 25	< 25	88	83	< 25
Ammonia as N	mg/L	0.02	0.41	0.5	---	---		0.81	0.06	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.06	< 0.02	< 0.02	< 0.02	0.05	< 0.02
Nitrate (as N)	mg/L	0.01	113	11.3	---	---		0.19	0.13	0.08	0.1	0.13	1.8	1.7	1.9	5.7	6.8	6.6	8.6	2.1	2.1
Nitrite (as N)	mg/L	0.01	9.1	0.91	---	---		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	<0.01	< 0.01	< 0.01	< 0.01	<0.01	< 0.01
Nitrite + Nitrate as N	mg/L	0.01	---	---	---	---		0.19	0.13	0.08	0.1	0.13	1.8	1.7	1.9	5.7	6.9	6.7	8.7	2.1	2.1
Nitrogen (Total)	mg/L	0.2	---	---	5,000	---		4.9	0.2	0.5	< 0.2	0.9	3.8	1.7	3.5	5.8	6.9	6.7	8.7	2.2	2.1
Kjeldahl Nitrogen Total	mg/L	0.2	---	---	---	---		4.7	<0.2	0.4	< 0.2	0.8	2	< 0.2	1.6	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Phosphorus	mg/L	0.01	---	---	50[#5]	---		< 0.01	0.3	0.1	0.02	< 0.01	0.37	0.04	0.68	0.04	0.08	0.02	0.03	0.03	0.13
Alkalinity total as CaCO3	mg/L as CaCO3	5	---	---	---	---		520	<5	40	< 5	< 5	< 5	< 5	< 5	21	17	22	21	14	13
Alkalinity (Hydroxide)	mg/L as CaCO3	5	---	---	---	---		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity (Bicarbonate as HCO3)	mg/L as CaCO3	5	---	---	---	---		520	<5	40	< 5	< 5	< 5	< 5	< 5	21	17	22	21	14	13
Alkalinity (Carbonate)	mg/L as CaCO3	5	---	---	---	---		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
TDS	mg/L	5	---	---	---	---		740	210	270	240	230	1400	1400	1200	270	260	270	270	300	300
Electrical Conductivity (Lab)	uS/cm	10	---	---	---	---		1200	350	450	400	390	2300	2300	2100	440	430	450	450	500	490
Total Organic Carbon (TOC)	mg/L	5	---	---	---	---		620	<5	< 5	< 5	380	< 5	< 5	170	<5	< 5	< 5	6.9	6.8	< 5
Major ions																					
Calcium	mg/L	0.5	---	---	---	---		51	1.0	1.3	1.00	1	1.6	2.8	1	2.9	2.8	3	3.2	3.2	4.5
Magnesium	mg/L	0.5	---	---	---	---		20	7.0	7.2	7.4	7.8	47	49	49	11	8.4	9.6	11	5.7	5.7
Magnesium (filtered)	mg/L	0.5	---	---	---	---		17	5.4	6.7	7.1	6.2	47	53	44	8.9	8.2	9.1	10	4.5	5.5
Potassium	mg/L	0.5	---	---	---	---		7.9	0.7	1.4	0.7	1	9.1	10	8.9	2.9	2.5	2.5	2.7	1.4	1.6
Sulfate	mg/L	1	250	---	---	---		< 1	11	12	11	13	48	44	43	4	14	16	21	24	26
Sodium	mg/L	0.5	180	---	---	---		190	59	65	69	69	340	340	380	69	65	66	63	88	88
Chloride (filtered)	mg/L	5	250	---	---	---		67	98	99	91	110	610	570	760	100	88	81	110	130	110
Metals																					
Aluminium (filtered)	mg/L	0.05	0.2	---	5	5		0.44	0.12	0.57	0.14	0.69	3.4	2	5	<0.05	0.07	< 0.05	< 0.05	<0.05	0.23
Arsenic (filtered)	mg/L	0.001	0.1	0.01	0.1	0.5[#7]		0.007	<0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001
Cadmium (filtered)	mg/L	0.0001	0.02	0.002	0.01	0.01		0.0003	<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001
Chromium (hexavalent)	mg/L	0.002	0.5	0.05	---	---		< 0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002
Chromium (III+VI) (filtered)	mg/L	0.001	---	---	0.1	1		< 0.001	<0.001	< 0.001	0.001	0.001	0.003	< 0.001	0.004	<0.001	< 0.001	< 0.001	< 0.001	<0.001	0.001
Chromium (Trivalent) (filtered)	mg/L	0.002	---	---	0.1	---		< 0.002	<0.002	< 0.002	< 0.002	< 0.002	0.003	< 0.002	0.004	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002
Copper (filtered)	mg/L	0.001	1	2	0.2	0.4[#6]		0.006	0.002	0.003	0.003	0.008	0.013	0.002	0.02	<0.001	< 0.001	< 0.001	0.002	0.001	0.002
Lead (filtered)	mg/L	0.001	0.1	0.01	2	0.1		0.002	<0.001	0.003	< 0.001	0.004	0.02	0.001	0.031	<0.001	< 0.001	< 0.001	< 0.001	<0.001	0.006
Manganese (filtered)	mg/L	0.005	5	0.5	0.2	---		8.2	<0.005	< 0.005	< 0.005	< 0.005	0.059	0.15	0.079	0.01	0.038	0.042	0.019	0.32	0.53
Mercury (filtered)	mg/L	0.0001	0.01	0.001	0.002	0.002		< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001
Nickel (filtered)	mg/L	0.001	0.2	0.02	0.2	1		0.028	<0.001	0.002	0.002	0.005	0.004	0.005	0.003	0.004	0.002	0.002	0.003	0.004	0.007
Selenium (filtered)	mg/L	0.001	0.1	0.01	0.02	0.02		< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.006	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001
Zinc (filtered)	mg/L	0.005	3	---	2	20		0.92	<0.005	< 0.005	0.005	0.031	0.11	0.11	0.27	0.05	0.007	0.005	0.008	0.006	0.019
Titanium (filtered)	mg/L	0.005	---	---	---	---		< 0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005
Iron	mg/L	0.01	0.3	---	0.2	---		400	0.1	2	0.22	4	7.2	41	50	0.07	0.3	0.89	0.72	0.2	3.4
Vanadium (filtered)	mg/L	0.05	---	---	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---
Molybdenum (filtered)	mg/L	0.001	0.5	0.05	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---
Silver (filtered)	mg/L	0.001	1	0.1	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---
Barium (filtered)	mg/L	0.01	20	2	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---
Beryllium (filtered)	mg/L	0.001	0.6	0.06	0.1	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---
Boron (filtered)	mg/L	0.05	40	4	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cobalt (filtered)	mg/L	0.001	0.5	0.05	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---
BTEXN																					
Naphthalene (VOC)	mg/kg	0.001	---		---	---		----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzene	mg/L	0.001	0.01	0.001	---	---		----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Toluene	mg/L	0.001	0.025	0.8	---	---		----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Ethylbenzene	mg/L	0.001	0.003	0.3	---	---		----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Xylene (m & p)	mg/L	0.002	0.02	---	---	---		----	< 0.002	----	< 0.002	----	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----
Xylene (o)	mg/L	0.001	0.02	---	---	---		----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Xylene Total	mg/L	0.003	---	0.6	---	---		----	< 0.003	----	< 0.003	----	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----
TPH																					
C6-C9	mg/L	0.02	---	---	---	---		----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C14	mg/L	0.02	---	---	---	---		----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C15-C28	mg/L	0.04	---	---	---	---		----	< 0.04	----	< 0.04	----	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----
C29-C36	mg/L	0.04	---	---	---	---		----	< 0.04	----	< 0.04	----	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----
C10-C36 (Total)	mg/L	0.04	---	---	---	---		----	< 0.04	----	< 0.04	----	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----

Table C1: Laboratory analysis results

						SAMPLE NAME	SE4S-R	SE4D	SE4D	SE4D	SE4D	GW5S	GW5S	GW5S	SE6S	SE6S	SE6S	SE6S	GW6D	GW6D
						LAB REPORT NUMBER	1173105	1083237	1112682	1144109	1173105	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682
						SAMPLE ID	L24-De0050593	L24-Ap0001463	L24-Jn0074086	L24-Se0073494	L24-De0050594	L24-Jn0074087	L24-Se0073495	L24-De0050595	L24-Ap0001464	L24-Jn0074089	L24-Se0073496	L24-De0050596	L24-Ap0001465	L24-Jn0074090
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	27 Jun 2024	26 Sep 2024	18 Dec 2024	26 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	26 Jun 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
TRH																				
C6-C10	mg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C6-C10 (F1 minus BTEX)	mg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C16	mg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C16 (F2 minus Naphthalene)	mg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C16-C34 (F3)	mg/L	0.05	---	---	---	---	----	< 0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
C34-C40 (F4)	mg/L	0.05	---	---	---	---	----	< 0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
C10-C40 (Total)	mg/L	0.05	---	---	---	---	----	< 0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
PAH																				
Acenaphthene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Naphthalene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Acenaphthylene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Anthracene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benz(a)anthracene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(a) pyrene	µg/L	1	0.1	0.01	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Chrysene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Fluoranthene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Fluorene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Phenanthrene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Pyrene	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
PAHs (Sum of total)	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
MAH																				
Styrene	µg/L	0.5	4	30	---		----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	---	0.7	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,1-dichloroethane	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,1-dichloroethene	µg/L	0.5	300	30	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,2-dichloroethane	µg/L	0.5	30	3	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
Carbon tetrachloride	µg/L	0.5	30	3	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
Dichloromethane	µg/L	5	---	4	---	---	----	< 5	----	< 5	----	----	< 5	----	< 5	----	< 5	----	< 5	----
Tetrachloroethene	µg/L	0.5	500	50	---	---	----	---	----	---	----	----	---	----	---	----	---	----	---	----
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	----	< 2	----	< 2	----	----	< 2	----	< 2	----	< 2	----	< 2	----
Trichloroethene	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
Vinyl chloride	µg/L	0.2	3	0.3	---		----	< 0.2	----	< 0.2	----	----	< 0.2	----	< 0.2	----	< 0.2	----	< 0.2	----
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	**0.01**	----	**0.02**	----	<0.01	----
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.7	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01		---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	0.7	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	**0.06**	----	**0.07**	----	<0.01	----
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	**0.04**	----	**0.05**	----	<0.01	----
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.56	0.56	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
N-ethyl perfluorooctane sulfonamide	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----

Table C1: Laboratory analysis results

						SAMPLE NAME	SE4S-R	SE4D	SE4D	SE4D	SE4D	GW5S	GW5S	GW5S	SE6S	SE6S	SE6S	SE6S	GW6D	GW6D
						LAB REPORT NUMBER	1173105	1083237	1112682	1144109	1173105	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682
						SAMPLE ID	L24-De0050593	L24-Ap0001463	L24-Jn0074086	L24-Se0073494	L24-De0050594	L24-Jn0074087	L24-Se0073495	L24-De0050595	L24-Ap0001464	L24-Jn0074089	L24-Se0073496	L24-De0050596	L24-Ap0001465	L24-Jn0074090
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	27 Jun 2024	26 Sep 2024	18 Dec 2024	26 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	26 Jun 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Sum of PFAS	µg/L	0.1	---	---	---	---	----	<0.1	----	< 0.1	----	----	< 0.1	----	**0.11**	----	**0.14**	----	<0.1	----
Sum of PFHxS and PFOS	µg/L	0.01	0.7	0.07	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Sum of enHealth PFAS (PFHxS + PFOS +	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	----	< 0.05	----	**0.11**	----	**0.14**	----	<0.05	----
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
chlordane	µg/L	0.002	20	2	---	---	----	< 0.002	----	< 0.002	----	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----
d-BHC	µg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
DDT	µg/L	0.001	90	9	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Heptachlor epoxide	µg/L	0.001	3,000	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
DDD	µg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Methoxychlor	µg/L	0.02	---	300[#2]	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
Dieldrin	µg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Endrin	µg/L	0.01	---	---	---	---	----	< 0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
4,4-DDE	µg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
a-BHC	µg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Aldrin	µg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
g-BHC (Lindane)	µg/L	0.001	---	10	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
b-BHC	µg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Endosulfan I	µg/L	0.001	200	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Endosulfan II	µg/L	0.001	200	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Endosulfan sulphate	µg/L	0.001	200,000	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Heptachlor	µg/L	0.001	---	0.3	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	100	10	---	---	----	< 0.005	----	< 0.005	----	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----
Diazinon	µg/L	0.01	40	4	---	---	----	< 0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Ethion	µg/L	0.01	40	4	---	---	----	< 0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Fenitrothion	µg/L	0.01	0.07	7[#Z]	---	---	----	< 0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Parathion	µg/L	0.02	200	20	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
Methyl parathion	µg/L	0.02	7	0.7	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
Malathion	µg/L	0.01	700	70	---	---	----	< 0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Pesticides																				
Bifenthrin	µg/L	0.05	---	---	---	---	----	< 0.05	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
Bromophos	mg/L	0.000005	---	---	---	---	----	< 0.005	----	< 0.005	----	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----
Atrazine	mg/L	0.1	---	---	---	---	----	< 0.1	----	< 0.1	----	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Dinoseb	mg/L	0.002	---	---	---	---	----	< 0.002	----	< 0.002	----	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----
Chlorothalonil	µg/L	0.01	---	50	---	---	----	< 0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Vinclozolin	µg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4.6-Trichlorophenol	mg/L	0.001	2	20	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dichlorophenol	mg/L	0.001	0.3	200	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Chlorophenol	mg/L	0.001	0.1	300	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Pentachlorophenol	mg/L	0.001	100	10	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	----	< 0.003	----	< 0.003	----	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Nitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Nitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Phenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total cresols*	mg/L	0.01	---	---	---	---	----	< 0.01	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	----	< 0.1	----	< 0.1	----	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Fipronil	mg/L	0.00002		0.0007	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----

Table C1: Laboratory analysis results

						SAMPLE NAME	SE4S-R	SE4D	SE4D	SE4D	SE4D	GW5S	GW5S	GW5S	SE6S	SE6S	SE6S	SE6S	GW6D	GW6D
						LAB REPORT NUMBER	1173105	1083237	1112682	1144109	1173105	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682
						SAMPLE ID	L24-De0050593	L24-Ap0001463	L24-Jn0074086	L24-Se0073494	L24-De0050594	L24-Jn0074087	L24-Se0073495	L24-De0050595	L24-Ap0001464	L24-Jn0074089	L24-Se0073496	L24-De0050596	L24-Ap0001465	L24-Jn0074090
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	27 Jun 2024	26 Sep 2024	18 Dec 2024	26 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	26 Jun 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
PCBs																				
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,2-dichlorobenzene	µg/L	0.5	---	1,500	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
1,4-dichlorobenzene	µg/L	0.5	---	40	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
Chlorobenzene	µg/L	0.5	---	300	---	---	----	< 0.5	----	< 0.5	----	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----
Hexachlorobenzene	µg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW6D	GW6D	GW7S	GW7S	GW7S	GW7S	GW7D-R	GW7D-R	GW7D-R	GW7D-R	GW8D	GW8D	GW8D	GW8D
						LAB REPORT NUMBER	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105
						SAMPLE ID	L24-Se0073497	L24-De0050597	L24-Ap0001466	L24-Jn0074091	L24-Se0073498	L24-De0050598	L24-Ap0001467	L24-Jn0074092	L24-Se0073499	L24-De0050599	L24-Ap0001468	L24-Jn0074093	L24-Se0073500	L24-De0050600
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	25 Sep 2024	17 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
Temperature	°C	---	---	---	---	---	17.4	25.1	22.2	19.1	20.9	21.6	23.9	19.5	19.9	21.2	21.2	19.5	20.4	20.6
Dissolved Oxygen	mg/L	---	---	---	---	---	4.09	8	9.99	5.08	5.17	8.4	3.9	4.75	3.68	8	4.25	5.23	4.03	8.2
Electrical Conductivity	uS/cm	---	---	---	---	---	482	490	269.6	313.6	342.1	260	268.7	309.3	334.6	260	311.2	349.9	379	410
pH (Lab)	pH unit	---	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	5.19	5.7	5.1	4.9	5.1	5	5.7	5.4	5.6	5.4	5.9	5.2	5.1	5.8
Oxygen Reduction Potential	mV	---	---	---	---	---	62.2	470	7.7	162.2	218.4	510	-11.8	167.1	232.3	520	-11.2	157.2	206.3	500
Top of Casing	mAHD	---	---	---	---	---	64.328	64.328	67.45	67.45	67.45	67.45	67.41	67.41	67.41	67.41	66.75	66.75	66.75	66.75
Well Depth	mbgl	---	---	---	---	---	51.61	----	32.71	39.69	.39.17	----	56.49	55.91	56.27	----	47.2	47.26	46.56	----
Depth to Water (mbtoc)	mbgl	---	---	---	---	---	30.30	30.03	39.26	32.99	32.78	32.45	33.56	33.56	33.23	33.15	34.1	32.54	32.29	32.10
Groundwater Elevation	mAHD	---	---	---	---	---	34.03	34.30	34.74	34.46	34.67	35.00	33.85	33.85	34.18	34.26	32.65	34.21	34.46	34.65
Colour	---	---	---	---	---	---	Colourless	Colourless	Colorless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colorless	Colourless	Colourless	Colourless
Turbidity	---	---	---	---	---	---	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low	Low	Low	Low
Odour	---	---	---	---	---	---	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless
Inorganics																				
COD	mg/L	25	---	---	---	---	< 25	< 25	<25	< 25	< 25	< 25	<25	< 25	< 25	< 25	<25	< 25	< 25	< 25
Ammonia as N	mg/L	0.02	0.41	0.5	---	---	< 0.02	< 0.02	0.04	< 0.02	< 0.02	< 0.02	0.05	< 0.02	< 0.02	< 0.02	0.05	< 0.02	< 0.02	< 0.02
Nitrate (as N)	mg/L	0.01	113	11.3	---	---	2.6	2.3	4.7	5.1	5.1	5.1	2.3	1.9	2.2	2	0.43	0.35	0.38	5.1
Nitrite (as N)	mg/L	0.01	9.1	0.91	---	---	< 0.01	< 0.01	<0.01	< 0.01	< 0.01	< 0.01	<0.01	< 0.01	< 0.01	< 0.01	<0.01	< 0.01	< 0.01	< 0.01
Nitrite + Nitrate as N	mg/L	0.01	---	---	---	---	2.6	2.3	4.7	5.1	5.1	5.1	2.3	1.9	2.2	2	0.43	0.35	0.39	5.1
Nitrogen (Total)	mg/L	0.2	---	---	5,000	---	2.6	2.5	4.7	5	5.1	5.1	2.4	1.9	2.2	2	0.5	0.5	0.6	5.1
Kjeldahl Nitrogen Total	mg/L	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
Phosphorus	mg/L	0.01	---	---	50[#5]	---	0.03	0.03	0.02	0.03	< 0.01	0.02	0.03	0.04	0.01	0.02	0.03	0.08	0.03	0.04
Alkalinity total as CaCO3	mg/L as CaCO3	5	---	---	---	---	13	13	<5	< 5	< 5	< 5	5.7	5.3	6.6	5.8	6.9	6.2	9.8	6.9
Alkalinity (Hydroxide)	mg/L as CaCO3	5	---	---	---	---	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity (Bicarbonate as HCO3)	mg/L as CaCO3	5	---	---	---	---	13	13	<5	< 5	< 5	< 5	5.7	5.3	6.6	5.8	6.9	6.2	9.8	6.9
Alkalinity (Carbonate)	mg/L as CaCO3	5	---	---	---	---	< 5	< 5	<5	< 5	< 5	< 5	<5	< 5	<5	< 5	<5	< 5	< 5	< 5
TDS	mg/L	5	---	---	---	---	290	290	160	170	160	160	160	160	160	160	190	190	190	250
Electrical Conductivity (Lab)	uS/cm	10	---	---	---	---	490	490	270	280	270	260	270	270	270	260	310	310	310	410
Total Organic Carbon (TOC)	mg/L	5	---	---	---	---	< 5	< 5	<5	< 5	< 5	< 5	< 5	< 5	< 5	6.1	< 5	< 5	< 5	17
Major ions																				
Calcium	mg/L	0.5	---	---	---	---	2.8	2.8	1.5	1.4	1.3	1.2	0.9	1.2	1.3	0.8	1.3	1.3	< 0.5	1.6
Magnesium	mg/L	0.5	---	---	---	---	5.3	4.8	7.6	6.6	6.5	5.8	5	4.9	5.3	4.7	6.6	5.8	5.7	6.8
Magnesium (filtered)	mg/L	0.5	---	---	---	---	5	4.7	6.1	6.4	6.4	5.4	4.2	4.7	5.1	4.5	5	5.7	6.1	7
Potassium	mg/L	0.5	---	---	---	---	1.4	1.3	0.9	0.9	0.7	0.7	0.9	1.0	0.7	0.8	0.9	1.0	0.8	0.8
Sulfate	mg/L	1	250	---	---	---	25	28	16	11	10	12	8.5	8.8	8.0	10	8.6	8.6	9.6	11
Sodium	mg/L	0.5	180	---	---	---	88	78	37	39	41	38	40	42	47	40	51	48	48	56
Chloride (filtered)	mg/L	5	250	---	---	---	110	130	61	49	45	70	67	59	59	72	81	76	66	110
Metals																				
Aluminium (filtered)	mg/L	0.05	0.2	---	5	5	< 0.05	< 0.05	0.08	0.11	0.08	0.07	<0.05	0.07	< 0.05	< 0.05	<0.05	0.15	< 0.05	< 0.05
Arsenic (filtered)	mg/L	0.001	0.1	0.01	0.1	0.5[#7]	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	mg/L	0.0001	0.02	0.002	0.01	0.01	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (hexavalent)	mg/L	0.002	0.5	0.05	---	---	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002
Chromium (III+VI) (filtered)	mg/L	0.001	---	---	0.1	1	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001
Chromium (Trivalent) (filtered)	mg/L	0.002	---	---	0.1	---	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002
Copper (filtered)	mg/L	0.001	1	2	0.2	0.4[#6]	0.002	0.002	0.002	0.003	0.003	0.004	0.007	0.005	0.002	0.005	0.001	0.001	0.003	0.003
Lead (filtered)	mg/L	0.001	0.1	0.01	2	0.1	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	0.001	<0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	mg/L	0.005	5	0.5	0.2	---	0.26	0.28	<0.005	< 0.005	< 0.005	< 0.005	0.009	0.013	0.011	0.01	0.046	0.065	0.035	0.14
Mercury (filtered)	mg/L	0.0001	0.01	0.001	0.002	0.002	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	mg/L	0.001	0.2	0.02	0.2	1	0.008	0.006	<0.001	0.003	0.002	0.003	0.002	0.004	0.002	0.004	0.001	0.003	0.005	0.004
Selenium (filtered)	mg/L	0.001	0.1	0.01	0.02	0.02	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	mg/L	0.005	3	---	2	20	0.01	0.01	<0.005	0.008	< 0.005	0.005	0.013	0.061	0.011	0.018	<0.005	0.005	0.025	0.026
Titanium (filtered)	mg/L	0.005	---	---	---	---	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.01	0.3	---	0.2	---	0.11	0.19	0.04	0.07	0.02	0.06	0.07	0.13	0.01	0.13	0.16	0.22	< 0.01	0.14
Vanadium (filtered)	mg/L	0.05	---	---	---	---	---	---	---	---	---	---	---	----	---	---	---	----	---	---
Molybdenum (filtered)	mg/L	0.001	0.5	0.05	---	---	---	---	---	---	---	---	---	----	---	---	---	----	---	---
Silver (filtered)	mg/L	0.001	1	0.1	---	---	---	---	---	---	---	---	---	----	---	---	---	----	---	---
Barium (filtered)	mg/L	0.01	20	2	---	---	---	---	---	---	---	---	---	----	---	---	---	----	---	---
Beryllium (filtered)	mg/L	0.001	0.6	0.06	0.1	---	---	---	---	---	---	---	---	----	---	---	---	----	---	---
Boron (filtered)	mg/L	0.05	40	4	---	---	---	---	---	---	---	---	---	----	---	---	---	----	---	---
Cobalt (filtered)	mg/L	0.001	0.5	0.05	---	---	---	---	---	---	---	---	---	----	---	---	---	----	---	---
BTEXN																				
Naphthalene (VOC)	mg/kg	0.001	---		---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Benzene	mg/L	0.001	0.01	0.001	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	<0.5	----	< 0.001	----
Toluene	mg/L	0.001	0.025	0.8	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	<0.5	----	< 0.001	----
Ethylbenzene	mg/L	0.001	0.003	0.3	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	<0.5	----	< 0.001	----
Xylene (m & p)	mg/L	0.002	0.02	---	---	---	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	<2	----	< 0.002	----
Xylene (o)	mg/L	0.001	0.02	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----
Xylene Total	mg/L	0.003	---	0.6	---	---	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	<3	----	< 0.003	----
TPH																				
C6-C9	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C14	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C15-C28	mg/L	0.04	---	---	---	---	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----
C29-C36	mg/L	0.04	---	---	---	---	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----
C10-C36 (Total)	mg/L	0.04	---	---	---	---	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW6D	GW6D	GW7S	GW7S	GW7S	GW7S	GW7D-R	GW7D-R	GW7D-R	GW7D-R	GW8D	GW8D	GW8D	GW8D
						LAB REPORT NUMBER	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105
						SAMPLE ID	L24-Se0073497	L24-De0050597	L24-Ap0001466	L24-Jn0074091	L24-Se0073498	L24-De0050598	L24-Ap0001467	L24-Jn0074092	L24-Se0073499	L24-De0050599	L24-Ap0001468	L24-Jn0074093	L24-Se0073500	L24-De0050600
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	25 Sep 2024	17 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
TRH																				
C6-C10	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<20	----	< 0.02	----
C6-C10 (F1 minus BTEX)	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<20	----	< 0.02	----
C10-C16	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<20	----	< 0.02	----
C10-C16 (F2 minus Naphthalene)	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<20	----	< 0.02	----
C16-C34 (F3)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	<50	----	< 0.05	----
C34-C40 (F4)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	<50	----	< 0.05	----
C10-C40 (Total)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	<50	----	< 0.05	----
PAH																				
Acenaphthene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Naphthalene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Acenaphthylene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Anthracene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benz(a)anthracene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(a) pyrene	µg/L	1	0.1	0.01	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Chrysene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Fluorene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Phenanthrene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Pyrene	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
PAHs (Sum of total)	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
MAH																				
Styrene	µg/L	0.5	4	30	---		< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	---	0.7	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1-dichloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1-dichloroethene	µg/L	0.5	300	30	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,2-dichloroethane	µg/L	0.5	30	3	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Carbon tetrachloride	µg/L	0.5	30	3	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Dichloromethane	µg/L	5	---	4	---	---	< 5	----	< 5	----	< 5	----	<5	----	< 5	----	<5	----	< 5	----
Tetrachloroethene	µg/L	0.5	500	50	---	---	---	----	---	----	---	----	<0.5	----	---	----	<0.5	----	---	----
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	< 2	----	< 2	----	< 2	----	<2	----	< 2	----	<2	----	< 2	----
Trichloroethene	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Vinyl chloride	µg/L	0.2	3	0.3	---		< 0.2	----	< 0.2	----	< 0.2	----	<0.2	----	< 0.2	----	<0.2	----	< 0.2	----
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.7	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01		---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	0.7	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	< 0.01	----	**0.02**	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	< 0.01	----	**0.01**	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.56	0.56	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	**0.14**	----	< 0.05	----	<0.05	----	< 0.05	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
N-ethyl perfluorooctane sulfonamide	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW6D	GW6D	GW7S	GW7S	GW7S	GW7S	GW7D-R	GW7D-R	GW7D-R	GW7D-R	GW8D	GW8D	GW8D	GW8D
						LAB REPORT NUMBER	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105
						SAMPLE ID	L24-Se0073497	L24-De0050597	L24-Ap0001466	L24-Jn0074091	L24-Se0073498	L24-De0050598	L24-Ap0001467	L24-Jn0074092	L24-Se0073499	L24-De0050599	L24-Ap0001468	L24-Jn0074093	L24-Se0073500	L24-De0050600
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	25 Sep 2024	17 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Sum of PFAS	µg/L	0.1	---	---	---	---	< 0.1	----	<0.1	----	< 0.1	----	**0.14**	----	< 0.1	----	<0.1	----	< 0.1	----
Sum of PFHxS and PFOS	µg/L	0.01	0.7	0.07	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Sum of enHealth PFAS (PFHxS + PFOS +	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	**0.14**	----	< 0.05	----	<0.05	----	< 0.05	----
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
chlordane	µg/L	0.002	20	2	---	---	< 0.002	----	< 0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----
d-BHC	µg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
DDT	µg/L	0.001	90	9	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Heptachlor epoxide	µg/L	0.001	3,000	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
DDD	µg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Methoxychlor	µg/L	0.02	---	300[#Z]	---	---	< 0.02	----	< 0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Dieldrin	µg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endrin	µg/L	0.01	---	---	---	---	< 0.01	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
4,4-DDE	µg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
a-BHC	µg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Aldrin	µg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
g-BHC (Lindane)	µg/L	0.001	---	10	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
b-BHC	µg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan I	µg/L	0.001	200	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan II	µg/L	0.001	200	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan sulphate	µg/L	0.001	200,000	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Heptachlor	µg/L	0.001	---	0.3	---	---	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	100	10	---	---	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	<0.005	----	< 0.005	----
Diazinon	µg/L	0.01	40	4	---	---	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Ethion	µg/L	0.01	40	4	---	---	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Fenitrothion	µg/L	0.01	0.07	7[#Z]	---	---	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Parathion	µg/L	0.02	200	20	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Methyl parathion	µg/L	0.02	7	0.7	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Malathion	µg/L	0.01	700	70	---	---	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Pesticides																				
Bifenthrin	µg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Bromophos	mg/L	0.000005	---	---	---	---	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	<0.000005	----	< 0.005	----
Atrazine	mg/L	0.1	---	---	---	---	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Dinoseb	mg/L	0.002	---	---	---	---	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	<0.002	----	< 0.002	----
Chlorothalonil	µg/L	0.01	---	50	---	---	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Vinclozolin	µg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4.6-Trichlorophenol	mg/L	0.001	2	20	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dichlorophenol	mg/L	0.001	0.3	200	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Chlorophenol	mg/L	0.001	0.1	300	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Pentachlorophenol	mg/L	0.001	100	10	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Phenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total cresols*	mg/L	0.01	---	---	---	---	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Fipronil	mg/L	0.00002		0.0007	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<0.00002	----	< 0.02	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW6D	GW6D	GW7S	GW7S	GW7S	GW7S	GW7D-R	GW7D-R	GW7D-R	GW7D-R	GW8D	GW8D	GW8D	GW8D
						LAB REPORT NUMBER	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105
						SAMPLE ID	L24-Se0073497	L24-De0050597	L24-Ap0001466	L24-Jn0074091	L24-Se0073498	L24-De0050598	L24-Ap0001467	L24-Jn0074092	L24-Se0073499	L24-De0050599	L24-Ap0001468	L24-Jn0074093	L24-Se0073500	L24-De0050600
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	25 Sep 2024	17 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024	25 Mar 2024	24 Jun 2024	24 Sep 2024	16 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
PCBs																				
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	<0.02	----	< 0.02	----
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,2-dichlorobenzene	µg/L	0.5	---	1,500	---	---	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,4-dichlorobenzene	µg/L	0.5	---	40	---	---	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Chlorobenzene	µg/L	0.5	---	300	---	---	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Hexachlorobenzene	µg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	<0.001	----	< 0.001	----

Table C1: Laboratory analysis results

ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES	SAMPLE NAME	GW9S	GW9S	GW9S	GW9S	GW9D	GW9D	GW9D	GW9D	SE10S	SE10S	SE10S	SE10S	GW10D	GW10D
							LAB REPORT NUMBER	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682
							SAMPLE ID	L24-Ap0001469	L24-Jn0074094	L24-Se0073501	L24-De0050601	L24-Ap0001470	L24-Jn0074095	L24-Se0073502	L24-De0050602	L24-Ap0001471	L24-Jn0074096	L24-Se0073503	L24-De0050603	L24-Ap0001472	L24-Jn0074097
							LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
							SAMPLE DATE	27 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	25 Jun 2024	26 Sep 2024	16 Dec 2024	27 Mar 2024	25 Jun 2024
							MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Temperature	ºC	---	---	---	---	---		22.5	19.4	20.7	23.8	21.8	18.1	19.4	24.6	25.7	18.8	16.5	20.7	26.2	18
Dissolved Oxygen	mg/L	---	---	---	---	---		7.49	8.14	6.08	8.6	5.89	4.12	5.72	8.6	4.26	3.85	4.89	4.52	4.22	10.73
Electrical Conductivity	uS/cm	---	---	---	---	---		299.1	328.1	374.6	280	310.2	361.7	365.3	310	294.3	199.5	535	413.2	312.5	303.2
pH (Lab)	pH unit	---	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5		6.3	5.1	5.6	5.7	5.9	5.5	6	5.5	5.7	6.2	5.7	5.7	5.7	5.6
Oxygen Reduction Potential	mV	---	---	---	---	---		58	186.2	200.2	460	-7.1	149.9	670	470	59	238.6	175.2	229.4	-5.5	257.3
Top of Casing	mAHD	---	---	---	---	---		60.56	60.56	60.56	60.56	60.55	55.92	55.92	55.92	64.43	64.43	64.43	64.43	55.92	55.92
Well Depth	mbgl	---	---	---	---	---		36.7	38.67	36.45	----	48.48	48.2	48.37	----	29.9	29.76	29.39	----	52.15	52.17
Depth to Water (mbtoc)	mbgl	---	---	---	---	---		26.07	26.28	25.96	25.59	26.46	26.46	26.18	25.89	25.51	25.81	25.43	25.06	26.02	25.7
Groundwater Elevation	mAHD	---	---	---	---	---		34.49	34.28	34.60	34.97	34.09	29.46	29.74	30.03	38.92	38.62	39.00	39.37	29.90	30.22
Colour	---	---	---	---	---	---		Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Light brown	Colourless	Colourless	Light brown	Light brown	Colourless	Colourless	Colourless
Turbidity	---	---	---	---	---	---		Low	Low	Low	Low	Low	Low	High	Low	Low	High	Moderate	Low	Low	Low
Odour	---	---	---	---	---	---		Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless
Inorganics																					
COD	mg/L	25	---	---	---	---		<25	< 25	< 25	< 25	<25	< 25	66	< 25	<25	< 25	76	<25	<25	< 25
Ammonia as N	mg/L	0.02	0.41	0.5	---	---		0.05	< 0.02	< 0.02	< 0.02	0.1	< 0.02	< 0.02	< 0.02	0.07	< 0.02	< 0.02	<0.02	0.08	< 0.02
Nitrate (as N)	mg/L	0.01	113	11.3	---	---		2.4	2	1.4	2	0.51	0.57	0.44	0.61	4	4.7	5	6.3	0.12	0.08
Nitrite (as N)	mg/L	0.01	9.1	0.91	---	---		<0.01	< 0.01	< 0.01	< 0.01	<0.01	0.02	< 0.01	< 0.01	<0.01	< 0.01	< 0.01	<0.01	<0.01	<0.01
Nitrite + Nitrate as N	mg/L	0.01	---	---	---	---		2.4	2	1.4	2	0.51	0.59	0.44	0.61	4	4.7	5	6.3	0.12	0.08
Nitrogen (Total)	mg/L	0.2	---	---	5,000	---		2.5	2	1.5	2	0.6	0.6	0.5	0.7	4	4.7	5	6.3	0.2	< 0.2
Kjeldahl Nitrogen Total	mg/L	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	---
Phosphorus	mg/L	0.01	---	---	50[ns]	---		0.03	0.05	0.02	0.02	<10	0.04	0.02	0.02	0.02	0.11	< 0.01	0.01	0.04	0.05
Alkalinity total as CaCO3	mg/L as CaCO3	5	---	---	---	---		7.5	< 5	9.3	10	6.8	14	11	7.4	<5	6.2	7.5	<5	6.1	5.9
Alkalinity (Hydroxide)	mg/L as CaCO3	5	---	---	---	---		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity (Bicarbonate as HCO3)	mg/L as CaCO3	5	---	---	---	---		7.5	< 5	9.3	10	6.8	14	11	7.4	<5	6.2	7.5	<5	6.1	5.9
Alkalinity (Carbonate)	mg/L as CaCO3	5	---	---	---	---		<5	< 5	<5	< 5	<5	< 5	< 5	<5	<5	< 5	< 5	<5	<5	< 5
TDS	mg/L	5	---	---	---	---		180	170	170	170	190	200	190	190	100	100	250	240	190	190
Electrical Conductivity (Lab)	uS/cm	10	---	---	---	---		310	290	280	280	310	330	320	310	170	170	420	400	310	310
Total Organic Carbon (TOC)	mg/L	5	---	---	---	---		< 5	< 5	< 5	15	< 5	< 5	< 5	17	< 5	< 5	16	17	< 5	< 5
Major ions																					
Calcium	mg/L	0.5	---	---	---	---		2.8	1.2	1.3	1.9	2.2	5.4	2.7	1.9	<0.5	< 0.5	5.3	3.4	2	1.9
Magnesium	mg/L	0.5	---	---	---	---		7	5.8	5.6	5.5	6.1	5.4	5.0	5.0	3.5	3.5	7.3	6.1	5.5	4.8
Magnesium (filtered)	mg/L	0.5	---	---	---	---		5.1	5.8	6.1	5.5	4.6	5.3	5.9	5.0	3.2	3.4	6.8	5.8	4.3	4.8
Potassium	mg/L	0.5	---	---	---	---		0.6	< 0.5	< 0.5	0.5	0.7	0.7	0.6	< 0.5	<0.5	< 0.5	3.5	2.8	3.1	2.9
Sulfate	mg/L	1	250	---	---	---		11	9.4	8.1	10	4.7	9	8.7	11	2.3	6.1	8	9.1	8.3	8
Sodium	mg/L	0.5	180	---	---	---		49	42	41	39	51	48	45	44	24	25	63	54	50	47
Chloride (filtered)	mg/L	5	250	---	---	---		76	66	63	67	86	77	63	85	31	25	86	110	84	76
Metals																					
Aluminium (filtered)	mg/L	0.05	0.2	---	5	5		<0.05	0.1	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	0.09	<0.05	0.14	0.05	<0.05	0.08	0.11
Arsenic (filtered)	mg/L	0.001	0.1	0.01	0.1	0.5[ef]		<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	<0.001	<0.001	< 0.001
Cadmium (filtered)	mg/L	0.0001	0.02	0.002	0.01	0.01		<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	<0.0001	<0.0001	< 0.0001
Chromium (hexavalent)	mg/L	0.002	0.5	0.05	---	---		<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	<0.002	<0.002	< 0.002
Chromium (III+VI) (filtered)	mg/L	0.001	---	---	0.1	1		<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	<0.001	<0.001	< 0.001
Chromium (Trivalent) (filtered)	mg/L	0.002	---	---	0.1	---		<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	<0.002	<0.002	< 0.002
Copper (filtered)	mg/L	0.001	1	2	0.2	0.4[ef5]		0.002	0.001	0.003	0.002	0.003	0.002	0.002	< 0.001	<0.001	0.001	< 0.001	<0.001	0.002	0.003
Lead (filtered)	mg/L	0.001	0.1	0.01	2	0.1		<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	<0.001	<0.001	< 0.001
Manganese (filtered)	mg/L	0.005	5	0.5	0.2	---		0.016	0.029	0.014	0.01	<0.005	0.008	0.014	0.006	<0.005	< 0.005	< 0.005	<0.005	0.02	0.022
Mercury (filtered)	mg/L	0.0001	0.01	0.001	0.002	0.002		<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	<0.0001	<0.0001	< 0.0001
Nickel (filtered)	mg/L	0.001	0.2	0.02	0.2	1		0.005	0.002	0.002	0.005	0.001	0.007	0.003	< 0.001	<0.001	< 0.001	< 0.001	<0.001	0.003	0.005
Selenium (filtered)	mg/L	0.001	0.1	0.01	0.02	0.02		<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	<0.001	<0.001	< 0.001
Zinc (filtered)	mg/L	0.005	3	---	2	20		0.015	< 0.005	< 0.005	0.019	<0.005	< 0.005	0.005	0.008	<0.005	0.007	0.014	<0.005	0.01	0.009
Titanium (filtered)	mg/L	0.005	---	---	---	---		<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	<0.005	<0.005	< 0.005
Iron	mg/L	0.01	0.3	---	0.2	---		0.24	0.21	0.01	0.04	0.26	0.08	0.05	0.27	0.05	0.24	0.07	0.24	0.35	0.07
Vanadium (filtered)	mg/L	0.05	---	---	---	---		---	----	----	----	---	----	----	----	---	----	----	----	---	----
Molybdenum (filtered)	mg/L	0.001	0.5	0.05	---	---		---	----	----	----	---	----	----	----	---	----	----	----	---	----
Silver (filtered)	mg/L	0.001	1	0.1	---	---		---	----	----	----	---	----	----	----	---	----	----	----	---	----
Barium (filtered)	mg/L	0.01	20	2	---	---		---	----	----	----	---	----	----	----	---	----	----	----	---	----
Beryllium (filtered)	mg/L	0.001	0.6	0.06	0.1	---		---	----	----	----	---	----	----	----	---	----	----	----	---	----
Boron (filtered)	mg/L	0.05	40	4	---	---		---	----	----	----	---	----	----	----	---	----	----	----	---	----
Cobalt (filtered)	mg/L	0.001	0.5	0.05	---	---		---	----	----	----	---	----	----	----	---	----	----	----	---	----
BTEXN																					
Naphthalene (VOC)	mg/kg	0.001	---		---	---		< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzene	mg/L	0.001	0.01	0.001	---	---		< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Toluene	mg/L	0.001	0.025	0.8	---	---		< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Ethylbenzene	mg/L	0.001	0.003	0.3	---	---		< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Xylene (m & p)	mg/L	0.002	0.02	---	---	---		< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----
Xylene (o)	mg/L	0.001	0.02	---	---	---		< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Xylene Total	mg/L	0.003	---	0.6	---	---		< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----
TPH																					
C6-C9	mg/L	0.02	---	---	---	---		< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C14	mg/L	0.02	---	---	---	---		< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	0.31	----	< 0.02	----
C15-C28	mg/L	0.04	---	---	---	---		< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	0.42	----	< 0.04	----
C29-C36	mg/L	0.04	---	---	---	---		< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	0.11	----	< 0.04	----
C10-C36 (Total)	mg/L	0.04	---	---	---	---		< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	0.84	----	< 0.04	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW9S	GW9S	GW9S	GW9S	GW9D	GW9D	GW9D	GW9D	SE10S	SE10S	SE10S	SE10S	GW10D	GW10D
						LAB REPORT NUMBER	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682
						SAMPLE ID	L24-Ap0001469	L24-Jn0074094	L24-Se0073501	L24-De0050601	L24-Ap0001470	L24-Jn0074095	L24-Se0073502	L24-De0050602	L24-Ap0001471	L24-Jn0074096	L24-Se0073503	L24-De0050603	L24-Ap0001472	L24-Jn0074097
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	27 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	25 Jun 2024	26 Sep 2024	16 Dec 2024	27 Mar 2024	25 Jun 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														<0
TRH																				
C6-C10	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C6-C10 (F1 minus BTEX)	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C16	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	**0.02**	----	< 0.02	----
C10-C16 (F2 minus Naphthalene)	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	**0.02**	----	< 0.02	----
C16-C34 (F3)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	**0.51**	----	< 0.05	----
C34-C40 (F4)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
C10-C40 (Total)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	**0.53**	----	< 0.05	----
PAH																				
Acenaphthene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Naphthalene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Acenaphthylene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Anthracene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Benz(a)anthracene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Benzo(a) pyrene	µg/L	1	0.1	0.01	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Chrysene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Fluoranthene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Fluorene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Phenanthrene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Pyrene	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
PAHs (Sum of total)	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----
MAH																				
Styrene	µg/L	0.5	4	30	---		<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	---	0.7	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,1-dichloroethane	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,1-dichloroethene	µg/L	0.5	300	30	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,2-dichloroethane	µg/L	0.5	30	3	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
Carbon tetrachloride	µg/L	0.5	30	3	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
Dichloromethane	µg/L	5	---	4	---	---	<5	----	< 5	----	<5	----	< 5	----	<5	----	< 5	----	<5	----
Tetrachloroethene	µg/L	0.5	500	50	---	---	<0.5	----	---	----	<0.5	----	---	----	<0.5	----	---	----	<0.5	----
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	<2	----	< 2	----	<2	----	< 2	----	<2	----	< 2	----	<2	----
Trichloroethene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
Vinyl chloride	µg/L	0.2	3	0.3	---	---	<0.2	----	< 0.2	----	<0.2	----	< 0.2	----	<0.2	----	< 0.2	----	<0.2	----
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.7	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01		---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	0.7	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.56	0.56	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
N-ethyl perfluorooctane sulfonamide	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW9S	GW9S	GW9S	GW9S	GW9D	GW9D	GW9D	GW9D	SE10S	SE10S	SE10S	SE10S	GW10D	GW10D
						LAB REPORT NUMBER	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682
						SAMPLE ID	L24-Ap0001469	L24-Jn0074094	L24-Se0073501	L24-De0050601	L24-Ap0001470	L24-Jn0074095	L24-Se0073502	L24-De0050602	L24-Ap0001471	L24-Jn0074096	L24-Se0073503	L24-De0050603	L24-Ap0001472	L24-Jn0074097
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	27 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	25 Jun 2024	26 Sep 2024	16 Dec 2024	27 Mar 2024	25 Jun 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														<0
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Sum of PFAS	µg/L	0.1	---	---	---	---	<0.1	----	< 0.1	----	<0.1	----	< 0.1	----	<0.1	----	< 0.1	----	<0.1	----
Sum of PFHxS and PFOS	µg/L	0.01	0.7	0.07	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Sum of enHealth PFAS (PFHxS + PFOS +	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
chlordane	µg/L	0.002	20	2	---	---	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----
d-BHC	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
DDT	µg/L	0.001	90	9	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Heptachlor epoxide	µg/L	0.001	3,000	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
DDD	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Methoxychlor	µg/L	0.02	---	300[#Z]	---	---	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----
Dieldrin	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Endrin	µg/L	0.01	---	---	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
4,4-DDE	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
a-BHC	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Aldrin	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
g-BHC (Lindane)	µg/L	0.001	---	10	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
b-BHC	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Endosulfan I	µg/L	0.001	200	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Endosulfan II	µg/L	0.001	200	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Endosulfan sulphate	µg/L	0.001	200,000	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Heptachlor	µg/L	0.001	---	0.3	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	100	10	---	---	<0.005	----	< 0.005	----	<0.005	----	< 0.005	----	<0.005	----	< 0.005	----	<0.005	----
Diazinon	µg/L	0.01	40	4	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Ethion	µg/L	0.01	40	4	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Fenitrothion	µg/L	0.01	0.07	7[#Z]	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Parathion	µg/L	0.02	200	20	---	---	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----
Methyl parathion	µg/L	0.02	7	0.7	---	---	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----
Malathion	µg/L	0.01	700	70	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Pesticides																				
Bifenthrin	µg/L	0.05	---	---	---	---	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----
Bromophos	mg/L	0.000005	---	---	---	---	<0.000005	----	< 0.005	----	<0.000005	----	< 0.005	----	<0.000005	----	< 0.005	----	<0.000005	----
Atrazine	mg/L	0.1	---	---	---	---	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Dinoseb	mg/L	0.002	---	---	---	---	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----
Chlorothalonil	µg/L	0.01	---	50	---	---	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----
Vinclozolin	µg/L	0.02	---	---	---	---	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4.6-Trichlorophenol	mg/L	0.001	2	20	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dichlorophenol	mg/L	0.001	0.3	200	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Chlorophenol	mg/L	0.001	0.1	300	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Pentachlorophenol	mg/L	0.001	100	10	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Phenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total cresols*	mg/L	0.01	---	---	---	---	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Fipronil	mg/L	0.00002		0.0007	---	---	<0.00002	----	< 0.02	----	<0.00002	----	< 0.02	----	<0.00002	----	< 0.02	----	<0.00002	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW9S	GW9S	GW9S	GW9S	GW9D	GW9D	GW9D	GW9D	SE10S	SE10S	SE10S	SE10S	GW10D	GW10D
						LAB REPORT NUMBER	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682
						SAMPLE ID	L24-Ap0001469	L24-Jn0074094	L24-Se0073501	L24-De0050601	L24-Ap0001470	L24-Jn0074095	L24-Se0073502	L24-De0050602	L24-Ap0001471	L24-Jn0074096	L24-Se0073503	L24-De0050603	L24-Ap0001472	L24-Jn0074097
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	27 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	26 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	25 Jun 2024	26 Sep 2024	16 Dec 2024	27 Mar 2024	25 Jun 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
PCBs																				
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,2-dichlorobenzene	µg/L	0.5	---	1,500	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
1,4-dichlorobenzene	µg/L	0.5	---	40	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
Chlorobenzene	µg/L	0.5	---	300	---	---	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----
Hexachlorobenzene	µg/L	0.001	---	---	---	---	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW10D	GW10D	GW11S	GW11S	GW11S	GW11S	GW11D	GW11D	GW11D	GW11D	GW12D	GW12D	GW12D	GW12D
						LAB REPORT NUMBER	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105
						SAMPLE ID	L24-Se0073504	L24-De0050604	L24-Ap0001473	L24-Jn0074098	L24-Se0073505	L24-De0050605	L24-Ap0001474	L24-Jn0074099	L24-Se0073506	L24-De0050606	L24-Ap0001475	L24-Jn0074100	L24-Se0073507	L24-De0050607
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	26 Sep 2024	16 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
Temperature	ºC	---	---	---	---	---	18.4	22.7	24.2	17.8	19.4	22.9	27.5	16.6	19.2	29	24	19.6	220.7	21.6
Dissolved Oxygen	mg/L	---	---	---	---	---	7.38	8.6	4.95	7.65	4.96	8.4	6.78	11.72	5.52	3.35	8.29	3.54	2.97	7.7
Electrical Conductivity	uS/cm	---	---	---	---	---	312	320	174.6	202.9	249.7	180	254.3	274.2	234.9	250.7	895	926	1445	1500
pH (Lab)	pH unit	---	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	5.7	5.6	5	5.3	5.6	5.4	5.6	5.8	5.8	5.8	5.5	5.7	5.9	5.6
Oxygen Reduction Potential	mV	---	---	---	---	---	80	520	71.8	220.3	216.8	530	-19.6	209.9	102	106.3	4.7	248.2	82	500
Top of Casing	mAHD	---	---	---	---	---	55.92	55.92	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	----	----	----	----
Well Depth	mbgl	---	---	---	---	---	52.22	----	36.8	37.35	36.75	----	52.32	52.55	52.84	----	53	52.84	52.43	----
Depth to Water (mbtoc)	mbgl	---	---	---	---	---	24.86	25.13	21.72	22.07	21.34	24.78	25.6	25.47	24.62	24.78	43.62	43.8	43.74	45.17
Groundwater Elevation	mAHD	---	---	---	---	---	31.06	30.79	34.18	33.83	34.56	31.12	30.30	30.43	31.28	31.12	----	----	----	----
Colour	---	---	---	---	---	---	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
Turbidity	---	---	---	---	---	---	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Odour	---	---	---	---	---	---	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless
Inorganics																				
COD	mg/L	25	---	---	---	---	< 25	< 25	<25	< 25	< 25	< 25	<25	< 25	< 25	< 25	<25	< 25	< 25	< 25
Ammonia as N	mg/L	0.02	0.41	0.5	---	---	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	0.02
Nitrate (as N)	mg/L	0.01	113	11.3	---	---	0.03	0.12	3.3	3.6	3.7	4.6	2.3	2.2	2.6	2.3	1.8	1.5	2	2.2
Nitrite (as N)	mg/L	0.01	9.1	0.91	---	---	< 0.01	< 0.01	<0.01	< 0.01	< 0.01	< 0.01	<0.01	< 0.01	< 0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01
Nitrite + Nitrate as N	mg/L	0.01	---	---	---	---	0.03	0.13	3.3	3.7	3.7	4.6	2.3	2.2	2.6	2.3	1.8	1.5	2	2.2
Nitrogen (Total)	mg/L	0.2	---	---	5,000	---	< 0.2	0.2	3.5	4	3.8	4.6	2.3	2.2	3.2	2.3	1.8	1.5	2	2.2
Kjeldahl Nitrogen Total	mg/L	0.2	---	---	---	---	< 0.2	< 0.2	0.2	0.3	< 0.2	< 0.2	<0.2	< 0.2	0.6	< 0.2	<0.2	< 0.2	< 0.2	< 0.2
Phosphorus	mg/L	0.01	---	---	50[#5]	---	0.03	0.03	0.03	0.05	0.02	0.02	0.04	0.05	0.03	0.02	0.04	0.05	0.04	0.05
Alkalinity total as CaCO3	mg/L as CaCO3	5	---	---	---	---	6	8.9	5.4	5.3	6	5.2	26	22	16	21	19	18	20	21
Alkalinity (Hydroxide)	mg/L as CaCO3	5	---	---	---	---	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity (Bicarbonate as HCO3)	mg/L as CaCO3	5	---	---	---	---	6	8.9	5.4	5.3	6	5.2	26	22	16	21	19	18	20	21
Alkalinity (Carbonate)	mg/L as CaCO3	5	---	---	---	---	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
TDS	mg/L	5	---	---	---	---	190	190	110	110	100	110	150	150	130	150	540	560	900	910
Electrical Conductivity (Lab)	uS/cm	10	---	---	---	---	320	320	180	180	170	180	260	250	220	250	900	930	1500	1500
Total Organic Carbon (TOC)	mg/L	5	---	---	---	---	< 5	< 5	< 5	< 5	< 5	17	< 5	< 5	< 5	14	< 5	< 5	< 5	6
Major ions																				
Calcium	mg/L	0.5	---	---	---	---	1.7	2.0	1.1	0.9	0.8	< 0.5	9.1	7.3	5.1	5.3	7.6	6.9	9.9	7.6
Magnesium	mg/L	0.5	---	---	---	---	4.7	4.0	3.7	3.7	3.5	3.3	3.4	3.4	3.0	3.2	24	23	35	28
Magnesium (filtered)	mg/L	0.5	---	---	---	---	5.3	4.4	3.5	3.8	3.8	3.3	3	3.2	3.2	3.1	21	22	30	32
Potassium	mg/L	0.5	---	---	---	---	2.2	2.1	<0.5	< 0.5	< 0.5	< 0.5	0.8	0.8	0.6	0.5	4.3	4.0	5.9	5.2
Sulfate	mg/L	1	250	---	---	---	8.4	10	1.9	7.3	6.2	6.8	11	12	10	13	32	42	47	50
Sodium	mg/L	0.5	180	---	---	---	45	38	24	25	25	24	35	36	33	34	140	130	270	210
Chloride (filtered)	mg/L	5	250	---	---	---	68	86	29	28	26	49	55	39	33	5.6	240	240	370	510
Metals																				
Aluminium (filtered)	mg/L	0.05	0.2	---	5	5	0.07	0.28	<0.05	< 0.05	< 0.05	< 0.05	<0.05	0.28	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	mg/L	0.001	0.1	0.01	0.1	0.5[#7]	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	mg/L	0.0001	0.02	0.002	0.01	0.01	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (hexavalent)	mg/L	0.002	0.5	0.05	---	---	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002
Chromium (III+VI) (filtered)	mg/L	0.001	---	---	0.1	1	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001
Chromium (Trivalent) (filtered)	mg/L	0.002	---	---	0.1	---	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002
Copper (filtered)	mg/L	0.001	1	2	0.2	0.4[#6]	0.002	0.003	<0.001	0.002	0.001	0.001	<0.001	0.002	0.001	<0.001	<0.001	< 0.001	< 0.001	< 0.001
Lead (filtered)	mg/L	0.001	0.1	0.01	2	0.1	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	mg/L	0.005	5	0.5	0.2	---	0.047	0.027	0.037	0.04	0.037	0.019	0.1	0.089	0.057	0.065	0.039	0.032	0.073	0.053
Mercury (filtered)	mg/L	0.0001	0.01	0.001	0.002	0.002	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	mg/L	0.001	0.2	0.02	0.2	1	0.003	0.005	0.002	0.004	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.002	0.004	0.004
Selenium (filtered)	mg/L	0.001	0.1	0.01	0.02	0.02	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	mg/L	0.005	3	---	2	20	0.011	0.039	<0.005	< 0.005	< 0.005	0.012	0.026	0.026	0.019	0.023	<0.005	< 0.005	0.007	0.015
Titanium (filtered)	mg/L	0.005	---	---	---	---	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.01	0.3	---	0.2	---	0.04	0.07	<0.01	0.02	0.02	0.04	0.12	0.03	0.01	0.32	0.04	< 0.01	0.04	0.16
Vanadium (filtered)	mg/L	0.05	---	---	---	---	---	---	---	----	---	---	---	----	---	---	---	----	---	---
Molybdenum (filtered)	mg/L	0.001	0.5	0.05	---	---	---	---	---	----	---	---	---	----	---	---	---	----	---	---
Silver (filtered)	mg/L	0.001	1	0.1	---	---	---	---	---	----	---	---	---	----	---	---	---	----	---	---
Barium (filtered)	mg/L	0.01	20	2	---	---	---	---	---	----	---	---	---	----	---	---	---	----	---	---
Beryllium (filtered)	mg/L	0.001	0.6	0.06	0.1	---	---	---	---	----	---	---	---	----	---	---	---	----	---	---
Boron (filtered)	mg/L	0.05	40	4	---	---	---	---	---	----	---	---	---	----	---	---	---	----	---	---
Cobalt (filtered)	mg/L	0.001	0.5	0.05	---	---	---	---	---	----	---	---	---	----	---	---	---	----	---	---
BTEXN																				
Naphthalene (VOC)	mg/kg	0.001	---		---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzene	mg/L	0.001	0.01	0.001	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Toluene	mg/L	0.001	0.025	0.8	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Ethylbenzene	mg/L	0.001	0.003	0.3	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Xylene (m & p)	mg/L	0.002	0.02	---	---	---	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----
Xylene (o)	mg/L	0.001	0.02	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Xylene Total	mg/L	0.003	---	0.6	---	---	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----
TPH																				
C6-C9	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C14	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C15-C28	mg/L	0.04	---	---	---	---	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----
C29-C36	mg/L	0.04	---	---	---	---	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----
C10-C36 (Total)	mg/L	0.04	---	---	---	---	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----	< 0.04	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW10D	GW10D	GW11S	GW11S	GW11S	GW11S	GW11D	GW11D	GW11D	GW11D	GW12D	GW12D	GW12D	GW12D
						LAB REPORT NUMBER	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105
						SAMPLE ID	L24-Se0073504	L24-De0050604	L24-Ap0001473	L24-Jn0074098	L24-Se0073505	L24-De0050605	L24-Ap0001474	L24-Jn0074099	L24-Se0073506	L24-De0050606	L24-Ap0001475	L24-Jn0074100	L24-Se0073507	L24-De0050607
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	26 Sep 2024	16 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
TRH																				
C6-C10	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C6-C10 (F1 minus BTEX)	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C16	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C10-C16 (F2 minus Naphthalene)	mg/L	0.02	---	---	---	---	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
C16-C34 (F3)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
C34-C40 (F4)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
C10-C40 (Total)	mg/L	0.05	---	---	---	---	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
PAH																				
Acenaphthene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Naphthalene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Acenaphthylene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Anthracene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benz(a)anthracene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(a) pyrene	µg/L	1	0.1	0.01	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Chrysene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Fluorene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Phenanthrene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Pyrene	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
PAHs (Sum of total)	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001	----
MAH																				
Styrene	µg/L	0.5	4	30	---		< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	---	0.7	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1-dichloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,1-dichloroethene	µg/L	0.5	300	30	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,2-dichloroethane	µg/L	0.5	30	3	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Carbon tetrachloride	µg/L	0.5	30	3	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Dichloromethane	µg/L	5	---	4	---	---	< 5	----	<5	----	< 5	----	<5	----	< 5	----	<5	----	< 5	----
Tetrachloroethene	µg/L	0.5	500	50	---	---	---	----	<0.5	----	---	----	<0.5	----	---	----	<0.5	----	---	----
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	< 2	----	<2	----	< 2	----	<2	----	< 2	----	<2	----	< 2	----
Trichloroethene	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Vinyl chloride	µg/L	0.2	3	0.3	---	---	< 0.2	----	<0.2	----	< 0.2	----	<0.2	----	< 0.2	----	<0.2	----	< 0.2	----
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.7	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01		---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	0.7	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.56	0.56	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
N-ethyl perfluorooctane sulfonamide	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW10D	GW10D	GW11S	GW11S	GW11S	GW11S	GW11D	GW11D	GW11D	GW11D	GW12D	GW12D	GW12D	GW12D
						LAB REPORT NUMBER	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105
						SAMPLE ID	L24-Se0073504	L24-De0050604	L24-Ap0001473	L24-Jn0074098	L24-Se0073505	L24-De0050605	L24-Ap0001474	L24-Jn0074099	L24-Se0073506	L24-De0050606	L24-Ap0001475	L24-Jn0074100	L24-Se0073507	L24-De0050607
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	26 Sep 2024	16 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Sum of PFAS	µg/L	0.1	---	---	---	---	< 0.1	----	<0.1	----	< 0.1	----	<0.1	----	< 0.1	----	<0.1	----	< 0.1	----
Sum of PFHxS and PFOS	µg/L	0.01	0.7	0.07	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Sum of enHealth PFAS (PFHxS + PFOS +	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
chlordane	µg/L	0.002	20	2	---	---	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----
d-BHC	µg/L	0.001	---	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
DDT	µg/L	0.001	90	9	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Heptachlor epoxide	µg/L	0.001	3,000	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
DDD	µg/L	0.001	---	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Methoxychlor	µg/L	0.02	---	300[#2]	---	---	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Dieldrin	µg/L	0.001	---	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endrin	µg/L	0.01	---	---	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
4,4-DDE	µg/L	0.001	---	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
a-BHC	µg/L	0.001	---	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Aldrin	µg/L	0.001	---	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
g-BHC (Lindane)	µg/L	0.001	---	10	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
b-BHC	µg/L	0.001	---	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan I	µg/L	0.001	200	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan II	µg/L	0.001	200	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan sulphate	µg/L	0.001	200,000	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Heptachlor	µg/L	0.001	---	0.3	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	100	10	---	---	< 0.005	----	<0.005	----	< 0.005	----	<0.005	----	< 0.005	----	<0.005	----	< 0.005	----
Diazinon	µg/L	0.01	40	4	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Ethion	µg/L	0.01	40	4	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Fenitrothion	µg/L	0.01	0.07	7[#Z]	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Parathion	µg/L	0.02	200	20	---	---	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Methyl parathion	µg/L	0.02	7	0.7	---	---	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Malathion	µg/L	0.01	700	70	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Pesticides																				
Bifenthrin	µg/L	0.05	---	---	---	---	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----
Bromophos	mg/L	0.000005	---	---	---	---	< 0.005	----	<0.000005	----	< 0.005	----	<0.000005	----	< 0.005	----	<0.000005	----	< 0.005	----
Atrazine	mg/L	0.1	---	---	---	---	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Dinoseb	mg/L	0.002	---	---	---	---	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----
Chlorothalonil	µg/L	0.01	---	50	---	---	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
Vinclozolin	µg/L	0.02	---	---	---	---	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4.6-Trichlorophenol	mg/L	0.001	2	20	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dichlorophenol	mg/L	0.001	0.3	200	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Chlorophenol	mg/L	0.001	0.1	300	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Pentachlorophenol	mg/L	0.001	100	10	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Phenol	mg/L	0.001	---	---	---	---	**0.002**	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total cresols*	mg/L	0.01	---	---	---	---	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Fipronil	mg/L	0.00002		0.0007	---	---	< 0.02	----	<0.00002	----	< 0.02	----	<0.00002	----	< 0.02	----	<0.00002	----	< 0.02	----

Table C1: Laboratory analysis results

						SAMPLE NAME	GW10D	GW10D	GW11S	GW11S	GW11S	GW11S	GW11D	GW11D	GW11D	GW11D	GW12D	GW12D	GW12D	GW12D
						LAB REPORT NUMBER	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105
						SAMPLE ID	L24-Se0073504	L24-De0050604	L24-Ap0001473	L24-Jn0074098	L24-Se0073505	L24-De0050605	L24-Ap0001474	L24-Jn0074099	L24-Se0073506	L24-De0050606	L24-Ap0001475	L24-Jn0074100	L24-Se0073507	L24-De0050607
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	26 Sep 2024	16 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
PCBs																				
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,2-dichlorobenzene	µg/L	0.5	---	1,500	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
1,4-dichlorobenzene	µg/L	0.5	---	40	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Chlorobenzene	µg/L	0.5	---	300	---	---	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----
Hexachlorobenzene	µg/L	0.001	---	---	---	---	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----

Table C1: Laboratory analysis results

ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES	GW13S	GW13S	GW13D	GW22S	GW22S	GW22S	GW22S	GW22D	GW22D	GW22D	GW22D	GW23S	GW23S	GW23S
SAMPLE NAME							GW13S	GW13S	GW13D	GW22S	GW22S	GW22S	GW22S	GW22D	GW22D	GW22D	GW22D	GW23S	GW23S	GW23S
LAB REPORT NUMBER							1144109	1173105	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109
SAMPLE ID							L24-Se0073508	L24-De0050624	L24-De0050624	L24-Ap0001476	L24-Jn0074101	L24-Se0073509	L24-De0050609	L24-Ap0001477	L24-Jn0074102	L24-Se0073510	L24-De0050610	L24-Ap0001478	L24-Jn0074103	L24-Se0073511
LAB NAME							Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
SAMPLE DATE							25 Sep 2024	16 Dec 2024	16 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024
MATRIX TYPE							Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Temperature	ºC	---	---	---	---	---	19.7	22.3	22.2	22.5	17.4	19	19.5	23.6	14.4	19.3	20.5	25	18.8	20.6
Dissolved Oxygen	mg/L	---	---	---	---	---	11.68	7.3	0.8	7.4	4.61	3.8	8.6	6.74	9.4	4.94	8.4	5.34	6.69	5.13
Electrical Conductivity	uS/cm	---	---	---	---	---	505	610	718	197.6	235.8	271.4	210	174.3	268.1	249.5	250	360.6	365.8	412.9
pH (Lab)	pH unit	---	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	5.8	6.3	----	5.3	5.5	5.7	5.8	4.9	5.5	5.7	5.1	4.6	5.2	5.8
Oxygen Reduction Potential	mV	---	---	---	---	---	102.1	470	-70.2	-8.3	158.4	205.5	500	4.1	187.8	87.4	540	79.7	228.5	218.4
Top of Casing	mAHD	---	---	---	---	---	76.90	76.90	77.12	54.42	54.42	54.42	54.42	54.49	54.49	54.49	54.49	51.07	71.7	71.7
Well Depth	mbgl	---	---	---	---	---	38.77	----	43.63	36	36.16	35.62	----	49.6	49.54	49.79	----	32.15	32.14	32.13
Depth to Water (mbtoc)	mbgl	---	---	---	---	---	32.16	33.60	42.33	20.4	20.78	20	19.60	24.46	24.29	23.45	23.60	17.25	17.6	16.26
Groundwater Elevation	mAHD	---	---	---	---	---	44.74	43.30	34.79	34.02	33.64	34.42	34.82	30.03	30.20	31.04	30.89	33.82	54.10	55.44
Colour	---	---	---	---	---	---	Light Brown	Colourless	Dark Brown	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
Turbidity	---	---	---	---	---	---	High	Low	High	Moderate	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Odour	---	---	---	---	---	---	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless
Inorganics																				
COD	mg/L	25	---	---	---	---	69	< 25	---	<25	< 25	< 25	< 25	<25	< 25	< 25	< 25	<25	< 25	< 25
Ammonia as N	mg/L	0.02	0.41	0.5	---	---	0.04	0.04	---	<0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02
Nitrate (as N)	mg/L	0.01	113	11.3	---	---	7.7	11	---	3.4	3.8	3.8	3.8	0.88	0.86	0.88	0.94	1.5	1.5	2.4
Nitrite (as N)	mg/L	0.01	9.1	0.91	---	---	0.05	0.01	---	<0.01	< 0.01	< 0.01	< 0.01	<0.01	< 0.01	< 0.01	< 0.01	<0.01	< 0.01	< 0.01
Nitrite + Nitrate as N	mg/L	0.01	---	---	---	---	7.8	11	---	3.4	3.8	3.8	3.8	0.88	0.87	0.88	0.94	1.5	1.5	2.4
Nitrogen (Total)	mg/L	0.2	---	---	5,000	---	18	13	---	3.4	3.8	3.9	3.8	0.9	0.9	1.1	1	1.5	1.5	3.9
Kjeldahl Nitrogen Total	mg/L	0.2	---	---	---	---	10	2	---	<0.2	< 0.2	< 0.2	< 0.2	<0.2	< 0.2	0.2	< 0.2	<0.2	< 0.2	1.5
Phosphorus	mg/L	0.01	---	---	50[ns]	---	0.08	0.02	---	0.04	0.04	0.02	0.03	0.04	0.04	0.02	0.02	0.03	0.03	0.01
Alkalinity total as CaCO3	mg/L as CaCO3	5	---	---	---	---	7.3	5.1	---	8	7	8.9	9.4	<5	< 5	< 5	< 5	<5	< 5	6.5
Alkalinity (Hydroxide)	mg/L as CaCO3	5	---	---	---	---	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity (Bicarbonate as HCO3)	mg/L as CaCO3	5	---	---	---	---	7.3	5.1	---	8	7	8.9	9.4	<5	< 5	< 5	< 5	<5	< 5	6.5
Alkalinity (Carbonate)	mg/L as CaCO3	5	---	---	---	---	<5	< 5	---	<5	< 5	< 5	< 5	<5	< 5	< 5	< 5	<5	< 5	< 5
TDS	mg/L	5	---	---	---	---	410	360	---	120	120	120	120	150	150	150	150	220	200	210
Electrical Conductivity (Lab)	uS/cm	10	---	---	---	---	680	610	----	200	190	200	210	240	250	240	250	360	340	340
Total Organic Carbon (TOC)	mg/L	5	---	---	---	---	6.9	< 5	15	<5	< 5	< 5	21	< 5	< 5	< 5	20	< 5	< 5	< 5
Major ions																				
Calcium	mg/L	0.5	---	---	---	---	6.3	3.5	68	1.7	1.5	1.8	1.9	1.2	1.3	1	0.7	0.9	1.3	2.7
Magnesium	mg/L	0.5	---	---	---	---	23	19	26	3.6	3.8	4	3.4	4.6	4.5	4.4	4.4	6.3	5.7	7.4
Magnesium (filtered)	mg/L	0.5	---	---	---	---	21	20	32	3.3	3.7	3.9	3.3	4.2	4.3	4.6	3.9	5.7	5.7	6.1
Potassium	mg/L	0.5	---	---	---	---	1.4	0.8	9.9	<0.5	< 0.5	< 0.5	< 0.5	0.6	0.7	0.5	< 0.5	<0.5	< 0.5	<0.5
Sulfate	mg/L	1	250	---	---	---	10	18	---	9	8.5	8.3	10	8.6	8.7	8.6	10	6.5	5.9	6
Sodium	mg/L	0.5	180	---	---	---	99	77	1000	29	30	33	28	38	39	38	37	56	52	66
Chloride (filtered)	mg/L	5	250	---	---	---	170	160	---	32	31	30	46	65	63	48	60	100	90	75
Metals																				
Aluminium (filtered)	mg/L	0.05	0.2	---	5	5	< 0.05	0.64	0.21	<0.05	< 0.05	< 0.05	< 0.05	0.05	< 0.05	< 0.05	< 0.05	0.08	0.07	0.07
Arsenic (filtered)	mg/L	0.001	0.1	0.01	0.1	0.5[ef]	< 0.001	< 0.001	0.016	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001
Cadmium (filtered)	mg/L	0.0001	0.02	0.002	0.01	0.01	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001
Chromium (hexavalent)	mg/L	0.002	0.5	0.05	---	---	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002
Chromium (III+VI) (filtered)	mg/L	0.001	---	---	0.1	1	< 0.001	< 0.001	0.003	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001
Chromium (Trivalent) (filtered)	mg/L	0.002	---	---	0.1	---	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002
Copper (filtered)	mg/L	0.001	1	2	0.2	0.4[ef]	0.001	0.017	< 0.001	0.001	0.001	0.001	0.001	<0.001	0.005	0.001	0.004	<0.001	< 0.001	0.001
Lead (filtered)	mg/L	0.001	0.1	0.01	2	0.1	< 0.001	< 0.001	0.003	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001
Manganese (filtered)	mg/L	0.005	5	0.5	0.2	---	0.069	< 0.005	2.7	0.057	0.051	0.019	0.012	0.006	0.008	0.006	0.006	<0.005	0.026	0.011
Mercury (filtered)	mg/L	0.0001	0.01	0.001	0.002	0.002	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001
Nickel (filtered)	mg/L	0.001	0.2	0.02	0.2	1	0.015	0.003	0.01	0.002	0.002	0.004	0.002	0.005	0.009	0.004	0.003	0.004	0.002	0.002
Selenium (filtered)	mg/L	0.001	0.1	0.01	0.02	0.02	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001
Zinc (filtered)	mg/L	0.005	3	---	2	20	0.11	0.038	0.33	0.023	0.019	0.024	0.054	<0.005	0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005
Titanium (filtered)	mg/L	0.005	---	---	---	---	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005
Iron	mg/L	0.01	0.3	---	0.2	---	3.8	0.36	190	0.02	< 0.01	0.05	0.07	0.02	0.01	< 0.01	0.02	0.05	0.02	0.01
Vanadium (filtered)	mg/L	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Molybdenum (filtered)	mg/L	0.001	0.5	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Silver (filtered)	mg/L	0.001	1	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Barium (filtered)	mg/L	0.01	20	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Beryllium (filtered)	mg/L	0.001	0.6	0.06	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Boron (filtered)	mg/L	0.05	40	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cobalt (filtered)	mg/L	0.001	0.5	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BTEXN																				
Naphthalene (VOC)	mg/kg	0.001	---	---	---	---	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzene	mg/L	0.001	0.01	0.001	---	---	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Toluene	mg/L	0.001	0.025	0.8	---	---	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Ethylbenzene	mg/L	0.001	0.003	0.3	---	---	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Xylene (m & p)	mg/L	0.002	0.02	---	---	---	< 0.002	----	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002
Xylene (o)	mg/L	0.001	0.02	---	---	---	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Xylene Total	mg/L	0.003	---	0.6	---	---	< 0.003	----	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003
TPH																				
C6-C9	mg/L	0.02	---	---	---	---	< 0.02	----	----	< 0.02	----	< 0.02		< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
C10-C14	mg/L	0.02	---	---	---	---	< 0.02	----	----	< 0.02	----	< 0.02		< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
C15-C28	mg/L	0.04	---	---	---	---	< 0.04	----	----	< 0.04	----	< 0.04		< 0.04	----	< 0.04	----	< 0.04	----	< 0.04
C29-C36	mg/L	0.04	---	---	---	---	< 0.04	----	----	< 0.04	----	< 0.04		< 0.04	----	< 0.04	----	< 0.04	----	< 0.04
C10-C36 (Total)	mg/L	0.04	---	---	---	---	< 0.04	----	----	< 0.04	----	< 0.04		< 0.04	----	< 0.04	----	< 0.04	----	< 0.04

Table C1: Laboratory analysis results

						SAMPLE NAME	GW13S	GW13S	GW13D	GW22S	GW22S	GW22S	GW22S	GW22D	GW22D	GW22D	GW22D	GW23S	GW23S	GW23S
						LAB REPORT NUMBER	1144109	1173105	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109
						SAMPLE ID	L24-Se0073508	L24-De0050624	L24-De0050624	L24-Ap0001476	L24-Jn0074101	L24-Se0073509	L24-De0050609	L24-Ap0001477	L24-Jn0074102	L24-Se0073510	L24-De0050610	L24-Ap0001478	L24-Jn0074103	L24-Se0073511
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	25 Sep 2024	16 Dec 2024	16 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
TRH																				
C6-C10	mg/L	0.02	---	---	---	---	< 0.02	----	----	< 0.02	----	< 0.02		< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
C6-C10 (F1 minus BTEX)	mg/L	0.02	---	---	---	---	< 0.02	----	----	< 0.02	----	< 0.02		< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
C10-C16	mg/L	0.02	---	---	---	---	< 0.02	----	----	< 0.02	----	< 0.02		< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
C10-C16 (F2 minus Naphthalene)	mg/L	0.02	---	---	---	---	< 0.02	----	----	< 0.02	----	< 0.02		< 0.02	----	< 0.02	----	< 0.02	----	`
C16-C34 (F3)	mg/L	0.05	---	---	---	---	< 0.05	----	----	< 0.05	----	< 0.05		< 0.05	----	< 0.05	----	< 0.05	----	< 0.05
C34-C40 (F4)	mg/L	0.05	---	---	---	---	< 0.05	----	----	< 0.05	----	< 0.05		< 0.05	----	< 0.05	----	< 0.05	----	< 0.05
C10-C40 (Total)	mg/L	0.05	---	---	---	---	< 0.05	----	----	< 0.05	----	< 0.05		< 0.05	----	< 0.05	----	< 0.05	----	< 0.05
PAH																				
Acenaphthene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Naphthalene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Acenaphthylene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Anthracene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Benz(a)anthracene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Benzo(a) pyrene	µg/L	1	0.1	0.01	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Chrysene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Fluoranthene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Fluorene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Phenanthrene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Pyrene	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
PAHs (Sum of total)	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	< 0.001	----	----	<1	----	< 0.001	----	<1	----	< 0.001	----	<1	----	< 0.001
MAH																				
Styrene	µg/L	0.5	4	30	---		< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	---	0.7	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,1-dichloroethane	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,1-dichloroethene	µg/L	0.5	300	30	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,2-dichloroethane	µg/L	0.5	30	3	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
Carbon tetrachloride	µg/L	0.5	30	3	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
Dichloromethane	µg/L	5	---	4	---	---	< 5	----	----	<5	----	< 5	----	<5	----	< 5	----	<5	----	< 5
Tetrachloroethene	µg/L	0.5	500	50	---	---	---	----	----	<0.5	----	---	----	<0.5	----	---	----	<0.5	----	---
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	< 2	----	----	<2	----	< 2	----	<2	----	< 2	----	<2	----	< 2
Trichloroethene	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
Vinyl chloride	µg/L	0.2	3	0.3	---	---	< 0.2	----	----	<0.2	----	< 0.2	----	<0.2	----	< 0.2	----	<0.2	----	< 0.2
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	**0.15**	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.7	---	---	---	**0.01**	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01		---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	0.7	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	**0.09**	----	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	**0.17**	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	**0.13**	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	< 0.05	----	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.56	0.56	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	< 0.05	----	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	< 0.01	----	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01
N-ethyl perfluorooctane sulfonamide	µg/L	0.05	---	---	---	---	< 0.05	----	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	< 0.05	----	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	< 0.05	----	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	< 0.05	----	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05	----	<0.05	----	< 0.05

Table C1: Laboratory analysis results

						SAMPLE NAME	GW13S	GW13S	GW13D	GW22S	GW22S	GW22S	GW22S	GW22D	GW22D	GW22D	GW22D	GW23S	GW23S	GW23S
						LAB REPORT NUMBER	1144109	1173105	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109
						SAMPLE ID	L24-Se0073508	L24-De0050624	L24-De0050624	L24-Ap0001476	L24-Jn0074101	L24-Se0073509	L24-De0050609	L24-Ap0001477	L24-Jn0074102	L24-Se0073510	L24-De0050610	L24-Ap0001478	L24-Jn0074103	L24-Se0073511
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	25 Sep 2024	16 Dec 2024	16 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	< 0.05	====	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	< 0.05	====	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	< 0.05	====	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05
Sum of PFAS	µg/L	0.1	---	---	---	---	**0.55**	====	====	<0.1	====	< 0.1	====	<0.1	====	< 0.1	====	<0.1	====	< 0.1
Sum of PFHxS and PFOS	µg/L	0.01	0.7	0.07	---	---	**0.01**	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS +	µg/L	0.01	---	---	---	---	**0.01**	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	**0.55**	====	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
chlordane	µg/L	0.002	20	2	---	---	< 0.002	====	====	<0.002	====	< 0.002	====	<0.002	====	< 0.002	====	<0.002	====	< 0.002
d-BHC	µg/L	0.001	---	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
DDT	µg/L	0.001	90	9	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Heptachlor epoxide	µg/L	0.001	3,000	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
DDD	µg/L	0.001	---	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Methoxychlor	µg/L	0.02	---	300[#Z]	---	---	< 0.02	====	====	<0.02	====	< 0.02	====	<0.02	====	< 0.02	====	<0.02	====	< 0.02
Dieldrin	µg/L	0.001	---	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Endrin	µg/L	0.01	---	---	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
4,4-DDE	µg/L	0.001	---	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
a-BHC	µg/L	0.001	---	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Aldrin	µg/L	0.001	---	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
g-BHC (Lindane)	µg/L	0.001	---	10	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
b-BHC	µg/L	0.001	---	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Endosulfan I	µg/L	0.001	200	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Endosulfan II	µg/L	0.001	200	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Endosulfan sulphate	µg/L	0.001	200,000	---	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Heptachlor	µg/L	0.001	---	0.3	---	---	< 0.001	====	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001	====	<0.001	====	< 0.001
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	100	10	---	---	< 0.005	====	====	<0.005	====	< 0.005	====	<0.005	====	< 0.005	====	<0.005	====	< 0.005
Diazinon	µg/L	0.01	40	4	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Ethion	µg/L	0.01	40	4	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Fenitrothion	µg/L	0.01	0.07	7[#Z]	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Parathion	µg/L	0.02	200	20	---	---	< 0.02	====	====	<0.02	====	< 0.02	====	<0.02	====	< 0.02	====	<0.02	====	< 0.02
Methyl parathion	µg/L	0.02	7	0.7	---	---	< 0.02	====	====	<0.02	====	< 0.02	====	<0.02	====	< 0.02	====	<0.02	====	< 0.02
Malathion	µg/L	0.01	700	70	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Pesticides																				
Bifenthrin	µg/L	0.05	---	---	---	---	< 0.05	====	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05	====	<0.05	====	< 0.05
Bromophos	mg/L	0.000005	---	---	---	---	< 0.005	====	====	<0.000005	====	< 0.005	====	<0.000005	====	< 0.005	====	<0.000005	====	< 0.005
Atrazine	mg/L	0.1	---	---	---	---	< 0.1	====	====	< 0.1	====	< 0.1	====	< 0.1	====	< 0.1	====	< 0.1	====	< 0.1
Dinoseb	mg/L	0.002	---	---	---	---	< 0.002	====	====	<0.002	====	< 0.002	====	<0.002	====	< 0.002	====	<0.002	====	< 0.002
Chlorothalonil	µg/L	0.01	---	50	---	---	< 0.01	====	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01	====	<0.01	====	< 0.01
Vinclozolin	µg/L	0.02	---	---	---	---	< 0.02	====	====	<0.02	====	< 0.02	====	<0.02	====	< 0.02	====	<0.02	====	< 0.02
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2.4.6-Trichlorophenol	mg/L	0.001	2	20	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2.4-Dichlorophenol	mg/L	0.001	0.3	200	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2-Chlorophenol	mg/L	0.001	0.1	300	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
Pentachlorophenol	mg/L	0.001	100	10	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	< 0.003	====	====	< 0.003	====	< 0.003	====	< 0.003	====	< 0.003	====	< 0.003	====	< 0.003
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
2-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
4-Nitrophenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
Phenol	mg/L	0.001	---	---	---	---	< 0.001	====	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001	====	< 0.001
Total cresols*	mg/L	0.01	---	---	---	---	< 0.01	====	====	< 0.01	====	< 0.01	====	< 0.01	====	< 0.01	====	< 0.01	====	< 0.01
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	< 0.1	====	====	< 0.1	====	< 0.1	====	< 0.1	====	< 0.1	====	< 0.1	====	< 0.1
Fipronil	mg/L	0.00002		0.0007	---	---	< 0.02	====	====	<0.00002	====	< 0.02	====	<0.00002	====	< 0.02	====	<0.00002	====	< 0.02

Table C1: Laboratory analysis results

						SAMPLE NAME	GW13S	GW13S	GW13D	GW22S	GW22S	GW22S	GW22S	GW22D	GW22D	GW22D	GW22D	GW23S	GW23S	GW23S
						LAB REPORT NUMBER	1144109	1173105	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109	1173105	1083237	1112682	1144109
						SAMPLE ID	L24-Se0073508	L24-De0050624	L24-De0050624	L24-Ap0001476	L24-Jn0074101	L24-Se0073509	L24-De0050609	L24-Ap0001477	L24-Jn0074102	L24-Se0073510	L24-De0050610	L24-Ap0001478	L24-Jn0074103	L24-Se0073511
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	25 Sep 2024	16 Dec 2024	16 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
PCBs																				
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	< 0.02	----	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,2-dichlorobenzene	µg/L	0.5	---	1,500	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
1,4-dichlorobenzene	µg/L	0.5	---	40	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
Chlorobenzene	µg/L	0.5	---	300	---	---	< 0.5	----	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5	----	<0.5	----	< 0.5
Hexachlorobenzene	µg/L	0.001	---	---	---	---	< 0.001	----	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001

Table C1: Laboratory analysis results

ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES	GW23S	GW23D	GW23D	GW23D	GW23D	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	PLP	PLP	PLP	PLP	PSD1
SAMPLE NAME							GW23S	GW23D	GW23D	GW23D	GW23D	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	PLP	PLP	PLP	PLP	PSD1
LAB REPORT NUMBER							1173105	1083237	1112682	1144109	1173105	1083260	1112682	1144222	1173105	1083260	1112682	1144222	1173105	1083260
SAMPLE ID							L24-De0050611	L24-Ap0001479	L24-Jn0074104	L24-Se0073512	L24-De0050612	L24-Ap0001564	L24-Jn0074109	L24-Se0074122	L24-De0050621	L24-Ap0001565	L24-Jn0074110	L24-Se0074123	L24-De0050620	L24-Ap0001566
LAB NAME							Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
SAMPLE DATE							17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	25 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	25 Mar 2024
MATRIX TYPE							Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Temperature	ºC	---	---	---	---	---	25.2	25.7	19.1	18.9	24.8	24.9	12.5	21.9	25.9	28.3	12.3	25.4	25.6	20.7
Dissolved Oxygen	mg/L	---	---	---	---	---	8.3	8.81	4.36	13.58	8.2	-0.07	7.85	5.49	8.5	-0.13	1.98	0.03	0.2	6.74
Electrical Conductivity	uS/cm	---	---	---	---	---	280	355.6	332.7	308.4	300	57769	32713	33107	41000	56526	21109	27724	29000	643
pH (Lab)	pH unit	---	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	5.8	6	5.9	6.7	5.8	5.7	6.2	6	6.1	8.2	8.1	7.9	8	7.1
Oxygen Reduction Potential	mV	---	---	---	---	---	500	-18.7	210.5	93	500	23	130.9	58.1	330	-117	6.4	-116.7	-88.4	-23.8
Top of Casing	mAHD	---	---	---	---	---	51.07	51.11	51.11	51.11	51.11	NA	----	----	----	----	----	----	----	----
Well Depth	mbgl	---	---	---	---	---	----	49.45	49.37	49.44	----	NA	----	----	----	----	----	----	----	----
Depth to Water (mbtoc)	mbgl	---	---	---	---	---	19.60	23.2	22.73	21.69	22.15	NA	----	----	----	----	----	----	----	----
Groundwater Elevation	mAHD	---	---	---	---	---	31.47	27.91	28.38	29.42	28.96	NA	----	----	----	----	----	----	----	----
Colour	---	---	---	---	---	---	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Black	Dark/brown	Dark brown	Dark brown	Light brown
Turbidity	---	---	---	---	---	---	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	High	High	High	Moderate
Odour	---	---	---	---	---	---	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Sulfur	Odourless	Odourless	Organic	Odourless
Inorganics																				
COD	mg/L	25	---	---	---	---	< 25	<25	< 25	< 25	< 25	1300	----	680	----	8000	----	4700	----	< 25
Ammonia as N	mg/L	0.02	0.41	0.5	---	---	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	2.2	----	1.1	----	1100	----	1100	----	0.23
Nitrate (as N)	mg/L	0.01	113	11.3	---	---	2.6	0.12	0.15	0.05	0.1	< 0.01	----	< 0.01	----	0.14	----	2.5	----	0.6
Nitrite (as N)	mg/L	0.01	9.1	0.91	---	---	< 0.01	<0.01	< 0.01	< 0.01	< 0.01	0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	0.01
Nitrite + Nitrate as N	mg/L	0.01	---	---	---	---	2.6	0.12	0.16	0.06	0.1	< 0.01	----	< 0.01	----	0.14	----	2.5	----	0.61
Nitrogen (Total)	mg/L	0.2	---	---	5,000	---	2.6	0.4	0.2	< 0.2	0.2	2.7	----	< 0.2	----	1200	----	1200	----	1.7
Kjeldahl Nitrogen Total	mg/L	0.2	---	---	---	---	< 0.2	0.3	< 0.2	< 0.2	< 0.2	2.7	----	< 0.2	----	1200	----	1200	----	1.1
Phosphorus	mg/L	0.01	---	---	50[#5]	---	0.03	0.06	0.08	0.04	0.05	0.04	----	< 0.01	----	15	----	11	----	0.07
Alkalinity total as CaCO3	mg/L as CaCO3	5	---	---	---	---	8.5	66	29	36	29	16	----	21	----	4900	----	5200	----	76
Alkalinity (Hydroxide)	mg/L as CaCO3	5	---	---	---	---	<5	<5	< 5	< 5	< 5	< 5	----	< 5	----	< 5	----	< 5	----	< 5
Alkalinity (Bicarbonate as HCO3)	mg/L as CaCO3	5	---	---	---	---	8.5	66	29	36	29	16	----	21	----	4900	----	5200	----	76
Alkalinity (Carbonate)	mg/L as CaCO3	5	---	---	---	---	<5	<5	< 5	< 5	< 5	< 5	----	< 5	----	< 5	----	< 5	----	< 5
TDS	mg/L	5	---	---	---	---	170	220	190	190	180	34000	----	20000	----	29000	----	17000	----	400
Electrical Conductivity (Lab)	uS/cm	10	---	---	---	---	280	360	310	310	300	57000	----	34000	----	49000	----	28000	----	670
Total Organic Carbon (TOC)	mg/L	5	---	---	---	---	7.2	15	< 5	< 5	< 5	< 5	----	8.5	----	3600	----	3700	----	< 5
Major ions																				
Calcium	mg/L	0.5	---	---	---	---	1.8	23	9.9	12	8.3	8900	----	5200	----	170	----	86		26
Magnesium	mg/L	0.5	---	---	---	---	4.6	5.1	4.1	3.9	4.1	540	----	740	----	260	----	120		9.4
Magnesium (filtered)	mg/L	0.5	---	---	---	---	4.2	3.7	4.2	4.2	3.5	---	----	740	----	---	----	120		---
Potassium	mg/L	0.5	---	---	---	---	< 0.5	2.8	4	2.5	2.4	68	----	34	----	2300	----	1100		5.5
Sulfate	mg/L	1	250	---	---	---	6.8	7.1	7	6.7	8.4	440	----	730	----	< 1	----	24		27
Sodium	mg/L	0.5	180	---	---	---	43	41	43	42	37	4600	----	2800	----	9100	----	4000		75
Chloride (filtered)	mg/L	5	250	---	---	---	67	76	69	57	73	27000	----	9200	----	18000	----	6200		140
Metals																				
Aluminium (filtered)	mg/L	0.05	0.2	---	5	5	< 0.05	<0.05	< 0.05	< 0.05	0.08	< 0.5	----	< 0.05	----	0.66	----	< 0.5	----	0.24
Arsenic (filtered)	mg/L	0.001	0.1	0.01	0.1	0.5[#4]	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.01	----	0.002	----	0.095	----	0.051	----	0.001
Cadmium (filtered)	mg/L	0.0001	0.02	0.002	0.01	0.01	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.002	----	0.0001	----	< 0.002	----	< 0.002	----	< 0.0001
Chromium (hexavalent)	mg/L	0.002	0.5	0.05	---	---	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002	----	0.10	----	< 0.002	----	< 0.002	----	< 0.002
Chromium (III+VI) (filtered)	mg/L	0.001	---	---	0.1	1	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.01	----	0.10	----	---	----	0.45	----	< 0.001
Chromium (Trivalent) (filtered)	mg/L	0.002	---	---	0.1	---	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002	----	< 0.002	----	0.7	----	0.45	----	< 0.002
Copper (filtered)	mg/L	0.001	1	2	0.2	0.4[#6]	0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.01	----	< 0.001	----	< 0.01	----	0.008	----	0.001
Lead (filtered)	mg/L	0.001	0.1	0.01	2	0.1	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.01	----	< 0.001	----	0.026	----	0.013	----	0.002
Manganese (filtered)	mg/L	0.005	5	0.5	0.2	---	0.015	0.036	0.056	0.06	0.053	9.7	----	1.3	----	0.31	----	0.14	----	< 0.005
Mercury (filtered)	mg/L	0.0001	0.01	0.001	0.002	0.002	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	----	< 0.0001	----	< 0.001	----	< 0.001	----	< 0.0001
Nickel (filtered)	mg/L	0.001	0.2	0.02	0.2	1	0.002	0.002	0.003	0.002	0.002	0.063	----	0.02	----	1.1	----	0.46	----	0.001
Selenium (filtered)	mg/L	0.001	0.1	0.01	0.02	0.02	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.01	----	< 0.001	----	< 0.01	----	< 0.01	----	< 0.001
Zinc (filtered)	mg/L	0.005	3	---	2	20	< 0.005	<0.005	< 0.005	< 0.005	0.005	< 0.05	----	< 0.005	----	0.32	----	0.24	----	0.034
Titanium (filtered)	mg/L	0.005	---	---	---	---	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.05	----	< 0.005	----	0.68	----	0.31	----	< 0.005
Iron	mg/L	0.01	0.3	---	0.2	---	0.02	0.03	< 0.01	< 0.01	0.06	< 0.5	----	0.02	----	14	----	6.6	----	0.4
Vanadium (filtered)	mg/L	0.05	---	---	---	---	---	---	---	---	---	< 0.05	----	0.015	----	0.22	----	< 0.05	----	< 0.005
Molybdenum (filtered)	mg/L	0.001	0.5	0.05	---	---	---	---	---	---	---	1.3	----	0.45	----	0.11	----	0.06	----	< 0.001
Silver (filtered)	mg/L	0.001	1	0.1	---	---	---	---	---	---	---	< 0.05	----	< 0.001	----	< 0.05	----	< 0.05	----	< 0.001
Barium (filtered)	mg/L	0.01	20	2	---	---	---	---	---	---	---	1.5	----	0.47	----	1.6	----	0.75	----	0.14
Beryllium (filtered)	mg/L	0.001	0.6	0.06	0.1	---	---	---	---	---	---	< 0.01	----	< 0.001	----	< 0.01	----	< 0.01	----	< 0.001
Boron (filtered)	mg/L	0.05	40	4	---	---	---	---	---	---	---	1.4	----	0.54	----	41	----	18	----	0.06
Cobalt (filtered)	mg/L	0.001	0.5	0.05	---	---	---	---	---	---	---	< 0.01	----	< 0.001	----	0.069	----	0.035	----	< 0.001
BTEXN																				
Naphthalene (VOC)	mg/kg	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	---	----	< 0.001	----	---	----	< 0.05	----	---
Benzene	mg/L	0.001	0.01	0.001	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.1	----	< 0.05	----	< 0.001
Toluene	mg/L	0.001	0.025	0.8	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.1	----	< 0.05	----	< 0.001
Ethylbenzene	mg/L	0.001	0.003	0.3	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.1	----	< 0.05	----	< 0.001
Xylene (m & p)	mg/L	0.002	0.02	---	---	---	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.2	----	< 0.1	----	< 0.002
Xylene (o)	mg/L	0.001	0.02	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.1	----	< 0.05	----	< 0.001
Xylene Total	mg/L	0.003	---	0.6	---	---	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.3	----	< 0.15	----	< 0.003
TPH																				
C6-C9	mg/L	0.02	---	---	---	---	----	<20	----	< 0.02	----	< 0.02	----	< 0.02	----	< 2	----	< 1	----	< 0.02
C10-C14	mg/L	0.02	---	---	---	---	----	<20	----	< 0.02	----	< 0.02	----	< 0.02	----	30	----	< 0.02	----	< 0.02
C15-C28	mg/L	0.04	---	---	---	---	----	<40	----	< 0.04	----	< 0.04	----	< 0.04	----	57	----	< 0.04	----	< 0.04
C29-C36	mg/L	0.04	---	---	---	---	----	<40	----	< 0.04	----	< 0.04	----	< 0.04	----	4.9	----	< 0.04	----	< 0.04
C10-C36 (Total)	mg/L	0.04	---	---	---	---	----	<40	----	< 0.04	----	< 0.04	----	< 0.04	----	91.9	----	< 0.04	----	< 0.04

Table C1: Laboratory analysis results

						SAMPLE NAME	GW23S	GW23D	GW23D	GW23D	GW23D	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	PLP	PLP	PLP	PLP	PSD1
						LAB REPORT NUMBER	1173105	1083237	1112682	1144109	1173105	1083260	1112682	1144222	1173105	1083260	1112682	1144222	1173105	1083260
						SAMPLE ID	L24-De0050611	L24-Ap0001479	L24-Jn0074104	L24-Se0073512	L24-De0050612	L24-Ap0001564	L24-Jn0074109	L24-Se0074122	L24-De0050621	L24-Ap0001565	L24-Jn0074110	L24-Se0074123	L24-De0050620	L24-Ap0001566
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	25 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	25 Mar 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
TRH																				
C6-C10	mg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 2	----	< 1	----	< 0.02
C6-C10 (F1 minus BTEX)	mg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 2	----	< 1	----	< 0.02
C10-C16	mg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	**40**	----	< 0.02	----	< 0.02
C10-C16 (F2 minus Naphthalene)	mg/L	0.02	---	---	---	---	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	**40**	----	< 0.02	----	< 0.02
C16-C34 (F3)	mg/L	0.05	---	---	---	---	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	**52**	----	< 0.05	----	< 0.05
C34-C40 (F4)	mg/L	0.05	---	---	---	---	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	**0.59**	----	< 0.05	----	< 0.05
C10-C40 (Total)	mg/L	0.05	---	---	---	---	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	**92.59**	----	< 0.05	----	< 0.05
PAH																				
Acenaphthene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Naphthalene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Acenaphthylene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Anthracene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benz(a)anthracene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(a) pyrene	µg/L	1	0.1	0.01	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Chrysene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Fluoranthene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Fluorene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Phenanthrene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Pyrene	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
PAHs (Sum of total)	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	----	<1	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
MAH																				
Styrene	µg/L	0.5	4	30	---		----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	---	0.7	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,1-dichloroethane	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,1-dichloroethene	µg/L	0.5	300	30	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,2-dichloroethane	µg/L	0.5	30	3	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
Carbon tetrachloride	µg/L	0.5	30	3	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
Dichloromethane	µg/L	5	---	4	---	---	----	<5	----	< 5	----	< 5	----	< 5	----	< 250	----	< 5	----	< 5
Tetrachloroethene	µg/L	0.5	500	50	---	---	----	<0.5	----	---	----	---	----	---	----	---	----	---	----	---
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	----	<2	----	< 2	----	< 2	----	< 2	----	< 50	----	< 2	----	< 2
Trichloroethene	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
Vinyl chloride	µg/L	0.2	3	0.3	---	---	----	<0.2	----	< 0.2	----	< 0.2	----	< 0.2	----	< 10	----	< 0.2	----	< 0.2
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	**65**	----	**14**	----	**0.01**
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.08**	----	< 0.01
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.7	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.56**	----	< 0.01
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01		---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.02**	----	< 0.01
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	0.7	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.73**	----	< 0.01
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	< 0.01	----	< 0.01
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	**2.1**	----	< 0.05
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**1.9**	----	**0.05**
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	**14**	----	**3.5**	----	**0.04**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	**0.43**	----	< 0.05
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.56	0.56	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**1.1**	----	**0.02**
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.09**	----	< 0.01
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.05**	----	< 0.01
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	< 0.01	----	< 0.01
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	< 0.01	----	< 0.01
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	< 0.01	----	< 0.01
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	< 0.01	----	< 0.01
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.02**	----	< 0.01
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	**3.6**	----	< 0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.09**	----	< 0.01
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	< 0.01	----	< 0.01
N-ethyl perfluorooctane sulfonamide	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	< 0.05	----	< 0.05
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	< 0.05	----	< 0.05
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	< 0.05	----	< 0.05
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	< 0.05	----	< 0.05

Table C1: Laboratory analysis results

ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES	SAMPLE NAME	GW23S	GW23D	GW23D	GW23D	GW23D	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	PLP	PLP	PLP	PLP	PSD1
							LAB REPORT NUMBER	1173105	1083237	1112682	1144109	1173105	1083260	1112682	1144222	1173105	1083260	1112682	1144222	1173105	1083260
							SAMPLE ID	L24-De0050611	L24-Ap0001479	L24-Jn0074104	L24-Se0073512	L24-De0050612	L24-Ap0001564	L24-Jn0074109	L24-Se0074122	L24-De0050621	L24-Ap0001565	L24-Jn0074110	L24-Se0074123	L24-De0050620	L24-Ap0001566
							LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
							SAMPLE DATE	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	25 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	25 Mar 2024
							MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	< 0.05	----	< 0.05
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	**0.1**	----	< 0.05
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 40	----	< 0.05	----	< 0.05
Sum of PFAS	µg/L	0.1	---	---	---	---	----	<0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	**79**	----	**29.07**	----	**0.12**
Sum of PFHxS and PFOS	µg/L	0.01	0.7	0.07	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**1.29**	----	< 0.01
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	< 0.01	----	< 0.01
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**0.7**	----	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**1.83**	----	**0.02**
Sum of enHealth PFAS (PFHxS + PFOS +	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 8	----	**2.39**	----	**0.02**
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	**79**	----	**28.01**	----	**0.12**
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
chlordane	µg/L	0.002	20	2	---	---	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002
d-BHC	µg/L	0.001	---	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
DDT	µg/L	0.001	90	9	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Heptachlor epoxide	µg/L	0.001	3,000	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
DDD	µg/L	0.001	---	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Methoxychlor	µg/L	0.02	---	300[#2]	---	---	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02
Dieldrin	µg/L	0.001	---	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Endrin	µg/L	0.01	---	---	---	---	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01
4,4-DDE	µg/L	0.001	---	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	**0.003**	----	<0.001
a-BHC	µg/L	0.001	---	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Aldrin	µg/L	0.001	---	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
g-BHC (Lindane)	µg/L	0.001	---	10	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
b-BHC	µg/L	0.001	---	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Endosulfan I	µg/L	0.001	200	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Endosulfan II	µg/L	0.001	200	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Endosulfan sulphate	µg/L	0.001	200,000	---	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Heptachlor	µg/L	0.001	---	0.3	---	---	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	100	10	---	---	----	<0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005
Diazinon	µg/L	0.01	40	4	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Ethion	µg/L	0.01	40	4	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Fenitrothion	µg/L	0.01	0.07	7[#2]	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Parathion	µg/L	0.02	200	20	---	---	----	<0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
Methyl parathion	µg/L	0.02	7	0.7	---	---	----	<0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
Malathion	µg/L	0.01	700	70	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Pesticides																				
Bifenthrin	µg/L	0.05	---	---	---	---	----	<0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05
Bromophos	mg/L	0.000005	---	---	---	---	----	<0.000005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005
Atrazine	mg/L	0.1	---	---	---	---	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1
Dinoseb	mg/L	0.002	---	---	---	---	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002
Chlorothalonil	µg/L	0.01	---	50	---	---	----	<0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Vinclozolin	µg/L	0.02	---	---	---	---	----	<0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.4.6-Trichlorophenol	mg/L	0.001	2	20	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.4-Dichlorophenol	mg/L	0.001	0.3	200	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2-Chlorophenol	mg/L	0.001	0.1	300	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Pentachlorophenol	mg/L	0.001	100	10	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
2-Nitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
4-Nitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Phenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001
Total cresols*	mg/L	0.01	---	---	---	---	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1
Fipronil	mg/L	0.00002		0.0007	---	---	----	<0.00002	----	< 0.02	----	---	----	< 0.02	----	---	----	< 0.02	----	---

Table C1: Laboratory analysis results

						SAMPLE NAME	GW23S	GW23D	GW23D	GW23D	GW23D	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	TDS Leachate Cell 1	PLP	PLP	PLP	PLP	PSD1
						LAB REPORT NUMBER	1173105	1083237	1112682	1144109	1173105	1083260	1112682	1144222	1173105	1083260	1112682	1144222	1173105	1083260
						SAMPLE ID	L24-De0050611	L24-Ap0001479	L24-Jn0074104	L24-Se0073512	L24-De0050612	L24-Ap0001564	L24-Jn0074109	L24-Se0074122	L24-De0050621	L24-Ap0001565	L24-Jn0074110	L24-Se0074123	L24-De0050620	L24-Ap0001566
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	17 Dec 2024	26 Mar 2024	25 Jun 2024	25 Sep 2024	17 Dec 2024	27 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	25 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	25 Mar 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
PCBs																				
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	----	<0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,2-dichlorobenzene	µg/L	0.5	---	1,500	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
1,4-dichlorobenzene	µg/L	0.5	---	40	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
Chlorobenzene	µg/L	0.5	---	300	---	---	----	<0.5	----	< 0.5	----	< 0.5	----	< 0.5	----	< 25	----	< 0.5	----	< 0.5
Hexachlorobenzene	µg/L	0.001	---	---	---	---	----	<0.001	----	< 0.001	----	< 0.001	----	< 0.5	----	< 0.001	----	< 0.5	----	< 0.001

Table C1: Laboratory analysis results

ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES	SAMPLE NAME	PSD1	PSD1	PSD1	PSD2	PSD2	PSD2	LEP1	LEP1	LEP1	LEP1	LEP3	LEP3	LEP3	LEP3
							LAB REPORT NUMBER	1112682	1144222	1173105	1112682	1144222	1173105	1083260	1112682	1144222	1173105	1083260	1112682	1144222	1173105
							SAMPLE ID	L24-Jn0074111	L24-Se0074124	L24-De0050616	L24-Jn0074112	L24-Se0074125	L24-De0050617	L24-Ap0001567	L24-Jn0074113	L24-Se0074126	L24-De0050618	L24-Ap0001568	L24-Jn0074114	L24-Se0074127	L24-De0050619
							LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
							SAMPLE DATE	26 Jun 2024	26 Sep 2024	16 Dec 2024	26 Jun 2024	26 Sep 2024	16 Dec 2024	26 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	26 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024
							MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Temperature	°C	---	---	---	---	---		11.8	22.5	25.7	12.5	18.9	25.9	30.4	11.4	23	29.4	29.6	11.5	23	27.1
Dissolved Oxygen	mg/L	---	---	---	---	---		7.5	5.82	8.5	7.52	7.22	8.8	0.005	4.62	0.63	0.8	0.06	4.11	0.42	1.2
Electrical Conductivity	uS/cm	---	---	---	---	---		553.2	1019	480	396.6	342.8	350	196239	64885	54060	75000	168118	61620	58930	110000
pH (Lab)	pH unit	---	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5		7.4	6.5	7.1	7.4	6.5	7.4	7.3	6.9	6.5	7.5	8	6.9	7.4	7.5
Oxygen Reduction Potential	mV	---	---	---	---	---		68.3	25.4	420	58.1	27.5	420	-97.3	64.8	48.8	280	-43	69.7	60.3	290
Top of Casing	mAHD	---	---	---	---	---		----	----	----	----	----	----	----	----	----	----	----	----	----	----
Well Depth	mbgl	---	---	---	---	---		----	----	----	----	----	----	----	----	----	----	----	----	----	----
Depth to Water (mbtoc)	mbgl	---	---	---	---	---		----	----	----	----	----	----	----	----	----	----	----	----	----	----
Groundwater Elevation	mAHD	---	---	---	---	---		----	----	----	----	----	----	----	----	----	----	----	----	----	----
Colour	---	---	---	---	---	---		Brown	Light cream	Yellow	Colourless	Colourless	Colourless	Dark Red	Dark/Brown	Dark Brown	Dark Brown	Dark Red	Dark/Brown	Dark Brown	Dark Brown
Turbidity	---	---	---	---	---	---		High	High	High	Moderate	High	Low	High	High	High	High	High	High	High	High
Odour	---	---	---	---	---	---		Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Sulfur	Odourless	Odourless	Organic	Sulfur	Odourless	Odourless	Organic
Inorganics																					
COD	mg/L	25	---	---	---	---		----	54	----	----	< 25	----	30000	----	3300	----	20000	----	3800	----
Ammonia as N	mg/L	0.02	0.41	0.5	---	---		----	0.14	----	----	< 0.02	----	1400	----	420	----	1400	----	370	----
Nitrate (as N)	mg/L	0.01	113	11.3	---	---		----	2.4	----	----	1.4	----	1.1	----	4.0	----	2.5	----	< 0.01	----
Nitrite (as N)	mg/L	0.01	9.1	0.91	---	---		----	0.18	----	----	< 0.01	----	< 0.01	----	< 0.01	----	2.0	----	< 0.01	----
Nitrite + Nitrate as N	mg/L	0.01	---	---	---	---		----	2.6	----	----	1.4	----	1.1	----	4.0	----	4.5	----	< 0.01	----
Nitrogen (Total)	mg/L	0.2	---	---	5,000	---		----	5.9	----	----	2.9	----	1500	----	510	----	1400	----	500	----
Kjeldahl Nitrogen Total	mg/L	0.2	---	---	---	---		----	3.3	----	----	1.5	----	1500	----	510	----	1400	----	500	----
Phosphorus	mg/L	0.01	---	---	50[m]	---		----	0.15	----	----	< 0.01	----	31	----	8.0	----	23	----	8.80	----
Alkalinity total as CaCO3	mg/L as CaCO3	5	---	---	---	---		----	85	----	----	59	----	1900	----	1200	----	3100	----	960	----
Alkalinity (Hydroxide)	mg/L as CaCO3	5	---	---	---	---		----	< 5	----	----	< 5	----	< 5	----	< 5	----	< 5	----	< 5	----
Alkalinity (Bicarbonate as HCO3)	mg/L as CaCO3	5	---	---	---	---		----	85	----	----	59	----	1900	----	1200	----	3100	----	960	----
Alkalinity (Carbonate)	mg/L as CaCO3	5	---	---	---	---		----	< 5	----	----	< 5	----	< 5	----	< 5	----	< 5	----	< 5	----
TDS	mg/L	5	---	---	---	---		----	270	----	----	200	----	120000	----	32000	----	96000	----	36000	----
Electrical Conductivity (Lab)	uS/cm	10	---	---	---	---		----	440	----	----	330	----	200000	----	54000	----	160000	----	59000	----
Total Organic Carbon (TOC)	mg/L	5	---	---	---	---		----	12	----	----	5.2	----	11000	----	2100	----	190	----	2400	----
Major ions																					
Calcium	mg/L	0.5	---	---	---	---		----	30	----	----	26	----	3100	----	330	----	1600	----	370	----
Magnesium	mg/L	0.5	---	---	---	---		----	6	----	----	4.6	----	3000	----	350	----	1600	----	380	----
Magnesium (filtered)	mg/L	0.5	---	---	---	---		----	6.3	----	----	4.8	----	---	----	300	----	---	----	330	----
Potassium	mg/L	0.5	---	---	---	---		----	20	----	----	11	----	20000	----	2800	----	12000	----	3000	----
Sulfate	mg/L	1	250	---	---	---		----	31	----	----	28	----	< 1	----	190	----	< 1	----	170	----
Sodium	mg/L	0.5	180	---	---	---		----	39	----	----	27	----	87000	----	12000	----	50000	----	13000	----
Chloride (filtered)	mg/L	5	250	---	---	---		----	48	----	----	32	----	140000	----	20000	----	79000	----	21000	----
Metals																					
Aluminium (filtered)	mg/L	0.05	0.2	---	5	5		----	0.57	----	----	0.32	----	1.7	----	< 0.5	----	0.62	----	< 0.5	----
Arsenic (filtered)	mg/L	0.001	0.1	0.01	0.1	0.5[n,r]		----	< 0.001	----	----	< 0.001	----	0.21	----	0.018	----	0.14	----	0.015	----
Cadmium (filtered)	mg/L	0.0001	0.02	0.002	0.01	0.01		----	< 0.0001	----	----	< 0.0001	----	0.0049	----	< 0.002	----	< 0.002	----	< 0.002	----
Chromium (hexavalent)	mg/L	0.002	0.5	0.05	---	---		----	< 0.002	----	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----	< 0.002	----
Chromium (III+VI) (filtered)	mg/L	0.001	---	---	0.1	1		----	< 0.001	----	----	< 0.001	----	2.1	----	0.31	----	1.2	----	0.31	----
Chromium (Trivalent) (filtered)	mg/L	0.002	---	---	0.1	---		----	< 0.002	----	----	< 0.002	----	2.1	----	0.31	----	1.2	----	0.31	----
Copper (filtered)	mg/L	0.001	1	2	0.2	0.4[n,o]		----	0.012	----	----	0.002	----	0.013	----	0.002	----	< 0.01	----	0.002	----
Lead (filtered)	mg/L	0.001	0.1	0.01	2	0.1		----	0.006	----	----	< 0.001	----	0.056	----	< 0.01	----	0.013	----	< 0.01	----
Manganese (filtered)	mg/L	0.005	5	0.5	0.2	---		----	0.008	----	----	< 0.005	----	4.1	----	0.36	----	1.5	----	0.39	----
Mercury (filtered)	mg/L	0.0001	0.01	0.001	0.002	0.002		----	< 0.0001	----	----	< 0.0001	----	0.0024	----	< 0.001	----	0.0013	----	< 0.001	----
Nickel (filtered)	mg/L	0.001	0.2	0.02	0.2	1		----	0.003	----	----	< 0.001	----	4.8	----	0.6	----	3	----	0.64	----
Selenium (filtered)	mg/L	0.001	0.1	0.01	0.02	0.02		----	< 0.001	----	----	< 0.001	----	0.025	----	< 0.01	----	0.027	----	< 0.01	----
Zinc (filtered)	mg/L	0.005	3	---	2	20		----	0.14	----	----	0.018	----	0.91	----	0.082	----	0.31	----	0.079	----
Titanium (filtered)	mg/L	0.005	---	---	---	---		----	< 0.005	----	----	< 0.005	----	1.6	----	0.12	----	0.47	----	0.1	----
Iron	mg/L	0.01	0.3	---	0.2	---		----	1.7	----	----	0.56	----	44	----	2.5	----	16	----	2.5	----
Vanadium (filtered)	mg/L	0.05	---	---	---	---		----	< 0.005	----	----	< 0.005	----	0.56	----	< 0.05	----	0.3	----	< 0.05	----
Molybdenum (filtered)	mg/L	0.001	0.5	0.05	---	---		----	0.001	----	----	< 0.001	----	0.14	----	0.029	----	0.093	----	0.027	----
Silver (filtered)	mg/L	0.001	1	0.1	---	---		----	< 0.001	----	----	< 0.001	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
Barium (filtered)	mg/L	0.01	20	2	---	---		----	0.04	----	----	0.04	----	12	----	0.95	----	4.1	----	0.98	----
Beryllium (filtered)	mg/L	0.001	0.6	0.06	0.1	---		----	< 0.001	----	----	< 0.001	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Boron (filtered)	mg/L	0.05	40	4	---	---		----	0.08	----	----	< 0.05	----	300	----	39	----	190	----	44	----
Cobalt (filtered)	mg/L	0.001	0.5	0.05	---	---		----	< 0.001	----	----	< 0.001	----	0.15	----	0.02	----	0.09	----	0.02	----
BTEXN																					
Naphthalene (VOC)	mg/kg	0.001	---		---	---		----	< 0.001	----	----	< 0.001	----	---	----	< 0.05	----	---	----	< 0.05	----
Benzene	mg/L	0.001	0.01	0.001	---	---		----	< 0.001	----	----	< 0.001	----	< 0.1	----	< 0.05	----	< 0.1	----	< 0.05	----
Toluene	mg/L	0.001	0.025	0.8	---	---		----	< 0.001	----	----	< 0.001	----	< 0.1	----	< 0.05	----	< 0.1	----	< 0.05	----
Ethylbenzene	mg/L	0.001	0.003	0.3	---	---		----	< 0.001	----	----	< 0.001	----	< 0.1	----	< 0.05	----	< 0.1	----	< 0.05	----
Xylene (m & p)	mg/L	0.002	0.02	---	---	---		----	< 0.002	----	----	< 0.002	----	< 0.2	----	< 0.1	----	< 0.2	----	< 0.1	----
Xylene (o)	mg/L	0.001	0.02	---	---	---		----	< 0.001	----	----	< 0.001	----	< 0.1	----	< 0.05	----	< 0.1	----	< 0.05	----
Xylene Total	mg/L	0.003	---	0.6	---	---		----	< 0.003	----	----	< 0.003	----	< 0.3	----	< 0.15	----	< 0.3	----	< 0.15	----
TPH																					
C6-C9	mg/L	0.02	---	---	---	---		----	< 0.02	----	----	< 0.02	----	< 2	----	< 1	----	< 2	----	< 1	----
C10-C14	mg/L	0.02	---	---	---	---		----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	2.2	----	5.5	----
C15-C28	mg/L	0.04	---	---	---	---		----	< 0.04	----	----	< 0.04	----	79	----	< 0.04	----	8.5	----	4.9	----
C29-C36	mg/L	0.04	---	---	---	---		----	< 0.04	----	----	< 0.04	----	0.96	----	< 0.04	----	0.88	----	< 0.04	----
C10-C36 (Total)	mg/L	0.04	---	---	---	---		----	< 0.04	----	----	< 0.04	----	79.96	----	< 0.04	----	11.58	----	10.4	----

Table C1: Laboratory analysis results

						SAMPLE NAME	PSD1	PSD1	PSD1	PSD2	PSD2	PSD2	LEP1	LEP1	LEP1	LEP1	LEP3	LEP3	LEP3	LEP3
						LAB REPORT NUMBER	1112682	1144222	1173105	1112682	1144222	1173105	1083260	1112682	1144222	1173105	1083260	1112682	1144222	1173105
						SAMPLE ID	L24-Jn0074111	L24-Se0074124	L24-De0050616	L24-Jn0074112	L24-Se0074125	L24-De0050617	L24-Ap0001567	L24-Jn0074113	L24-Se0074126	L24-De0050618	L24-Ap0001568	L24-Jn0074114	L24-Se0074127	L24-De0050619
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	26 Jun 2024	26 Sep 2024	16 Dec 2024	26 Jun 2024	26 Sep 2024	16 Dec 2024	26 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	26 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
TRH																				
C6-C10	mg/L	0.02	---	---	---	---	----	< 0.02	----	----	< 0.02	----	< 2	----	< 1	----	< 2	----	< 1	----
C6-C10 (F1 minus BTEX)	mg/L	0.02	---	---	---	---	----	< 0.02	----	----	< 0.02	----	< 2	----	< 1	----	< 2	----	< 1	----
C10-C16	mg/L	0.02	---	---	---	---	----	< 0.02	----	----	< 0.02	----	**4.4**	----	< 0.02	----	**3.3**	----	**8.6**	----
C10-C16 (F2 minus Naphthalene)	mg/L	0.02	---	---	---	---	----	< 0.02	----	----	< 0.02	----	**4.4**	----	< 0.02	----	**3.3**	----	**8.6**	----
C16-C34 (F3)	mg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	**80**	----	< 0.05	----	**8.1**	----	**2.9**	----
C34-C40 (F4)	mg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	**0.36**	----	< 0.05	----
C10-C40 (Total)	mg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	**84.4**	----	< 0.05	----	**11.76**	----	**11.5**	----
PAH																				
Acenaphthene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Naphthalene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Acenaphthylene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Anthracene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Benz(a)anthracene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(a) pyrene	µg/L	1	0.1	0.01	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Chrysene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Fluoranthene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Fluorene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Phenanthrene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Pyrene	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
PAHs (Sum of total)	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.0057	----	< 0.001	----	< 0.001	----	< 0.001	----
MAH																				
Styrene	µg/L	0.5	4	30	---		----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	---	0.7	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,1-dichloroethane	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,1-dichloroethene	µg/L	0.5	300	30	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,2-dichloroethane	µg/L	0.5	30	3	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
Carbon tetrachloride	µg/L	0.5	30	3	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
Dichloromethane	µg/L	5	---	4	---	---	----	< 5	----	----	< 5	----	< 250	----	< 5	----	< 500	----	< 5	----
Tetrachloroethene	µg/L	0.5	500	50	---	---	----	---	----	----	---	----	---	----	---	----	---	----	---	----
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	----	< 2	----	----	< 2	----	< 50	----	< 2	----	< 100	----	< 2	----
Trichloroethene	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
Vinyl chloride	µg/L	0.2	3	0.3	---	---	----	< 0.2	----	----	< 0.2	----	< 10	----	< 0.2	----	< 20	----	< 0.2	----
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	----	**0.01**	----	----	< 0.01	----	**590**	----	**27**	----	**190**	----	**23**	----
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	**0.15**	----	< 8	----	**0.13**	----
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.7	---	---	---	----	< 0.01	----	----	< 0.01	----	**14**	----	**0.39**	----	< 8	----	**0.64**	----
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01		---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	< 0.01	----	< 8	----	**0.01**	----
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	0.7	---	---	---	----	**0.06**	----	----	**0.02**	----	< 8	----	**0.17**	----	< 8	----	**0.5**	----
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	< 0.01	----	< 8	----	< 0.01	----
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	**160**	----	**5.9**	----	**47**	----	**7.2**	----
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	----	**0.09**	----	----	**0.07**	----	**79**	----	**3.1**	----	**24**	----	**4**	----
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	----	**0.1**	----	----	**0.06**	----	**110**	----	**3.7**	----	**38**	----	**4.5**	----
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 40	----	**0.37**	----	< 40	----	**0.57**	----
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.56	0.56	---	---	----	**0.03**	----	----	**0.02**	----	**8.9**	----	**0.49**	----	< 8	----	**0.7**	----
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	----	**0.01**	----	----	< 0.01	----	< 8	----	**0.03**	----	< 8	----	**0.06**	----
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	**0.01**	----	< 8	----	**0.04**	----
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	< 0.01	----	< 8	----	< 0.01	----
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	< 0.01	----	< 8	----	< 0.01	----
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	< 0.01	----	< 8	----	< 0.01	----
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	< 0.01	----	< 8	----	< 0.01	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	**0.02**	----	< 8	----	**0.03**	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	52	----	**1.9**	----	< 40	----	**2.7**	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	**0.03**	----	< 8	----	**0.1**	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	< 0.01	----	< 8	----	< 0.01	----
N-ethyl perfluorooctane sulfonamide	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 40	----	< 0.05	----	< 40	----	< 0.05	----
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 40	----	< 0.05	----	< 40	----	< 0.05	----
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 40	----	< 0.05	----	< 40	----	< 0.05	----
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 40	----	< 0.05	----	< 40	----	< 0.05	----

Table C1: Laboratory analysis results

						SAMPLE NAME	PSD1	PSD1	PSD1	PSD2	PSD2	PSD2	LEP1	LEP1	LEP1	LEP1	LEP3	LEP3	LEP3	LEP3
						LAB REPORT NUMBER	1112682	1144222	1173105	1112682	1144222	1173105	1083260	1112682	1144222	1173105	1083260	1112682	1144222	1173105
						SAMPLE ID	L24-Jn0074111	L24-Se0074124	L24-De0050616	L24-Jn0074112	L24-Se0074125	L24-De0050617	L24-Ap0001567	L24-Jn0074113	L24-Se0074126	L24-De0050618	L24-Ap0001568	L24-Jn0074114	L24-Se0074127	L24-De0050619
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	26 Jun 2024	26 Sep 2024	16 Dec 2024	26 Jun 2024	26 Sep 2024	16 Dec 2024	26 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	26 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 40	----	< 0.05	----	< 40	----	< 0.05	----
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 40	----	< 0.05	----	< 40	----	< 0.05	----
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 40	----	< 0.05	----	< 40	----	< 0.05	----
Sum of PFAS	µg/L	0.1	---	---	---	---	----	**0.3**	----	----	**0.17**	----	**1029.9**	----	**43.88**	----	**299**	----	**44.53**	----
Sum of PFHxS and PFOS	µg/L	0.01	0.7	0.07	---	---	----	**0.06**	----	----	**0.02**	----	**14**	----	**0.56**	----	< 8	----	**1.14**	----
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 8	----	< 0.01	----	< 8	----	< 0.01	----
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	**16**	----	**0.62**	----	< 8	----	**0.35**	----
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	----	**0.09**	----	----	**0.04**	----	**8.9**	----	**0.66**	----	< 8	----	**1.2**	----
Sum of enHealth PFAS (PFHxS + PFOS +	µg/L	0.01	---	---	---	---	----	**0.09**	----	----	**0.04**	----	**22.9**	----	**1.05**	----	< 8	----	**1.84**	----
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	----	**0.29**	----	----	**0.17**	----	**1013.9**	----	**43.05**	----	**299**	----	**43.91**	----
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
chlordane	µg/L	0.002	20	2	---	---	----	< 0.002	----	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----
d-BHC	µg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
DDT	µg/L	0.001	90	9	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Heptachlor epoxide	µg/L	0.001	3,000	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
DDD	µg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Methoxychlor	µg/L	0.02	---	300[#2]	---	---	----	< 0.02	----	----	< 0.02	----	<0.02	----	< 0.02	----	<0.02	----	< 0.02	----
Dieldrin	µg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endrin	µg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	<0.01	----	< 0.01	----	<0.01	----	< 0.01	----
4,4-DDE	µg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
a-BHC	µg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Aldrin	µg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
g-BHC (Lindane)	µg/L	0.001	---	10	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
b-BHC	µg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan I	µg/L	0.001	200	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan II	µg/L	0.001	200	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Endosulfan sulphate	µg/L	0.001	200,000	---	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Heptachlor	µg/L	0.001	---	0.3	---	---	----	< 0.001	----	----	< 0.001	----	<0.001	----	< 0.001	----	<0.001	----	< 0.001	----
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	100	10	---	---	----	< 0.005	----	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----
Diazinon	µg/L	0.01	40	4	---	---	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Ethion	µg/L	0.01	40	4	---	---	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Fenitrothion	µg/L	0.01	0.07	7[#2]	---	---	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Parathion	µg/L	0.02	200	20	---	---	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
Methyl parathion	µg/L	0.02	7	0.7	---	---	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
Malathion	µg/L	0.01	700	70	---	---	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Pesticides																				
Bifenthrin	µg/L	0.05	---	---	---	---	----	< 0.05	----	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----	< 0.05	----
Bromophos	mg/L	0.000005	---	---	---	---	----	< 0.005	----	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----	< 0.005	----
Atrazine	mg/L	0.1	---	---	---	---	----	< 0.1	----	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Dinoseb	mg/L	0.002	---	---	---	---	----	< 0.002	----	----	< 0.002	----	<0.002	----	< 0.002	----	<0.002	----	< 0.002	----
Chlorothalonil	µg/L	0.01	---	50	---	---	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Vinclozolin	µg/L	0.02	---	---	---	---	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4.6-Trichlorophenol	mg/L	0.001	2	20	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dichlorophenol	mg/L	0.001	0.3	200	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Chlorophenol	mg/L	0.001	0.1	300	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Pentachlorophenol	mg/L	0.001	100	10	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	----	< 0.003	----	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----	< 0.003	----
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
2-Nitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
4-Nitrophenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Phenol	mg/L	0.001	---	---	---	---	----	< 0.001	----	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----	< 0.001	----
Total cresols*	mg/L	0.01	---	---	---	---	----	< 0.01	----	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----	< 0.01	----
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	----	< 0.1	----	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----	< 0.1	----
Fipronil	mg/L	0.00002		0.0007	---	---	----	< 0.02	----	----	< 0.02	----	---	----	< 0.02	----	---	----	< 0.02	----

Table C1: Laboratory analysis results

						SAMPLE NAME	PSD1	PSD1	PSD1	PSD2	PSD2	PSD2	LEP1	LEP1	LEP1	LEP1	LEP3	LEP3	LEP3	LEP3
						LAB REPORT NUMBER	1112682	1144222	1173105	1112682	1144222	1173105	1083260	1112682	1144222	1173105	1083260	1112682	1144222	1173105
						SAMPLE ID	L24-Jn0074111	L24-Se0074124	L24-De0050616	L24-Jn0074112	L24-Se0074125	L24-De0050617	L24-Ap0001567	L24-Jn0074113	L24-Se0074126	L24-De0050618	L24-Ap0001568	L24-Jn0074114	L24-Se0074127	L24-De0050619
						LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
						SAMPLE DATE	26 Jun 2024	26 Sep 2024	16 Dec 2024	26 Jun 2024	26 Sep 2024	16 Dec 2024	26 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024	26 Mar 2024	26 Jun 2024	26 Sep 2024	18 Dec 2024
						MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LIMIT OF REPORTING	ADWG 2014 NPUG	ADWG 2018 HEALTH	ANZECC 2000 LONG TERM IRRIGATION VALUES	ANZECC 2000 LIVESTOCK LOW RISK DW VALUES														
PCBs																				
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	----	< 0.02	----	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----	< 0.02	----
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,2-dichlorobenzene	µg/L	0.5	---	1,500	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
1,4-dichlorobenzene	µg/L	0.5	---	40	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
Chlorobenzene	µg/L	0.5	---	300	---	---	----	< 0.5	----	----	< 0.5	----	< 25	----	< 0.5	----	< 50	----	< 0.5	----
Hexachlorobenzene	µg/L	0.001	---	---	---	---	----	< 0.5	----	----	< 0.5	----	< 0.001	----	< 0.5	----	< 0.001	----	< 0.5	----

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW7D-R	QC02	
		LAB REPORT NUMBER	1083237	1083237		1083237	1083237		L24-Jn0074092	L24-Jn0074105		L24-Jn0074098	L24-Jn0074106		L24-Se0073499	L24-Se0073513		L24-Se0073499	EP2414023-001	
		LAB NAME	Eurofins ARL	Eurofins ARL		Eurofins ARL	Eurofins ARL		Eurofins	Eurofins		Eurofins	Eurofins		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Mar 2024	25 Mar 2024		26 Mar 2024	26 Mar 2024		24 Jun 2024	24 Jun 2024		25 Jun 2024	25 Jun 2024		24 Sep 2024	24 Sep 2024		24 Sep 2024	24 Sep 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
Inorganics																				
COD	ug/L	25,000	<25,000	<25,000	NA	<25,000	<25,000	NA	< 25	< 25	NA	< 25	< 25	NA	< 25	<25	NA	< 25	10	NA
Ammonia as N	mg/L	20	0.05	<0.02	NC	<0.02	<0.02	NA	<0.02	<0.02	NA	<0.02	<0.02	NA	< 0.02	< 0.02	NA	< 0.02	<0.01	NA
Nitrate (as N)	ug/L	10	2,300	2,100	9%	3,300	3,200	3%	1.9	1.8	5%	3.6	4.4	20%	2.2	2.1	5%	2.2	1.8	20%
Nitrite (as N)	ug/L	10	<10	<10	NA	<10	<10	NA	< 0.01	< 0.01	NA	< 0.01	< 0.01	NA	< 0.01	<0.01	NA	< 0.01	<0.01	NA
Nitrite + Nitrate as N	ug/L	10	2,300	2,100	9%	3,300	3,200	3%	1.9	1.8	5%	3.7	4.4	17%	2.2	2.1	5%	2.2	1.8	20%
Nitrogen (Total)	ug/L	200	2,400	2,400	0%	3,500	3,400	3%	1.9	1.8	5%	4.0	4.4	10%	2.2	2.1	5%	2.2	2.2	0%
Phosphorus	µg/L	10	30	30	0%	30	30	0%	0.04	0.05	22%	0.1	0.04	22%	0.01	0.02	67%	0.01	<0.01	NC
Alkalinity (total) as CaCO3	mg/L CaCO3	5	5.7	5.3	7%	5.4	5.6	4%	5.3	10	61%	5.3	< 5	NC	6.6	7.30	10%	6.6	6	10%
Alkalinity (Hydroxide)	mg/L CaCO3	5,000	<5,000	<5,000	NA	<5,000	<5,000	NA	< 5	< 5	NA	< 5	< 5	NA	<5	<5	NA	<5	<1	NA
Alkalinity (Bicarbonate as HCO3)	mg/L CaCO3	5	5.7	5.3	7%	5.4	5.6	4%	5.3	10	61%	5.3	< 5	NC	6.6	7.3	10%	6.6	6	10%
Alkalinity (Carbonate)	mg/L CaCO3	5	<5	<5	NA	<5	<5	NA	< 5	< 5	NA	< 5	< 5	NA	<5	<5	NA	<5	<1	NA
TDS	ug/L	5,000	160,000	160,000	0%	110,000	110,000	0%	160	160	0%	110	110	0%	160	160	0%	160	162	1%
Electrical Conductivity (Lab)	uS/cm	10	270	270	0%	180	180	0%	270	270	0%	180	180	0%	270	270	0%	270	254	6%
Total Organic Carbon (TOC)	mg/L	5	<5	<5	NA	<5	<5	NA	< 5	< 5	NA	< 5	< 5	NA	<5	<5	NA	<5	1	NA
Metals																				
Aluminium (filtered)	mg/L	0.05	<0.05	<0.05	NA	<0.05	<0.05	NA	0.07	< 0.05	NC	< 0.05	< 0.05	NA	< 0.05	< 0.05	NC	< 0.05	0.02	NC
Arsenic (filtered)	mg/L	0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	<0.001	NA
Cadmium (filtered)	mg/L	0.0001	<0.0001	<0.0001	NA	<0.0001	<0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	<0.0001	NA
Chromium (hexavalent)	mg/L	0.002	<0.002	<0.002	NA	<0.002	<0.002	NA	< 0.002	< 0.002	NA	< 0.002	< 0.002	NA	< 0.002	< 0.002	NA	< 0.002	<0.01	NA
Chromium (III+VI) (filtered)	mg/L	0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	<0.001	NA
Chromium (Trivalent) (filtered)	mg/L	0.002	<0.002	<0.002	NA	<0.002	<0.002	NA	< 0.002	< 0.002	NA	< 0.002	< 0.002	NA	< 0.002	< 0.002	NA	< 0.002	<0.01	NA
Copper (filtered)	mg/L	0.001	0.007	0.006	15%	<0.001	<0.001	NA	0.005	0.004	22%	0.002	0.002	0%	0.002	0.002	0%	0.002	0.002	0%
Lead (filtered)	mg/L	0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	<0.001	NA
Manganese (filtered)	mg/L	0.005	0.009	0.008	12%	0.037	0.037	0%	0.013	0.011	17%	0.04	0.029	32%	0.011	0.011	0%	0.011	0.011	0%
Mercury (filtered)	mg/L	0.0001	<0.0001	<0.0001	NA	<0.0001	<0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	0.0001	NC	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NA
Nickel (filtered)	mg/L	0.001	0.002	0.002	0%	0.002	0.003	40%	0.004	0.003	29%	0.004	0.004	0%	0.002	0.001	67%	0.002	<0.001	NC
Selenium (filtered)	mg/L	0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	<0.01	NA
Zinc (filtered)	mg/L	0.005	0.013	0.011	17%	<0.005	<0.005	NA	0.061	0.033	60%	< 0.005	< 0.005	NA	0.011	0.009	20%	0.011	0.022	67%
Titanium (filtered)	mg/L	0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	< 0.005	< 0.005	NA	< 0.005	< 0.005	NA	< 0.005	< 0.005	NA	< 0.005	----	NA
Iron	mg/L	0.01	0.07	0.13	60%	<0.01	<0.01	NA	0.13	0.02	147%	0.02	< 0.01	NC	0.01	0.01	0%	0.01	<0.05	NC
Vanadium (filtered)	mg/L	0.005	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Molybdenum (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Silver (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Barium (filtered)	mg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Beryllium (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Boron (filtered)	mg/L	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cobalt (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chromium (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Major ions																				
Calcium	mg/L	0.5	0.9	3.1	110%	1.1	1.3	17%	1.2	1.3	8%	0.9	0.9	0%	1.3	0.9	36%	1.3	<1	NC
Magnesium	mg/L	0.5	5.0	5.0	0%	3.7	4.2	13%	4.9	4.8	2%	3.7	3.8	3%	5.3	3.7	36%	5.3	4	28%
Magnesium (filtered)	mg/L	0.5	4.2	4.6	9%	3.5	3.7	6%	4.7	5	6%	3.8	3.8	0%	5.1	5.1	0%	5.1	---	NC
Potassium	mg/L	0.5	0.9	1.0	11%	<0.5	<0.5	NA	1	1.4	33%	< 0.5	< 0.5	NA	0.7	0.7	0%	0.7	1	35%
Sulfate	mg/L	1	8.5	<1	NC	1.9	1.3	38%	8.8	8.1	8%	7.3	7.4	1%	8	8.1	1%	8	8	0%
Sodium	mg/L	0.5	40	42	5%	24	210	159%	42	42	0%	25	25	0%	47	32	38%	47	40	16%
Chloride (filtered)	mg/L	5	67	69	3%	29	29	0%	59	58	2%	28	29	4%	59	60	2%	59	62	5%
BTEXN																				
Naphthalene (VOC)	mg/kg	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	<0.005	NA
Benzene	µg/L	0.5	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA
Toluene	µg/L	0.5	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	< 0.002	NA
Ethylbenzene	µg/L	0.5	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	< 0.002	NA
Xylene (m & p)	µg/L	2	< 0.002	---	---	< 0.002	---	---	---	---	---	---	---	---	< 0.002	< 0.002	NA	< 0.002	< 0.002	NA
Xylene (o)	µg/L	1	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	---	< 0.001	< 0.002	NA
Xylene Total	µg/L	3	< 0.003	---	---	< 0.003	---	---	---	---	---	---	---	---	< 0.003	< 0.003		< 0.003	< 0.002	NA
TPH																				
C6-C9	µg/L	20	<20	---	---	<20	---	---	---	---	---	---	---	---	<20	<20	NA	<20	<20	NA
C10-C14	µg/L	20	<20	---	---	<20	---	---	---	---	---	---	---	---	<20	<20	NA	<20	<50	NA
C15-C28	µg/L	40	<40	---	---	<40	---	---	---	---	---	---	---	---	<40	<40	NA	<40	<100	NA
C29-C36	µg/L	40	<40	---	---	<40	---	---	---	---	---	---	---	---	<40	<40	NA	<40	<50	NA
C10-C36 (Total)	µg/L	40	<40	---	---	<40	---	---	---	---	---	---	---	---	<40	<40	NA	<40	<50	NA

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW7D-R	QC02	
		LAB REPORT NUMBER	1083237	1083237		1083237	1083237		L24-Jn0074092	L24-Jn0074105		L24-Jn0074098	L24-Jn0074106		L24-Se0073499	L24-Se0073513		L24-Se0073499	EP2414023-001	
		LAB NAME	Eurofins ARL	Eurofins ARL		Eurofins ARL	Eurofins ARL		Eurofins	Eurofins		Eurofins	Eurofins		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Mar 2024	25 Mar 2024		26 Mar 2024	26 Mar 2024		24 Jun 2024	24 Jun 2024		25 Jun 2024	25 Jun 2024		24 Sep 2024	24 Sep 2024		24 Sep 2024	24 Sep 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
TRH																				
C6-C10	µg/L	20	<20	---	---	<20	---	---	---	---	---	---	---	---	<20	<20	NA	<20	<20	NA
C6-C10 (F1 minus BTEX)	µg/L	20	<20	---	---	<20	---	---	---	---	---	---	---	---	<20	<20	NA	<20	<20	NA
C10-C16	µg/L	20	<20	---	---	<20	---	---	---	---	---	---	---	---	<20	<20	NA	<20	<100	NA
C10-C16 (F2 minus Naphthalene)	µg/L	20	<20	---	---	<20	---	---	---	---	---	---	---	---	<20	<20	NA	<20	<100	NA
C16-C34 (F3)	µg/L	50	<50	---	---	<50	---	---	---	---	---	---	---	---	<50	<50	NA	<50	<100	NA
C34-C40 (F4)	µg/L	50	<50	---	---	<50	---	---	---	---	---	---	---	---	<50	<50	NA	<50	<100	NA
C10-C40 (Total)	µg/L	50	<50	---	---	<50	---	---	---	---	---	---	---	---	<50	<50	NA	<50	<100	NA
PAH																				
Acenaphthene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Naphthalene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Acenaphthylene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Anthracene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Benz(a)anthracene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Benzo(a) pyrene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Benzo(b+j)fluoranthene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Benzo(g,h,i)perylene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Benzo(k)fluoranthene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Chrysene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Dibenz(a,h)anthracene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Fluoranthene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Fluorene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Indeno(1,2,3-c,d)pyrene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Phenanthrene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Pyrene	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
PAHs (Sum of total)	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	<1	---	---	<1	---	---	---	---	---	---	---	---	<1	<1	NA	<1	---	---
MAH																				
Styrene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,1,1-trichloroethane	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,1-dichloroethane	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,1-dichloroethene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,2-dichloroethane	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Carbon tetrachloride	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
cis-1,2-dichloroethene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Dichloromethane	µg/L	5	<5	---	---	<5	---	---	---	---	---	---	---	---	<5	<5	NA	<5	---	---
Tetrachloroethene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
trans-1,2-dichloroethene	µg/L	2	<2	---	---	<2	---	---	---	---	---	---	---	---	<2	<2	NA	<2	---	---
Trichloroethene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Vinyl chloride	µg/L	0.2	<0.2	---	---	<0.2	---	---	---	---	---	---	---	---	<0.2	<0.2	NA	<0.2	---	---
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.05	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	<0.05	---	---	<5	---	---	---	---	---	---	---	---	<5	<5	NA	<5	---	---
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.01	---	---	<2	---	---	---	---	---	---	---	---	<2	<2	NA	<2	---	---
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.01	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.01	---	---	<0.2	---	---	---	---	---	---	---	---	<0.2	<0.2	NA	<0.2	---	---
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	0.14	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW7D-R	QC02	
		LAB REPORT NUMBER	1083237	1083237		1083237	1083237		L24-Jn0074092	L24-Jn0074105		L24-Jn0074098	L24-Jn0074106		L24-Se0073499	L24-Se0073513		L24-Se0073499	EP2414023-001	
		LAB NAME	Eurofins ARL	Eurofins ARL		Eurofins ARL	Eurofins ARL		Eurofins	Eurofins		Eurofins	Eurofins		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Mar 2024	25 Mar 2024		26 Mar 2024	26 Mar 2024		24 Jun 2024	24 Jun 2024		25 Jun 2024	25 Jun 2024		24 Sep 2024	24 Sep 2024		24 Sep 2024	24 Sep 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
N-ethyl perfluorooctane sulfonamide (NEtFOSA)	µg/L	0.05	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
Sum of PFAS	µg/L	0.1	0.14	---	---	<0.1	---	---	---	---	---	---	---	---	<0.1	<0.1	NA	<0.1	---	---
Sum of PFHxS and PFOS	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	0.14	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	<0.000001	---	---	<0.000001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
chlordane	µg/L	0.002	<0.002	---	---	<0.002	---	---	---	---	---	---	---	---	<0.002	<0.002	NA	<0.002	---	---
d-BHC	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
DDT	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Heptachlor epoxide	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
DDD	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Methoxychlor	µg/L	0.02	<0.02	---	---	<0.02	---	---	---	---	---	---	---	---	<0.02	<0.02	NA	<0.02	---	---
Dieldrin	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Endrin	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
4,4-DDE	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
a-BHC	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Aldrin	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
g-BHC (Lindane)	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
b-BHC	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Endosulfan I	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Endosulfan II	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Endosulfan sulphate	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Heptachlor	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	<0.005	---	---	<0.005	---	---	---	---	---	---	---	---	<0.005	<0.005	NA	<0.005	---	---
Diazinon	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Ethion	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Fenitrothion	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Parathion	µg/L	0.02	<0.02	---	---	<0.02	---	---	---	---	---	---	---	---	<0.02	<0.02	NA	<0.02	---	---
Methyl parathion	µg/L	0.02	<0.02	---	---	<0.02	---	---	---	---	---	---	---	---	<0.02	<0.02	NA	<0.02	---	---
Malathion	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Pesticides																				
Bifenthrin	µg/L	0.05	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---	<0.05	<0.05	NA	<0.05	---	---
Bromophos	mg/L	0.000005	<0.000005	---	---	<0.000005	---	---	---	---	---	---	---	---	<0.000005	<0.000005	NA	<0.05	---	---
Atrazine	mg/L	0.1	< 0.1	---	---	< 0.1	---	---	---	---	---	---	---	---	< 0.1	< 0.1	NA	< 0.1	---	---
Dinoseb	mg/L	0.002	<0.002	---	---	<0.002	---	---	---	---	---	---	---	---	<0.002	<0.002	NA	<0.002	---	---
Chlorothalonil	µg/L	0.01	<0.01	---	---	<0.01	---	---	---	---	---	---	---	---	<0.01	<0.01	NA	<0.01	---	---
Vinclozolin	µg/L	0.02	<0.02	---	---	<0.02	---	---	---	---	---	---	---	---	<0.02	<0.02	NA	<0.02	---	---
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2.4.6-Trichlorophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2.4-Dichlorophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2.6-Dichlorophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2-Chlorophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
4-Chloro-3-methylphenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
Pentachlorophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
Tetrachlorophenols - Total	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW7D-R	QC02	
		LAB REPORT NUMBER	1083237	1083237		1083237	1083237		L24-Jn0074092	L24-Jn0074105		L24-Jn0074098	L24-Jn0074106		L24-Se0073499	L24-Se0073513		L24-Se0073499	EP2414023-001	
		LAB NAME	Eurofins ARL	Eurofins ARL		Eurofins ARL	Eurofins ARL		Eurofins	Eurofins		Eurofins	Eurofins		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Mar 2024	25 Mar 2024		26 Mar 2024	26 Mar 2024		24 Jun 2024	24 Jun 2024		25 Jun 2024	25 Jun 2024		24 Sep 2024	24 Sep 2024		24 Sep 2024	24 Sep 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
Total Halogenated Phenol*	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2.4-Dimethylphenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2.4-Dinitrophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	< 0.003	---	---	< 0.003	---	---	---	---	---	---	---	---	< 0.003	< 0.003	NA	< 0.003	---	---
2-Methyl-4.6-dinitrophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2-Methylphenol (o-Cresol)	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
2-Nitrophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
4-Nitrophenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
Phenol	mg/L	0.001	< 0.001	---	---	< 0.001	---	---	---	---	---	---	---	---	< 0.001	< 0.001	NA	< 0.001	---	---
Total cresols*	mg/L	0.01	< 0.01	---	---	< 0.01	---	---	---	---	---	---	---	---	< 0.01	< 0.01	NA	< 0.01	---	---
Total Non-Halogenated Phenol*	mg/L	0.1	< 0.1	---	---	< 0.1	---	---	---	---	---	---	---	---	< 0.1	< 0.1	NA	< 0.1	---	---
Fipronil	mg/L	0.00002	<0.00002	---	---	<0.00002	---	---	---	---	---	---	---	---	<0.00002	<0.00002	NA	<0.00002	---	---

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW11S	QC02		GW7D-R	QC01		GW7D-R	QC02	
		LAB REPORT NUMBER	1083237	1083237		1083237	1083237		L24-Jn0074092	L24-Jn0074105		L24-Jn0074098	L24-Jn0074106		L24-Se0073499	L24-Se0073513		L24-Se0073499	EP2414023-001	
		LAB NAME	Eurofins ARL	Eurofins ARL		Eurofins ARL	Eurofins ARL		Eurofins	Eurofins		Eurofins	Eurofins		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Mar 2024	25 Mar 2024		26 Mar 2024	26 Mar 2024		24 Jun 2024	24 Jun 2024		25 Jun 2024	25 Jun 2024		24 Sep 2024	24 Sep 2024		24 Sep 2024	24 Sep 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
PCBs																				
PCBs (Sum of total)	µg/L	0.02	<0.02	---	---	<0.02	---	---	---	---	---	---	---	---	<0.02	<0.02	NA	<0.02	---	---
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,3,5-Trichlorobenzene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,2-dichlorobenzene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,3-dichlorobenzene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
1,4-dichlorobenzene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Chlorobenzene	µg/L	0.5	<0.5	---	---	<0.5	---	---	---	---	---	---	---	---	<0.5	<0.5	NA	<0.5	---	---
Hexachlorobenzene	µg/L	0.001	<0.001	---	---	<0.001	---	---	---	---	---	---	---	---	<0.001	<0.001	NA	<0.001	---	---

Acronyms:
NA = Not applicable, both concentrations are below the LOR
NC= Not calculated as one value is above LOR and one is below LOR
LOR = limits of reporting
mg/L = milligrams per litre
µg/L = micrograms per litre
RPD = relative percentage difference
QA/QC = Quality assurance/quality control:
RPDs have only been considered where concentrations are greater than 1 times the LOR
Font and Cell :
- Bolded and **green** RPDs indicates detection above the acceptable RPDs (30%)

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW11S	QC03		GW11S	QC04		GW7D-R	QC01		GW7D-R	QC02		GW11S	QC03		GW11S	QC04	
		LAB REPORT NUMBER	L24-Se0073505	L24-Se0073514		L24-Se0073505	EP2414023-002		L24-De0050599	L24-De0050612		L24-De0050599	EP2419251001		L24-De0050605	L24-De0050613		L24-De0050605	EP2419251002	
		LAB NAME	Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Sep 2024	25 Sep 2024		25 Sep 2024	25 Sep 2024		16 Dec 2024	16 Dec 2024		16 Dec 2024	16 Dec 2024		17 Dec 2024	17 Dec 2024		17 Dec 2024	17 Dec 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
Inorganics																				
COD	ug/L	25,000	< 25	< 25	NA	< 25	<10	NA	< 25	<25	NA	< 25	<10	NA	< 25	<25	NA	< 25	<10	NA
Ammonia as N	mg/L	20	< 0.02	< 0.02	NA	< 0.02	<0.01	NA	< 0.02	<0.02	NA	< 0.02	<0.01	NA	< 0.02	<0.02	NA	< 0.02	<0.01	NA
Nitrate (as N)	ug/L	10	3.7	3.7	0%	3.7	3.7	1%	5.1	1.9	**91%**	5.1	1.79	**96%**	4.6	3.1	**39%**	4.6	3.15	**37%**
Nitrite (as N)	ug/L	10	< 0.01	< 0.01	NA	< 0.01	<0.01	NA	< 0.01	< 0.01	NA	< 0.01	<0.01	NA	< 0.01	< 0.01	NA	< 0.01	<0.01	NA
Nitrite + Nitrate as N	ug/L	10	3.7	3.7	0%	3.7	3.7	1%	5.1	1.9	**91%**	5.1	1.79	**96%**	4.6	3.1	**39%**	4.6	3.15	**37%**
Nitrogen (Total)	ug/L	200	3.8	3.7	3%	3.8	4.3	12%	5.1	2.3	**76%**	5.1	2.3	**76%**	4.6	3.10	**39%**	4.6	3.8	19%
Phosphorus	µg/L	10	0.02	0.02	0%	0.02	<0.01	NA	0.02	0.05	**86%**	0.02	<0.01	NC	0.02	0.02	0%	0.02	0.02	0%
Alkalinity (total) as CaCO3	mg/L CaCO3	5	6.0	6.2	3%	6	4	**40%**	5.8	5.2	11%	5.8	1	**141%**	5.2	<5	NC	5.2	4.0	26%
Alkalinity (Hydroxide)	mg/L CaCO3	5,000	<5	<5	NA	<5	<1	NA	< 5	<5	NA	< 5	<1	NA	<5	<5	NA	<5	<1	NA
Alkalinity (Bicarbonate as HCO3)	mg/L CaCO3	5	6.0	6.2	3%	6	4	**40%**	5.80	5.2	11%	<5	1	NC	5.2	<5	NC	5.2	4.0	26%
Alkalinity (Carbonate)	mg/L CaCO3	5	< 5	<5	NA	< 5	<1	NA	< 5	<5	NA	< 5	<1	NA	< 5	<5	NA	< 5	<1	NA
TDS	ug/L	5,000	100	100	0%	100	93	7%	160	160	0%	160	145	10%	110	110	0%	110	97	13%
Electrical Conductivity (Lab)	uS/cm	10	170	170	0%	170	162	5%	260	260	0%	260	257	1%	180	180	0%	180	172	5%
Total Organic Carbon (TOC)	mg/L	5	< 5	< 5	NA	< 5	1	NC	<5	13	NC	<5	2	NC	17	21	21%	17	2	**158%**
Metals																				
Aluminium (filtered)	mg/L	0.05	< 0.05	< 0.05	NA	< 0.05	0.01	NC	< 0.05	< 0.05	NA	< 0.05	0.02	NC	< 0.05	< 0.05	NA	< 0.05	0.02	NC
Arsenic (filtered)	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA
Cadmium (filtered)	mg/L	0.0001	< 0.0001	< 0.0001	NA	< 0.0001	<0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NA
Chromium (hexavalent)	mg/L	0.002	< 0.002	< 0.002	NA	< 0.002	<0.01	NA	< 0.002	< 0.002	NA	< 0.002	<0.01	NA	< 0.002	< 0.002	NA	< 0.002	<0.01	NA
Chromium (III+VI) (filtered)	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA
Chromium (Trivalent) (filtered)	mg/L	0.002	< 0.002	< 0.002	NA	< 0.002	<0.01	NA	< 0.002	< 0.002	NA	< 0.002	<0.01	NA	< 0.002	< 0.002	NA	< 0.002	<0.01	NA
Copper (filtered)	mg/L	0.001	0.005	<0.0001	NC	0.01	<0.001	NC	0.001	0.004	**120%**	0.001	0.003	**100%**	0.001	<0.001	NC	0.001	0.001	0%
Lead (filtered)	mg/L	0.001	0.001	< 0.001	NC	0.001	<0.001	NC	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA	< 0.001	< 0.001	NA
Manganese (filtered)	mg/L	0.005	0.01	0.035	**111%**	0.01	0.03	**109%**	0.04	0.01	**129%**	0.037	0.008	**129%**	0.019	0.02	5%	0.019	0.019	0%
Mercury (filtered)	mg/L	0.0001	< 0.0001	< 0.0001	NC	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NA	< 0.0001	< 0.0001	NC	< 0.0001	< 0.0001	NC
Nickel (filtered)	mg/L	0.001	0.004	0.002	**67%**	0.004	0.002	**67%**	0.002	0.004	**67%**	0.002	0.003	**40%**	0.002	0.001	**67%**	0.002	0.001	**67%**
Selenium (filtered)	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.01	NC	< 0.001	< 0.001	NA	< 0.001	<0.01	NA	< 0.001	< 0.001	NA	< 0.001	<0.01	NA
Zinc (filtered)	mg/L	0.005	0.018	<0.005	NA	0.02	<0.005	NA	< 0.005	0.02	NC	< 0.005	0.006	NC	0.012	< 0.005	NC	0.012	<0.005	NC
Titanium (filtered)	mg/L	0.005	< 0.005	< 0.005	NA	< 0.005	---	NA	< 0.005	< 0.005	NA	< 0.005	<0.01	NA	< 0.005	< 0.005	NA	< 0.005	<0.01	NA
Iron	mg/L	0.01	0.13	0.07	**60%**	0.13	<0.05	NC	0.02	0.09	**127%**	0.02	0.08	**120%**	0.04	0.02	**67%**	0.04	<0.05	NC
Vanadium (filtered)	mg/L	0.005	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Molybdenum (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Silver (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Barium (filtered)	mg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Beryllium (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Boron (filtered)	mg/L	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cobalt (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chromium (filtered)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Major ions																				
Calcium	mg/L	0.5	0.8	0.7	13%	0.8	<1	NC	0.8	0.7	13%	0.8	1	22%	< 0.5	<0.5	NC	< 0.5	1	NC
Magnesium	mg/L	0.5	3.5	3.2	9%	3.5	3	15%	4.7	4.3	9%	4.7	5	6%	3.3	3.3	0%	3.3	4	19%
Magnesium (filtered)	mg/L	0.5	3.8	3.6	5%	3.8	---	NC	4.5	4.3	5%	4.5	---	NC	3.3	3.8	14%	3.3	---	NC
Potassium	mg/L	0.5	< 0.5	<0.5	NA	< 0.5	<1	NC	0.8	0.7	13%	0.8	<1	NC	< 0.5	<0.5	NA	< 0.5	<1	NA
Sulfate	mg/L	1	6.2	6.1	2%	6.2	6	3%	10	9.6	4%	10	11	10%	6.8	7	3%	6.8	6	13%
Sodium	mg/L	0.5	25	24	4%	25	26	4%	40	36	11%	40	40	0%	24	55	**78%**	24	28	15%
Chloride (filtered)	mg/L	5	26	27	4%	26	34	27%	72	63	13%	72	65	10%	49	43	13%	49	36	**31%**
BTEXN																				
Naphthalene (VOC)	mg/kg	0.001	< 0.001	---	---	< 0.001	<0.005	NA	---	---	---	---	---	---	---	---	---	---	---	---
Benzene	µg/L	0.5	< 0.001	---	---	< 0.001	< 0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	µg/L	0.5	< 0.001	---	---	< 0.001	< 0.002	NA	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	µg/L	0.5	< 0.001	---	---	< 0.001	< 0.002	NA	---	---	---	---	---	---	---	---	---	---	---	---
Xylene (m & p)	µg/L	2	< 0.002	---	---	< 0.002	< 0.002	NA	---	---	---	---	---	---	---	---	---	---	---	---
Xylene (o)	µg/L	1	< 0.001	---	---	< 0.001	< 0.002	NA	---	---	---	---	---	---	---	---	---	---	---	---
Xylene Total	µg/L	3	< 0.003	---	---	< 0.003	< 0.002	NA	---	---	---	---	---	---	---	---	---	---	---	---
TPH																				
C6-C9	µg/L	20	<20	<20	NA	<20	<20	NA	---	---	---	---	---	---	---	---	---	---	---	---
C10-C14	µg/L	20	<20	<20	NA	<20	<50	NA	---	---	---	---	---	---	---	---	---	---	---	---
C15-C28	µg/L	40	<40	<40	NA	<40	<100	NA	---	---	---	---	---	---	---	---	---	---	---	---
C29-C36	µg/L	40	<40	<40	NA	<40	<50	NA	---	---	---	---	---	---	---	---	---	---	---	---
C10-C36 (Total)	µg/L	40	<40	<40	NA	<40	<50	NA	---	---	---	---	---	---	---	---	---	---	---	---

Table C2: QA/QC RPD assessment

	SAMPLE NAME		GW11S	QC03		GW11S	QC04		GW7D-R	QC01		GW7D-R	QC02		GW11S	QC03		GW11S	QC04	
	LAB REPORT NUMBER		L24-Se0073505	L24-Se0073514		L24-Se0073505	EP2414023-002		L24-De0050599	L24-De0050612		L24-De0050599	EP2419251001		L24-De0050605	L24-De0050613		L24-De0050605	EP2419251002	
	LAB NAME		Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
	SAMPLE DATE		25 Sep 2024	25 Sep 2024		25 Sep 2024	25 Sep 2024		16 Dec 2024	16 Dec 2024		16 Dec 2024	16 Dec 2024		17 Dec 2024	17 Dec 2024		17 Dec 2024	17 Dec 2024	
	MATRIX TYPE		Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
TRH																				
C6-C10	µg/L	20	<20	<20	NA	<20	<20	NA	----	----	----	----	----	----	----	----	----	----	----	----
C6-C10 (F1 minus BTEX)	µg/L	20	<20	<20	NA	<20	<20	NA	----	----	----	----	----	----	----	----	----	----	----	----
C10-C16	µg/L	20	<20	<20	NA	<20	<20	NA	----	----	----	----	----	----	----	----	----	----	----	----
C10-C16 (F2 minus Naphthalene)	µg/L	20	<20	<20	NA	<20	<20	NA	----	----	----	----	----	----	----	----	----	----	----	----
C16-C34 (F3)	µg/L	50	<50	<50	NA	<50	<50	NA	----	----	----	----	----	----	----	----	----	----	----	----
C34-C40 (F4)	µg/L	50	<50	<50	NA	<50	<50	NA	----	----	----	----	----	----	----	----	----	----	----	----
C10-C40 (Total)	µg/L	50	<50	<50	NA	<50	<50	NA	----	----	----	----	----	----	----	----	----	----	----	----
PAH																				
Acenaphthene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Naphthalene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Acenaphthylene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Anthracene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Benz(a)anthracene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(a) pyrene	µg/L	1	<1	<1	NA	<1	<0.5	NA	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(b+j)fluoranthene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(g,h,i)perylene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(k)fluoranthene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Chrysene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Dibenz(a,h)anthracene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Fluoranthene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Fluorene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Indeno(1,2,3-c,d)pyrene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Phenanthrene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Pyrene	µg/L	1	<1	<1	NA	<1	<1	NA	----	----	----	----	----	----	----	----	----	----	----	----
PAHs (Sum of total)	µg/L	1	<1	<1	NA	<1	<0.5	NA	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	<1	<1	NA	<1	<0.5	NA	----	----	----	----	----	----	----	----	----	----	----	----
MAH																				
Styrene	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Chlorinated Hydrocarbons																				
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	NA	<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dichloromethane	µg/L	5	<5	<5	NA	<5	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Tetrachloroethene	µg/L	0.5	<0.5	<0.5	NA	<0.5	<5	NA	----	----	----	----	----	----	----	----	----	----	----	----
trans-1,2-dichloroethene	µg/L	2	<2	<2	NA	<2	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Trichloroethene	µg/L	0.5	<0.5	<0.5	NA	<0.5	<5	NA	----	----	----	----	----	----	----	----	----	----	----	----
Vinyl chloride	µg/L	0.2	<0.2	<0.2	NA	<0.2	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PFAS																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.01	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.01	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.5	<0.5	NA	<0.5	<0.1	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	<5	<5	NA	<5	<0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.5	<0.5	NA	<0.5	<0.01	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorononanoic acid (PFNA)	µg/L	0.01	<2	<2	NA	<2	<0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.5	<0.5	NA	<0.5	0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.2	<0.2	NA	<0.2	0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.01	<0.01	NA	<0.01	0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.01	<0.01	NA	<0.01	0.02	NA	----	----	----	----	----	----	----	----	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.05	NA	----	----	----	----	----	----	----	----	----	----	----	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.05	NA	----	----	----	----	----	----	----	----	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	<0.05	<0.05	NA	<0.05	<0.05	NA	----	----	----	----	----	----	----	----	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.05	NA	----	----	----	----	----	----	----	----	----	----	----	----

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW11S	QC03		GW11S	QC04		GW7D-R	QC01		GW7D-R	QC02		GW11S	QC03		GW11S	QC04	
		LAB REPORT NUMBER	L24-Se0073505	L24-Se0073514		L24-Se0073505	EP2414023-002		L24-De0050599	L24-De0050612		L24-De0050599	EP2419251001		L24-De0050605	L24-De0050613		L24-De0050605	EP2419251002	
		LAB NAME	Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Sep 2024	25 Sep 2024		25 Sep 2024	25 Sep 2024		16 Dec 2024	16 Dec 2024		16 Dec 2024	16 Dec 2024		17 Dec 2024	17 Dec 2024		17 Dec 2024	17 Dec 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.05	NA	---	---	---	---	---	---	---	---	---	---	---	---
N-ethyl perfluorooctane sulfonamide (NEtFOSA)	µg/L	0.05	<0.05	<0.05	NA	<0.05	<0.05	NA	---	---	---	---	---	---	---	---	---	---	---	---
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	<0.05	<0.05	NA	<0.05	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	<0.05	<0.05	NA	<0.05	<0.05	NA	---	---	---	---	---	---	---	---	---	---	---	---
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	<0.05	<0.05	NA	<0.05	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	<0.05	<0.05	NA	<0.05	<0.05	NA	---	---	---	---	---	---	---	---	---	---	---	---
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	<0.05	<0.05	NA	<0.05	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	<0.05	<0.05	NA	<0.05	<0.05	NA	---	---	---	---	---	---	---	---	---	---	---	---
Sum of PFAS	µg/L	0.1	<0.1	<0.1	NA	<0.1	<0.01	NA	---	---	---	---	---	---	---	---	---	---	---	---
Sum of PFHxS and PFOS	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.01	NA	---	---	---	---	---	---	---	---	---	---	---	---
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	<0.01	<0.01	NA	<0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	µg/L	0.01	<0.01	<0.01	NA	<0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	<0.05	<0.05	NA	<0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Organochlorine Pesticides																				
Oxychlordane	mg/L	0.000001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
chlordane	µg/L	0.002	<0.002	<0.002	NA	<0.002	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
d-BHC	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
DDT	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
Heptachlor epoxide	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
DDD	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
Methoxychlor	µg/L	0.02	<0.02	<0.02	NA	<0.02	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
Dieldrin	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
Endrin	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
4,4-DDE	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
a-BHC	µg/L	0.001	<0.001	<0.001	NA	<0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aldrin	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
g-BHC (Lindane)	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
b-BHC	µg/L	0.001	<0.001	<0.001	NA	<0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan II	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan sulphate	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.010	NA	---	---	---	---	---	---	---	---	---	---	---	---
Heptachlor	µg/L	0.001	<0.001	<0.001	NA	<0.001	<0.005	NA	---	---	---	---	---	---	---	---	---	---	---	---
Organophosphorus Pesticides																				
Chlorpyrifos	µg/L	0.005	<0.005	<0.005	NA	<0.005	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
Diazinon	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.01	NA	---	---	---	---	---	---	---	---	---	---	---	---
Ethion	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
Fenitrothion	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
Parathion	µg/L	0.02	<0.02	<0.02	NA	<0.02	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
Methyl parathion	µg/L	0.02	<0.02	<0.02	NA	<0.02	<0.5	NA	---	---	---	---	---	---	---	---	---	---	---	---
Malathion	µg/L	0.01	<0.01	<0.01	NA	<0.01	<0.02	NA	---	---	---	---	---	---	---	---	---	---	---	---
Pesticides																				
Bifenthrin	µg/L	0.05	<0.05	<0.05	NA	<0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bromophos	mg/L	0.000005	<0.05	<0.05	NA	<0.05	<0.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Atrazine	mg/L	0.1	< 0.1	< 0.1	NA	< 0.1	<0.5	NA	---	---	---	---	---	---	---	---	---	---	---	---
Dinoseb	mg/L	0.002	<0.002	<0.002	NA	<0.002	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorothalonil	µg/L	0.01	<0.01	<0.01	NA	<0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Vinclozolin	µg/L	0.02	<0.02	<0.02	NA	<0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenols																				
2.4.5-Trichlorophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2.4.6-Trichlorophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2.4-Dichlorophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
2.6-Dichlorophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
2-Chlorophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloro-3-methylphenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
Pentachlorophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachlorophenols - Total	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW11S	QC03		GW11S	QC04		GW7D-R	QC01		GW7D-R	QC02		GW11S	QC03		GW11S	QC04	
		LAB REPORT NUMBER	L24-Se0073505	L24-Se0073514		L24-Se0073505	EP2414023-002		L24-De0050599	L24-De0050612		L24-De0050599	EP2419251001		L24-De0050605	L24-De0050613		L24-De0050605	EP2419251002	
		LAB NAME	Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Sep 2024	25 Sep 2024		25 Sep 2024	25 Sep 2024		16 Dec 2024	16 Dec 2024		16 Dec 2024	16 Dec 2024		17 Dec 2024	17 Dec 2024		17 Dec 2024	17 Dec 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
Total Halogenated Phenol*	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2.4-Dimethylphenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
2.4-Dinitrophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	< 0.003	< 0.003	NA	< 0.003	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methyl-4.6-dinitrophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylphenol (o-Cresol)	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitrophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitrophenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenol	mg/L	0.001	< 0.001	< 0.001	NA	< 0.001	<0.001	NA	---	---	---	---	---	---	---	---	---	---	---	---
Total cresols*	mg/L	0.01	< 0.01	< 0.01	NA	< 0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total Non-Halogenated Phenol*	mg/L	0.1	< 0.1	< 0.1	NA	< 0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fipronil	mg/L	0.00002	<0.00002	<0.00002	NA	<0.00002	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table C2: QA/QC RPD assessment

		SAMPLE NAME	GW11S	QC03		GW11S	QC04		GW7D-R	QC01		GW7D-R	QC02		GW11S	QC03		GW11S	QC04	
		LAB REPORT NUMBER	L24-Se0073505	L24-Se0073514		L24-Se0073505	EP2414023-002		L24-De0050599	L24-De0050612		L24-De0050599	EP2419251001		L24-De0050605	L24-De0050613		L24-De0050605	EP2419251002	
		LAB NAME	Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS		Eurofins ARL	Eurofins		Eurofins ARL	ALS	
		SAMPLE DATE	25 Sep 2024	25 Sep 2024		25 Sep 2024	25 Sep 2024		16 Dec 2024	16 Dec 2024		16 Dec 2024	16 Dec 2024		17 Dec 2024	17 Dec 2024		17 Dec 2024	17 Dec 2024	
		MATRIX TYPE	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
ANALYTE	UNIT	LOR																		
PCBs																				
PCBs (Sum of total)	µg/L	0.02	<0.02	<0.02	NA	<0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	NA	<0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3,5-Trichlorobenzene	µg/L	0.5	<0.5	<0.5	NA	<0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	NA	<0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	NA	<0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	NA	<0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,4-dichlorobenzene	µg/L	0.5	<0.5	<0.5	NA	<0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorobenzene	µg/L	0.5	<0.5	<0.5	NA	<0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	µg/L	0.001	<0.001	<0.001	NA	<0.001	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Acronyms:
NA = Not applicable, both concentrations are below the LOR
NC= Not calculated as one value is above LOR and one is below LOR
LOR = limits of reporting
mg/L = milligrams per litre
µg/L = micrograms per litre
RPD = relative percentage difference
QA/QC = Quality assurance/quality control:
RPDs have only been considered where concentrations are greater than 1
Font and Cell :
- Bolded and **green** RPDs indicates detection above the acceptable RPDs

Table C3: Field blanks, rinsate blanks and trip blanks

		SAMPLE NAME	FB01	RS01	TB	RS01	FB01	FB01	RS01	FB02	RS02	TB01	FB01	RS01
		LAB REPORT NUMBER	L24-Ap0001482	L24-Ap0001483	L24-Ap0001626	L24-Jn0074107	L24-Jn0074108	L24-Se0073515	L24-Se0073516	L24-Se0073517	L24-Se0073518	L24-Se0073519	L24-De0050613	L24-De0050615
		LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
		SAMPLE DATE	25 Mar 2024	25 Mar 2024	25 Mar 2024	25 Jun 2024	25 Jun 2024	24 Sep 2024	24 Sep 2024	25 Sep 2024	25 Sep 2024	24 Sep 2024	16 Dec 2024	16 Dec 2024
		MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LOR												
Inorganics														
COD	ug/L	25,000	< 25	< 25	----	< 25	< 25	< 25	< 25	< 25	< 25	----	< 25	< 25
Ammonia as N	ug/L	20	< 0.02	< 0.02	----	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	----	< 0.02	< 0.02
Kjeldahl Nitrogen Total	mg/L	200	0.05	<0.02	----	<0.02	<0.02	< 0.2	<0.02	<0.02	NA	<0.02	<0.02	NA
Nitrite (as N)	ug/L	10	< 0.01	< 0.01	----	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	----	< 0.01	< 0.01
Nitrite + Nitrate as N	ug/L	10	< 0.01	< 0.01	----	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	----	< 0.01	< 0.01
Nitrogen (Total)	ug/L	200	< 0.2	< 0.2	----	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	----	< 0.2	< 0.2
Phosphorus	µg/L	10	< 0.01	< 0.01	----	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	----	< 0.01	< 0.01
Alkalinity (total) as CaCO3	mg/L CaCO3	5	< 0.5	< 0.5	----	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	----	< 0.5	< 0.5
Alkalinity (Bicarbonate as HCO3)	mg/L CaCO3	5	< 5	< 5	----	< 5	< 5	< 5	< 5	< 5	< 5	----	< 5	< 5
Alkalinity (Carbonate)	mg/L CaCO3	5	< 5	< 5	----	< 5	< 5	< 5	< 5	< 5	< 5	----	< 5	< 5
Alkalinity (Hydroxide)	mg/L CaCO3	5,000	< 5	< 5	----	< 5	< 5	< 5	< 5	< 5	< 5	----	< 5	< 5
TDS	ug/L	5,000	< 5	< 5	----	< 5	< 5	< 5	< 5	< 5	< 5	----	< 5	< 5
Electrical Conductivity (Lab)	uS/cm	10	< 10	< 10	----	< 10	< 10	< 10	< 10	< 10	< 10	----	< 10	< 10
Reactive P	mg/L	----	----	----	----	----	----	----	----	----	----	----	----	----
Hardness	mg/L CaCO3	----	----	----	----	----	----	----	----	----	----	----	----	----
Total Organic Carbon (TOC)	ug/L	5,000	< 5	< 5	----	< 5	< 5	< 5	< 5	< 5	< 5	----	----	----
Major Ions														
Calcium	mg/L	0.5	< 0.5	< 0.5	----	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	----	< 0.5	< 0.5
Magnesium	mg/L	0.5	< 0.5	< 0.5	----	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	----	< 0.5	< 0.5
Magnesium (filtered)	mg/L	0.5	< 0.5	< 0.5	----	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	----	< 0.5	< 0.5
Potassium	mg/L	0.5	< 0.5	< 0.5	----	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	----	< 0.5	< 0.5
Sulfate	mg/L	1	< 1	< 1	----	< 1	< 1	< 2	< 3	< 4	< 5	----	<1	<1
Sodium	mg/L	0.5	< 0.5	< 0.5	----	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	----	< 0.5	< 0.5
Chloride (filtered)	mg/L	5	< 5	< 5	----	< 5	< 5	< 5	< 5	< 5	< 5	----	< 5	< 5
Metals														
Aluminium (filtered)	mg/L	0.05	< 0.05	< 0.05	----	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	----	< 0.05	< 0.05
Arsenic (filtered)	mg/L	0.001	< 0.001	< 0.001	----	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	----	< 0.001	< 0.001
Cadmium (filtered)	mg/L	0.0001	< 0.0001	< 0.0001	----	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	----	< 0.0001	< 0.0001
Chromium (filtered)	mg/L	0.001	< 0.001	< 0.001	----	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	----	< 0.001	< 0.001
Chromium (hexavalent)	mg/L	0.002	< 0.002	< 0.002	----	----	----	< 0.002	< 0.002	< 0.002	< 0.002	----	< 0.002	< 0.002
Chromium (III+VI) (filtered)	mg/L	0.001	----	----	----	----	----	----	----	----	----	----	<0.002	<0.002
Chromium (Trivalent) (filtered)	mg/L	0.002	< 0.002	< 0.002	----	----	----	< 0.002	< 0.002	< 0.002	< 0.002	----	< 0.002	< 0.002
Copper (filtered)	mg/L	0.001	< 0.001	< 0.001	----	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	----	< 0.001	< 0.001
Lead (filtered)	mg/L	0.001	< 0.001	< 0.001	----	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	----	< 0.001	< 0.001
Manganese (filtered)	mg/L	0.005	< 0.005	< 0.005	----	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	----	< 0.005	< 0.005
Mercury (filtered)	mg/L	0.0001	< 0.0001	< 0.0001	----	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	----	< 0.0001	< 0.0001
Nickel (filtered)	mg/L	0.001	< 0.001	< 0.001	----	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	----	< 0.001	< 0.001
Selenium (filtered)	mg/L	0.001	< 0.001	< 0.001	----	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	----	< 0.001	< 0.001
Zinc (filtered)	mg/L	0.005	< 0.005	< 0.005	----	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	----	< 0.005	< 0.005
Titanium (filtered)	mg/L	0.005	< 0.005	< 0.005	----	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	----	< 0.005	< 0.005
Iron	mg/L	0.01	< 0.01	< 0.01	----	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	----	< 0.01	< 0.01
Vanadium (filtered)	mg/L	0.005	----	----	----	----	----	----	----	----	----	----	----	----
Molybdenum (filtered)	mg/L	0.001	----	----	----	----	----	----	----	----	----	----	----	----
Silver (filtered)	mg/L	0.001	----	----	----	----	----	----	----	----	----	----	----	----
Barium (filtered)	mg/L	0.01	----	----	----	----	----	----	----	----	----	----	----	----
Beryllium (filtered)	mg/L	0.001	----	----	----	----	----	----	----	----	---	----	----	----
Boron (filtered)	mg/L	0.05	----	----	----	----	----	---	----	----	----	----	----	----
Cobalt (filtered)	mg/L	0.001	----	----	----	----	----	---	----	----	----	----	----	----
BTEXN														
Naphthalene (VOC)	mg/kg	0.001	----	----	< 0.001	----	----	----	----	----	----	< 0.001	----	----
Benzene	µg/L	0.5	----	----	< 0.001	----	----	----	----	----	----	< 0.001	----	----
Toluene	µg/L	0.5	----	----	< 0.001	----	----	----	----	----	----	< 0.001	----	----
Ethylbenzene	µg/L	0.5	----	----	< 0.001	----	----	----	----	----	----	< 0.001	----	----
Xylene (m & p)	µg/L	2	----	----	< 0.002	----	----	----	----	----	----	< 0.002	----	----
Xylene (o)	µg/L	1	----	----	< 0.001	----	----	----	----	----	----	< 0.001	----	----
Xylene Total	µg/L	3	----	----	< 0.003	----	----	----	----	----	----	< 0.003	----	----
TPH														
C6-C9	µg/L	20	----	----	< 0.02	----	----	----	----	----	----	< 0.02	----	----
C10-C14	µg/L	20	----	----	----	----	----	----	----	----	----	----	----	----
C15-C28	µg/L	40	----	----	----	----	----	----	----	----	----	----	----	----
C29-C36	µg/L	40	----	----	----	----	----	----	----	----	----	----	----	----
C10-C36 (Total)	µg/L	40	----	----	----	----	----	----	----	----	----	----	----	----

Table C3: Field blanks, rinsate blanks and trip blanks

		SAMPLE NAME	FB01	RS01	TB	RS01	FB01	FB01	RS01	FB02	RS02	TB01	FB01	RS01
		LAB REPORT NUMBER	L24-Ap0001482	L24-Ap0001483	L24-Ap0001626	L24-Jn0074107	L24-Jn0074108	L24-Se0073515	L24-Se0073516	L24-Se0073517	L24-Se0073518	L24-Se0073519	L24-De0050613	L24-De0050615
		LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
		SAMPLE DATE	25 Mar 2024	25 Mar 2024	25 Mar 2024	25 Jun 2024	25 Jun 2024	24 Sep 2024	24 Sep 2024	25 Sep 2024	25 Sep 2024	24 Sep 2024	16 Dec 2024	16 Dec 2024
		MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LOR												
TRH														
C6-C10	µg/L	20	---	---	< 0.02	---	---	---	---	---	---	< 0.02	---	---
C6-C10 (F1 minus BTEX)	µg/L	20	---	---	< 0.02	---	---	---	---	---	---	< 0.02	---	---
C10-C16	µg/L	20	---	---	---	---	---	---	---	---	---	---	---	---
C10-C16 (F2 minus Naphthalene)	µg/L	20	---	---	---	---	---	---	---	---	---	---	---	---
C16-C34 (F3)	µg/L	50	---	---	---	---	---	---	---	---	---	---	---	---
C34-C40 (F4)	µg/L	50	---	---	---	---	---	---	---	---	---	---	---	---
C10-C40 (Total)	µg/L	50	---	---	---	---	---	---	---	---	---	---	---	---
PAH														
Acenaphthene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Naphthalene	µg/L	1	---	---	< 0.001	---	---	---	---	---	---	---	---	---
Acenaphthylene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Anthracene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Benz(a)anthracene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(a) pyrene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(b+j)fluoranthene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Fluorene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Indeno(1,2,3-c,d)pyrene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Phenanthrene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
PAHs (Sum of total)	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(a)pyrene TEQ calc (Zero)	µg/L	1	---	---	---	---	---	---	---	---	---	---	---	---
MAH														
Styrene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
Chlorinated Hydrocarbons														
Hexachlorobutadiene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,1,1,2-tetrachloroethane	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,1,1-trichloroethane	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,1,2,2-tetrachloroethane	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,1-dichloroethane	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,1-dichloroethene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,2-dichloroethane	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
Carbon tetrachloride	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
cis-1,2-dichloroethene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
Dichloromethane	µg/L	5	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
trans-1,2-dichloroethene	µg/L	2	---	---	---	---	---	---	---	---	---	---	---	---
Trichloroethene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
Vinyl chloride	µg/L	0.2	---	---	---	---	---	---	---	---	---	---	---	---
PFAS														
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorobutanoic acid (PFBA)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluoroheptanoic acid (PFHpA)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
Perfluorooctanoic acid (PFOA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorononanoic acid (PFNA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorodecanoic acid (PFDA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---

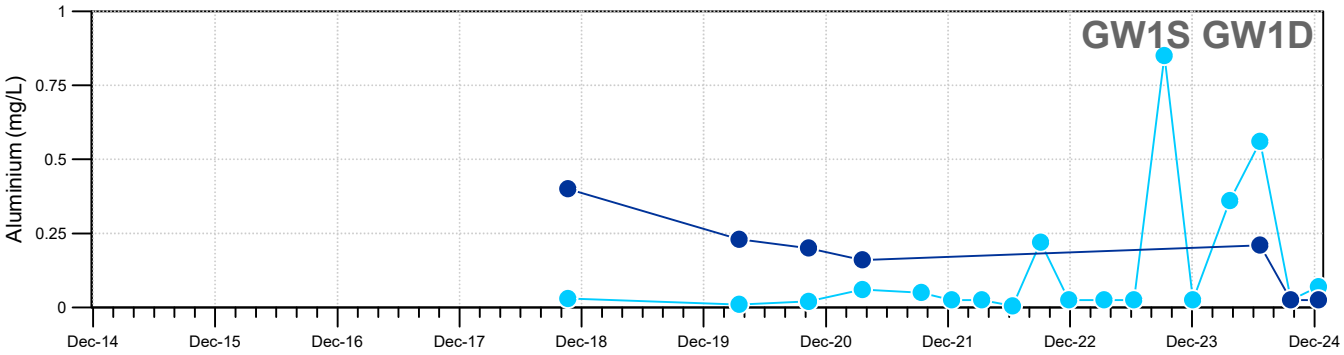
Table C3: Field blanks, rinsate blanks and trip blanks

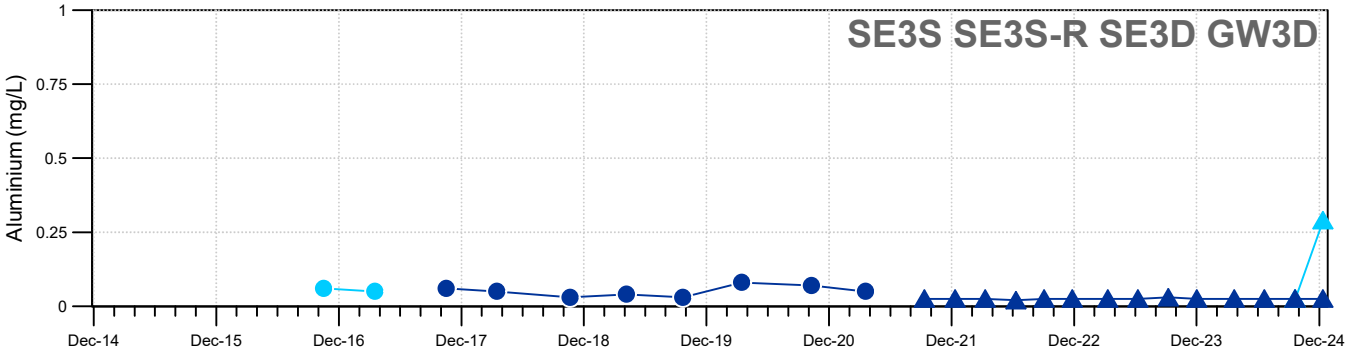
		SAMPLE NAME	FB01	RS01	TB	RS01	FB01	FB01	RS01	FB02	RS02	TB01	FB01	RS01
		LAB REPORT NUMBER	L24-Ap0001482	L24-Ap0001483	L24-Ap0001626	L24-Jn0074107	L24-Jn0074108	L24-Se0073515	L24-Se0073516	L24-Se0073517	L24-Se0073518	L24-Se0073519	L24-De0050613	L24-De0050615
		LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
		SAMPLE DATE	25 Mar 2024	25 Mar 2024	25 Mar 2024	25 Jun 2024	25 Jun 2024	24 Sep 2024	24 Sep 2024	25 Sep 2024	25 Sep 2024	24 Sep 2024	16 Dec 2024	16 Dec 2024
		MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LOR												
N-ethyl perfluorooctane sulfonamide (NEtFOSA)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
N-methyl perfluorooctane sulfonamide (NMeFOSA)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
N-methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
Sum of PFAS	µg/L	0.1	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
Sum of PFHxS and PFOS	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluorononanesulfonic acid (PFNS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	µg/L	0.01	---	---	---	---	---	<0.01	<0.01	<0.01	<0.01	<0.01	---	---
Sum of WA DWER PFAS (n=10)*	µg/L	0.05	---	---	---	---	---	<0.05	<0.05	<0.05	<0.05	<0.05	---	---
Organochlorine Pesticides														
Oxychlordane	mg/L	0.000001	---	---	---	---	---	---	---	---	---	---	---	---
chlordane	µg/L	0.002	---	---	---	---	---	---	---	---	---	---	---	---
d-BHC	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
DDT	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Heptachlor epoxide	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
DDD	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Methoxychlor	µg/L	0.02	---	---	---	---	---	---	---	---	---	---	---	---
Dieldrin	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Endrin	µg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---
4,4-DDE	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
a-BHC	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Aldrin	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
g-BHC (Lindane)	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
b-BHC	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan II	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan sulphate	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Heptachlor	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Organophosphorus Pesticides														
Chlorpyrifos	µg/L	0.005	---	---	---	---	---	---	---	---	---	---	---	---
Diazinon	µg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---
Ethion	µg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---
Fenitrothion	µg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---
Parathion	µg/L	0.02	---	---	---	---	---	---	---	---	---	---	---	---
Methyl parathion	µg/L	0.02	---	---	---	---	---	---	---	---	---	---	---	---
Malathion	µg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---
Pesticides														
Bifenthrin	µg/L	0.05	---	---	---	---	---	---	---	---	---	---	---	---
Bromophos	mg/L	0.000005	---	---	---	---	---	---	---	---	---	---	---	---
Atrazine	mg/L	0.1	---	---	---	---	---	---	---	---	---	---	---	---
Dinoseb	mg/L	0.002	---	---	---	---	---	---	---	---	---	---	---	---
Chlorothalonil	µg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---
Vinclozolin	µg/L	0.02	---	---	---	---	---	---	---	---	---	---	---	---
Phenols														
2.4.5-Trichlorophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
2.4.6-Trichlorophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
2.4-Dichlorophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
2.6-Dichlorophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
2-Chlorophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloro-3-methylphenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Pentachlorophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachlorophenols - Total	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Total Halogenated Phenol*	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
2.4-Dimethylphenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
2.4-Dinitrophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
2-Cyclohexyl-4.6-dinitrophenol	mg/L	0.003	---	---	---	---	---	---	---	---	---	---	---	---
2-Methyl-4.6-dinitrophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---

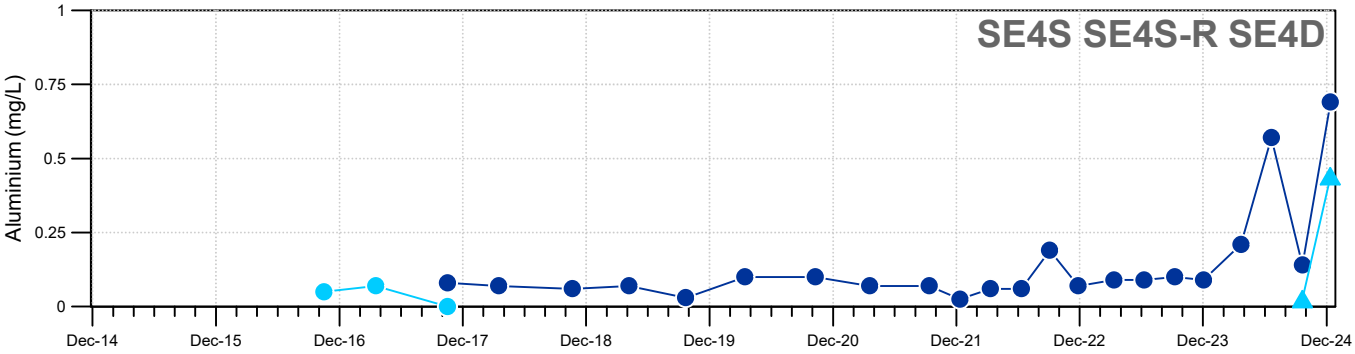
Table C3: Field blanks, rinsate blanks and trip blanks

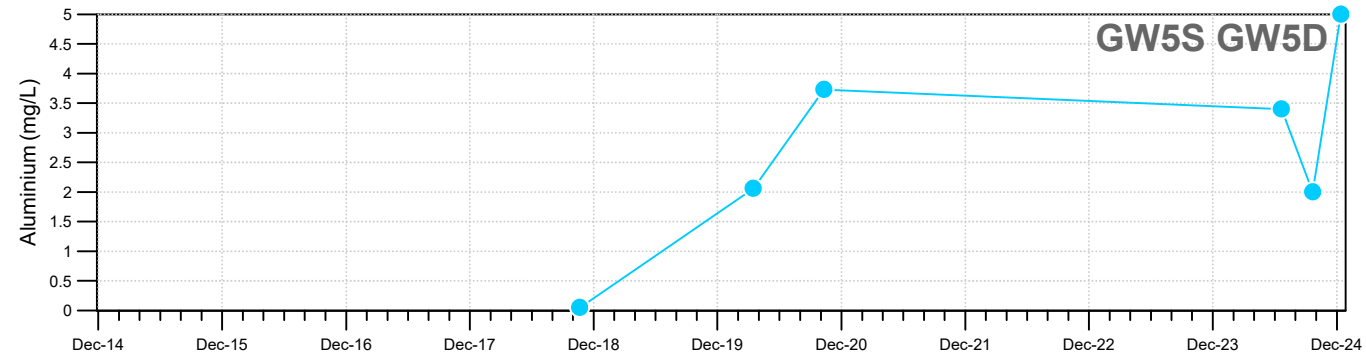
		SAMPLE NAME	FB01	RS01	TB	RS01	FB01	FB01	RS01	FB02	RS02	TB01	FB01	RS01
		LAB REPORT NUMBER	L24-Ap0001482	L24-Ap0001483	L24-Ap0001626	L24-Jn0074107	L24-Jn0074108	L24-Se0073515	L24-Se0073516	L24-Se0073517	L24-Se0073518	L24-Se0073519	L24-De0050613	L24-De0050615
		LAB NAME	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL	Eurofins ARL
		SAMPLE DATE	25 Mar 2024	25 Mar 2024	25 Mar 2024	25 Jun 2024	25 Jun 2024	24 Sep 2024	24 Sep 2024	25 Sep 2024	25 Sep 2024	24 Sep 2024	16 Dec 2024	16 Dec 2024
		MATRIX TYPE	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
ANALYTE	UNIT	LOR												
2-Methylphenol (o-Cresol)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitrophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
3&4-Methylphenol (m&p-Cresol)	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitrophenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Phenol	mg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---
Total cresols*	mg/L	0.01	---	---	---	---	---	---	---	---	---	---	---	---
Total Non-Halogenated Phenol*	mg/L	0.1	---	---	---	---	---	---	---	---	---	---	---	---
Fipronil	mg/L	0.00002	---	---	---	---	---	---	---	---	---	---	---	---
PCBs														
PCBs (Sum of total)	µg/L	0.02	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3-trichlorobenzene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,3,5-Trichlorobenzene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,2,4-trichlorobenzene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,2-dichlorobenzene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,3-dichlorobenzene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
1,4-dichlorobenzene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
Chlorobenzene	µg/L	0.5	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	µg/L	0.001	---	---	---	---	---	---	---	---	---	---	---	---

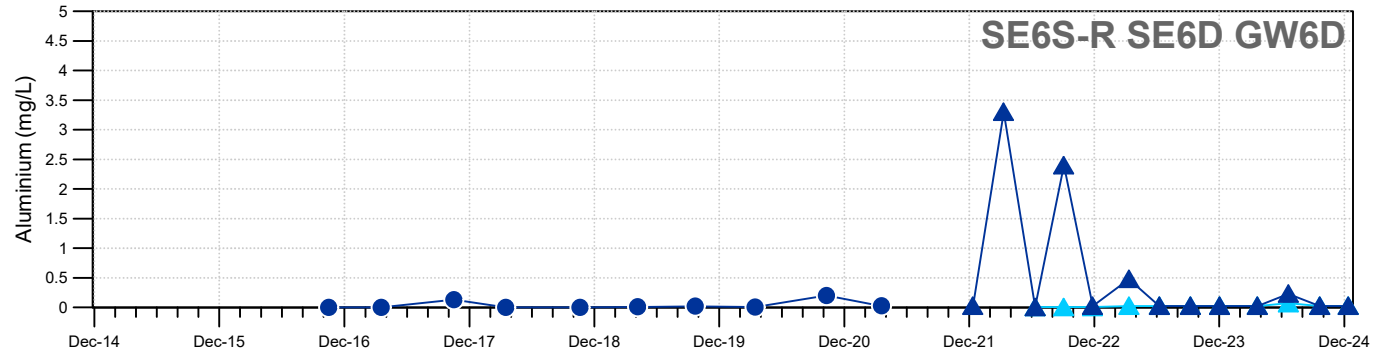
APPENDIX D TIME SERIES PLOTS











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- Deep Well
- Deep Well Replacement

NOTES:
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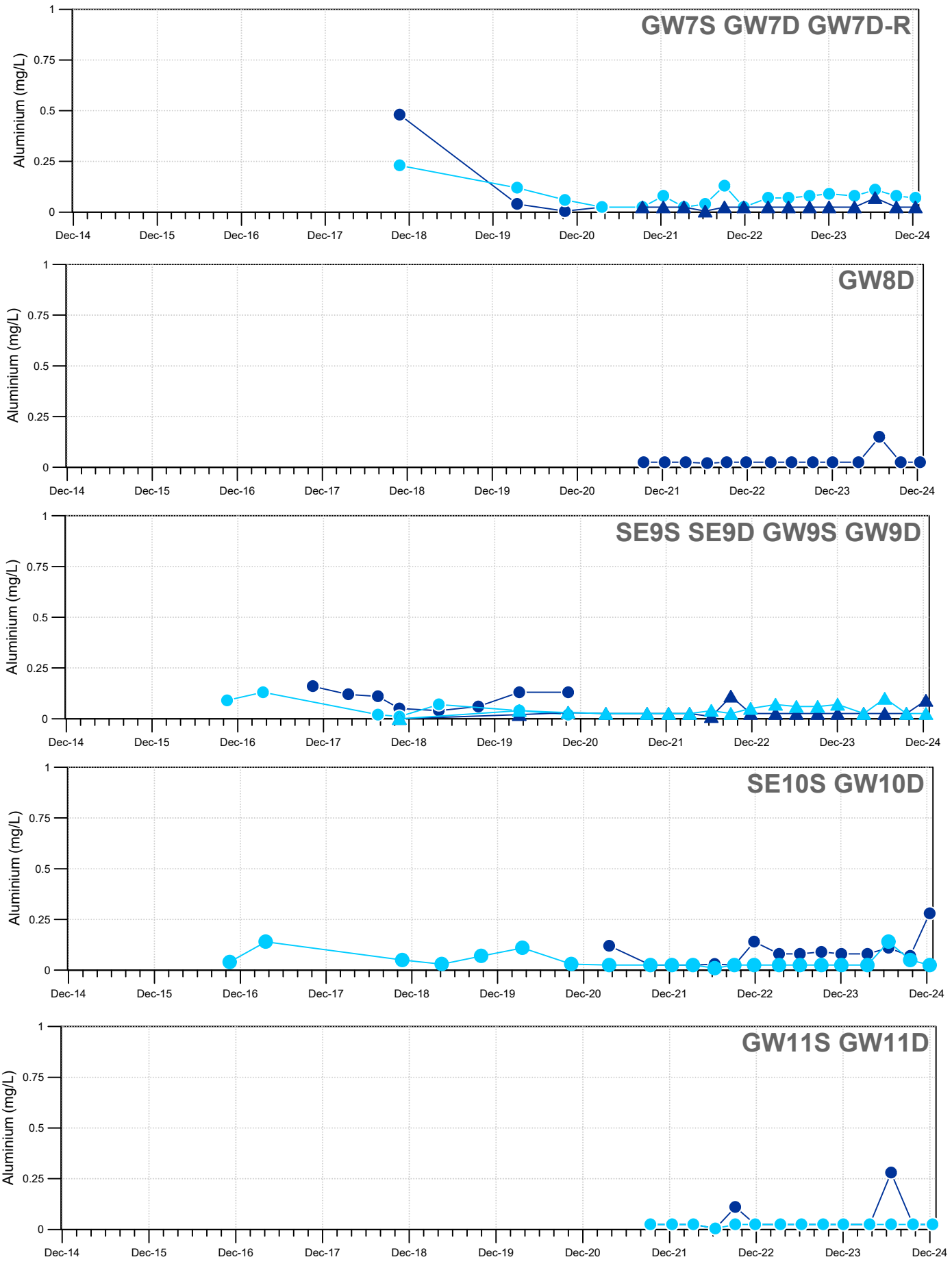
PROJECT No. J-G-AU0010

DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT



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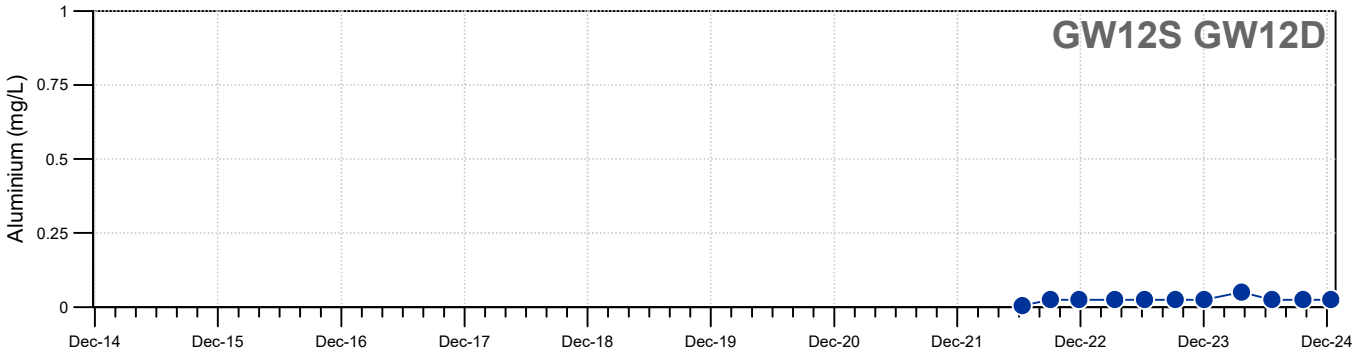

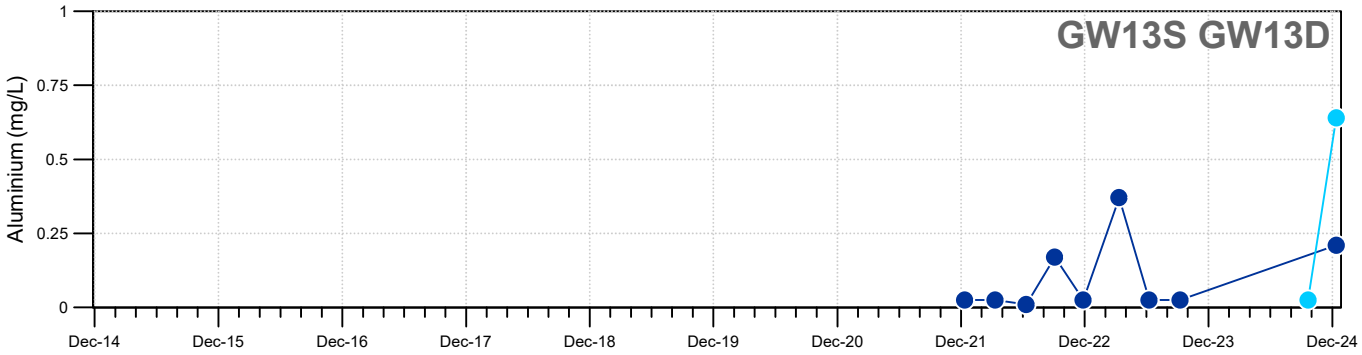

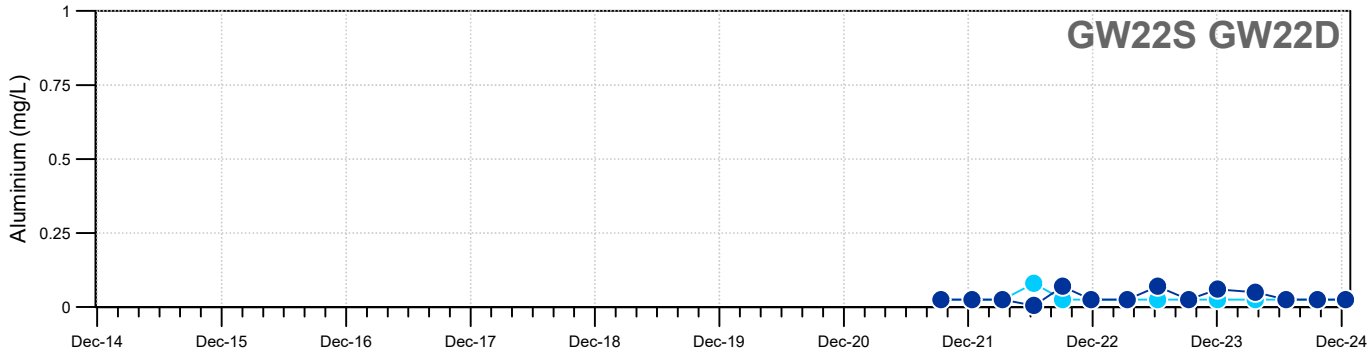

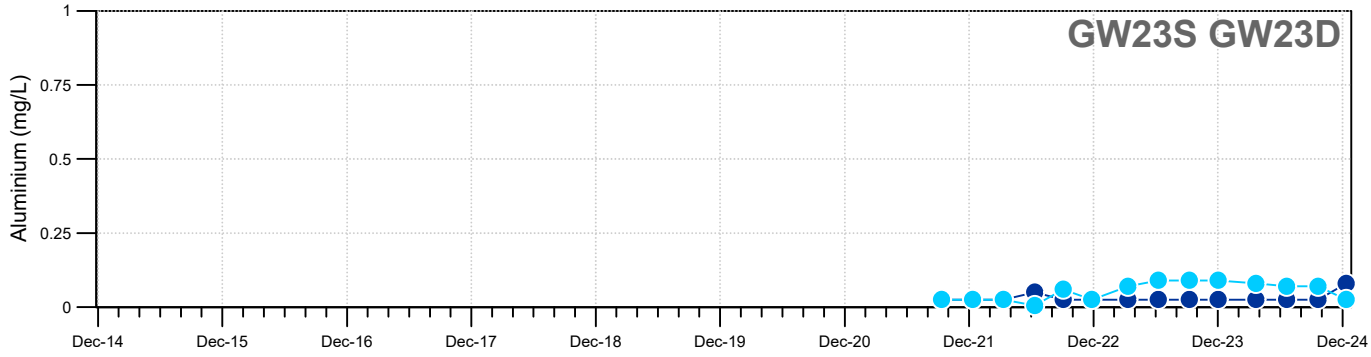

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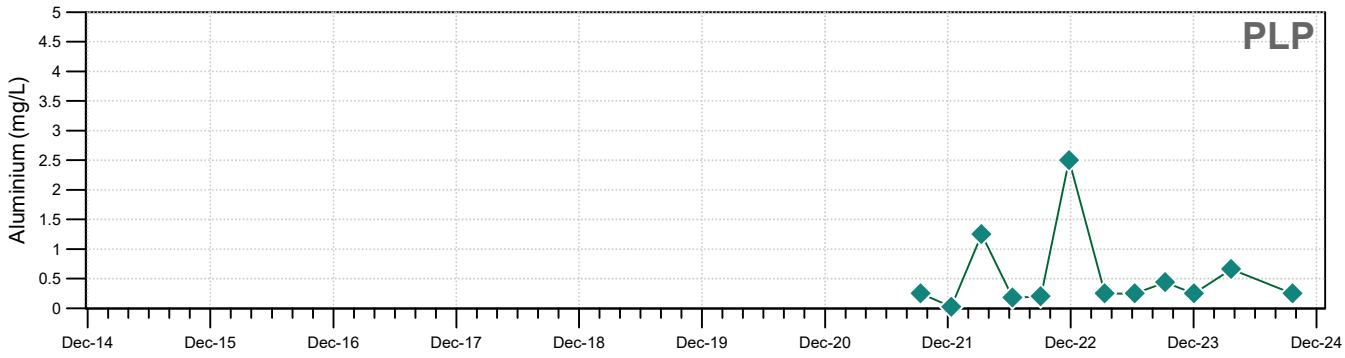

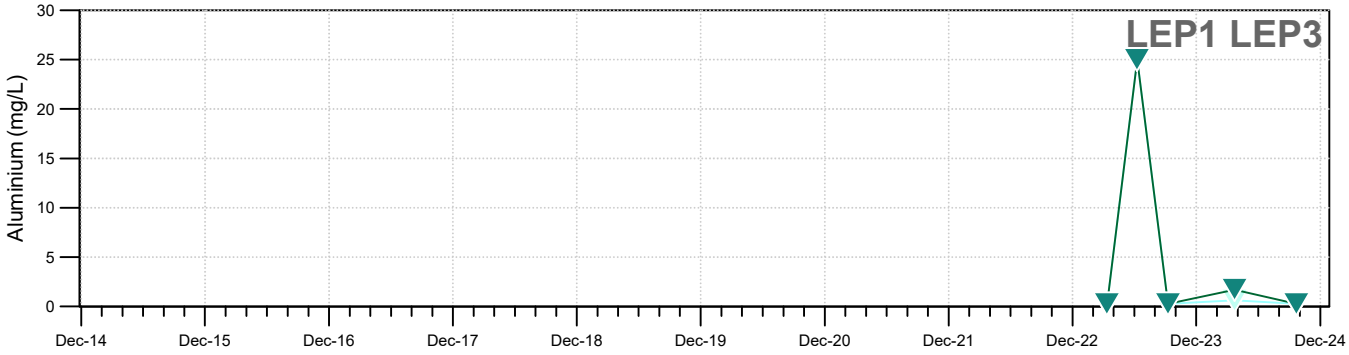

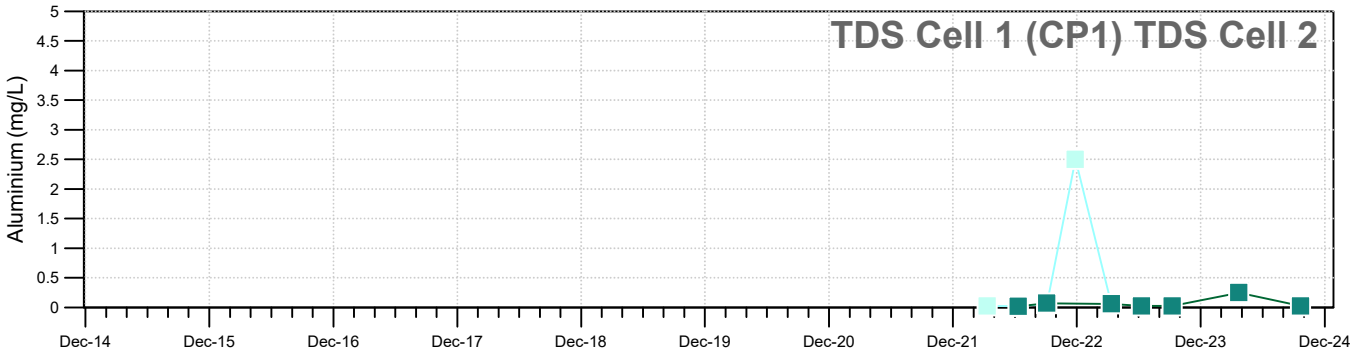

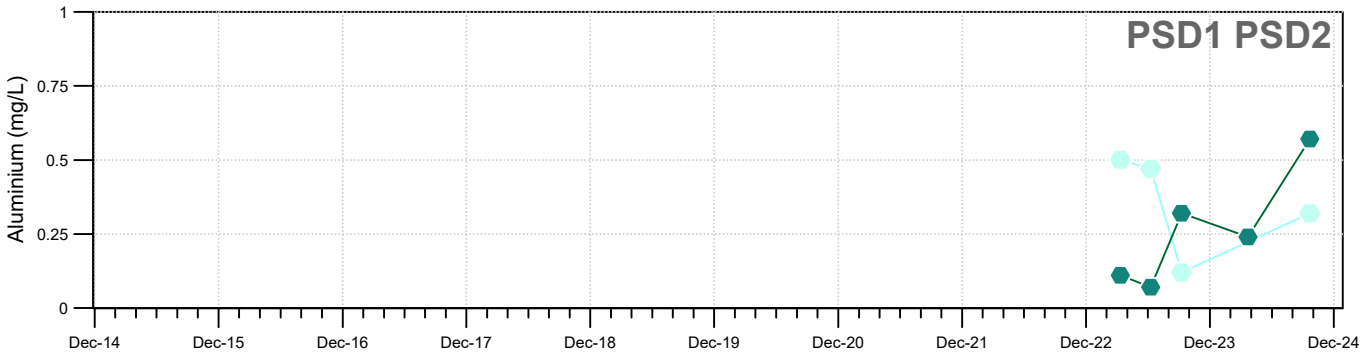

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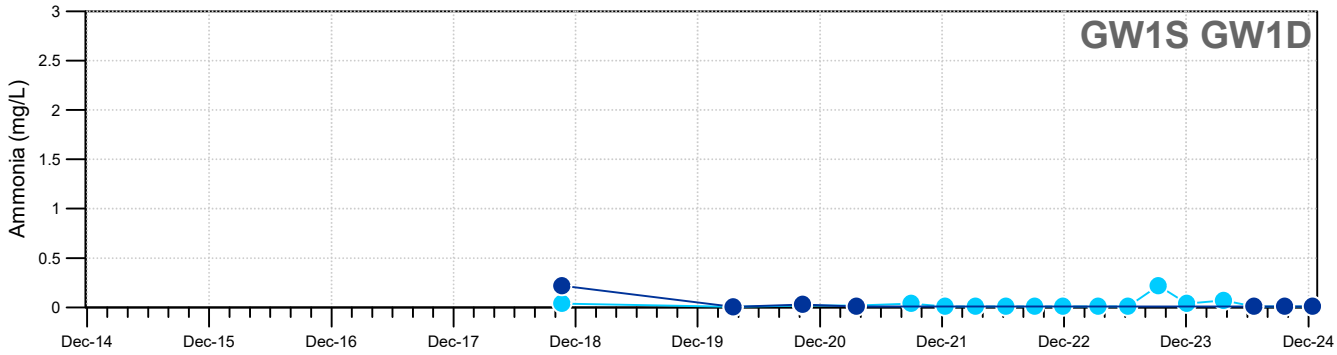

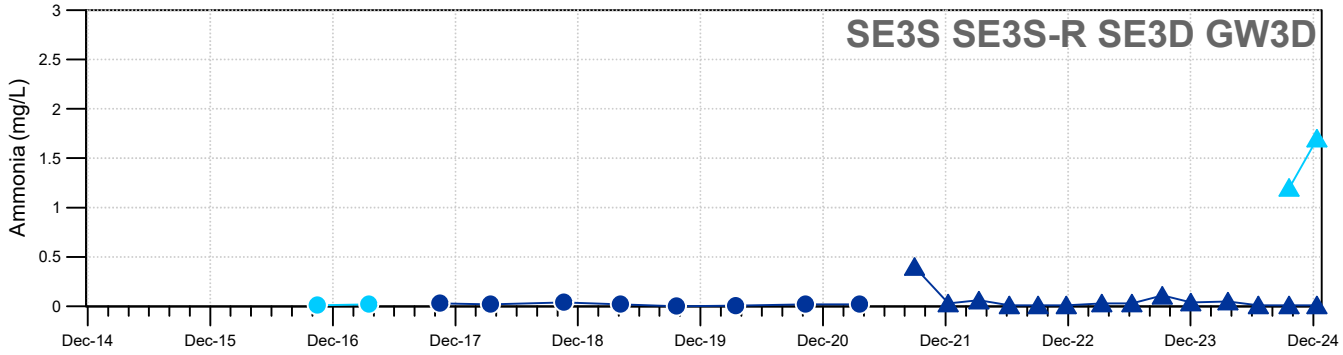

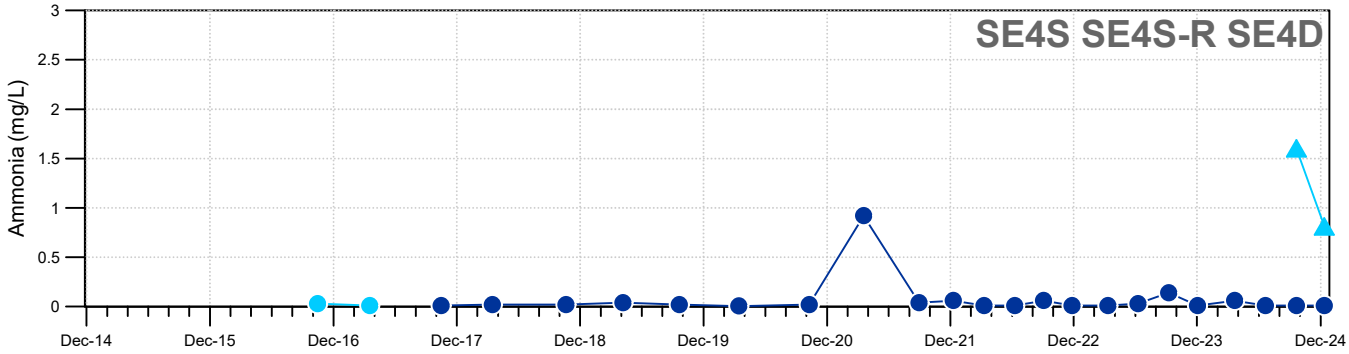

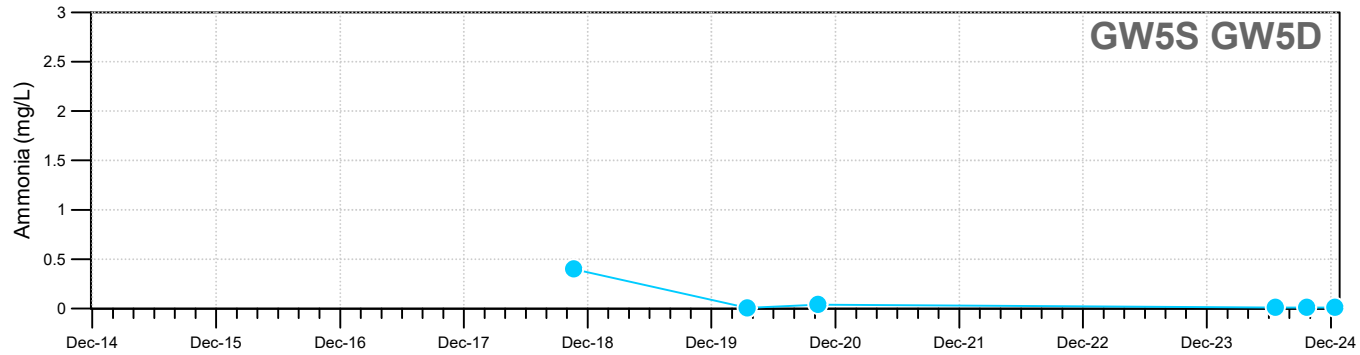

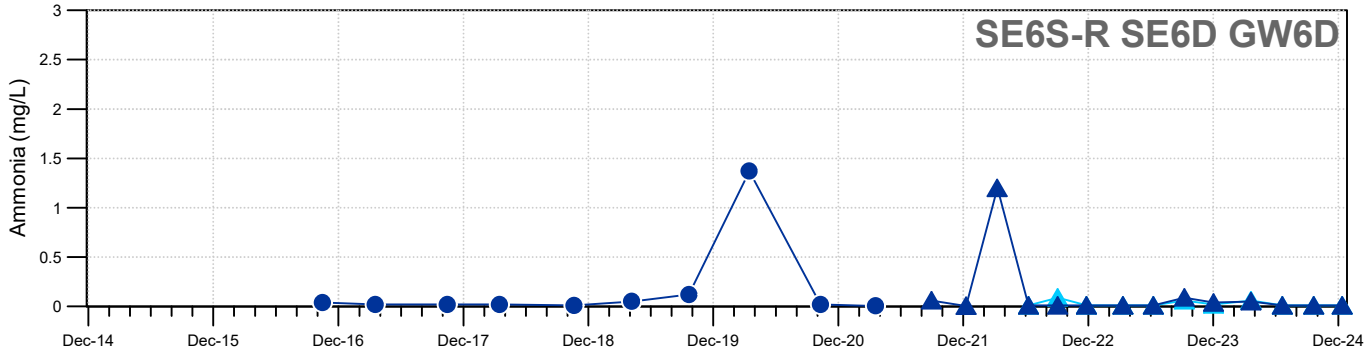

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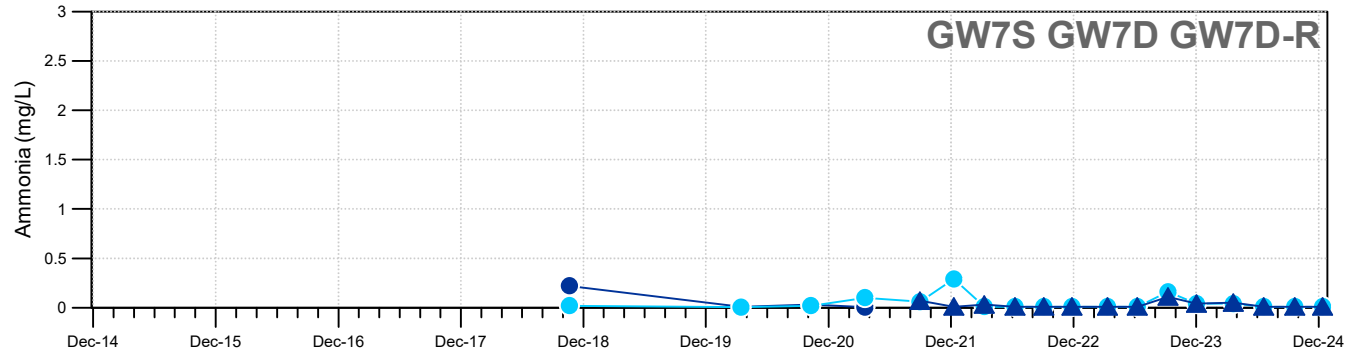

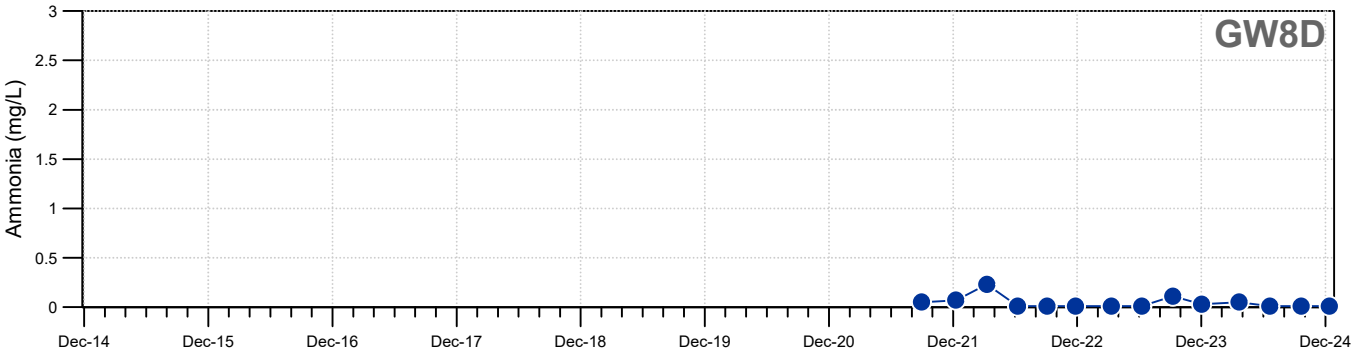

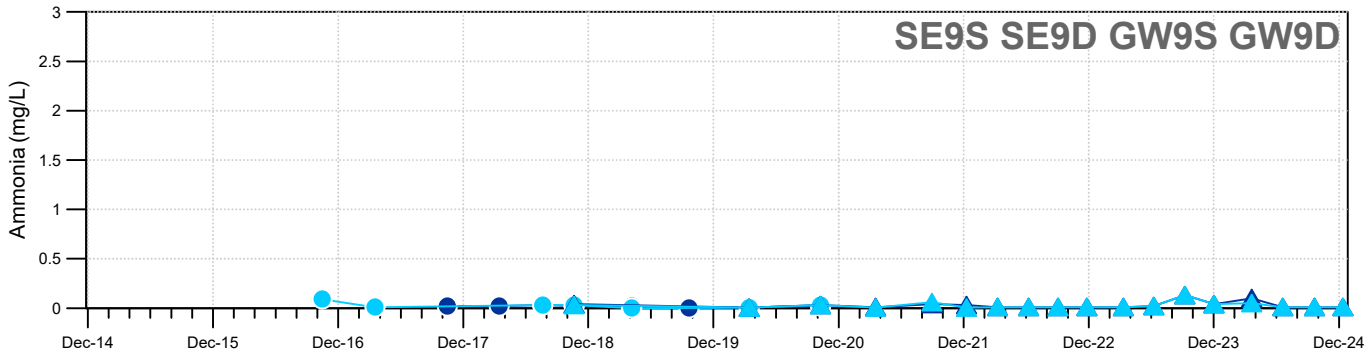

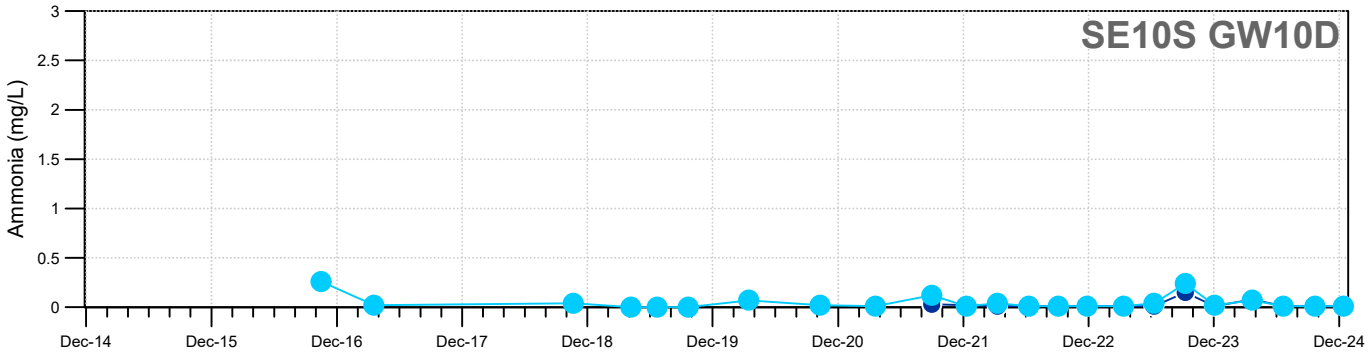

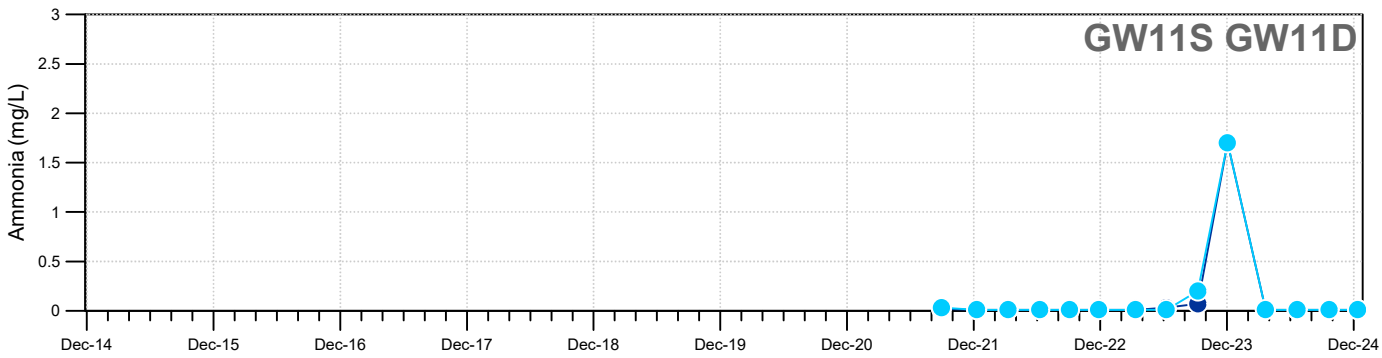

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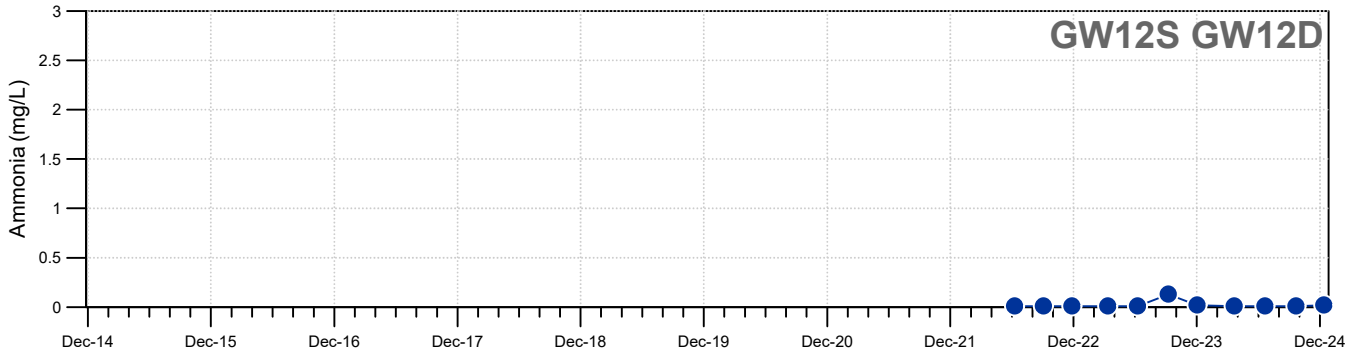

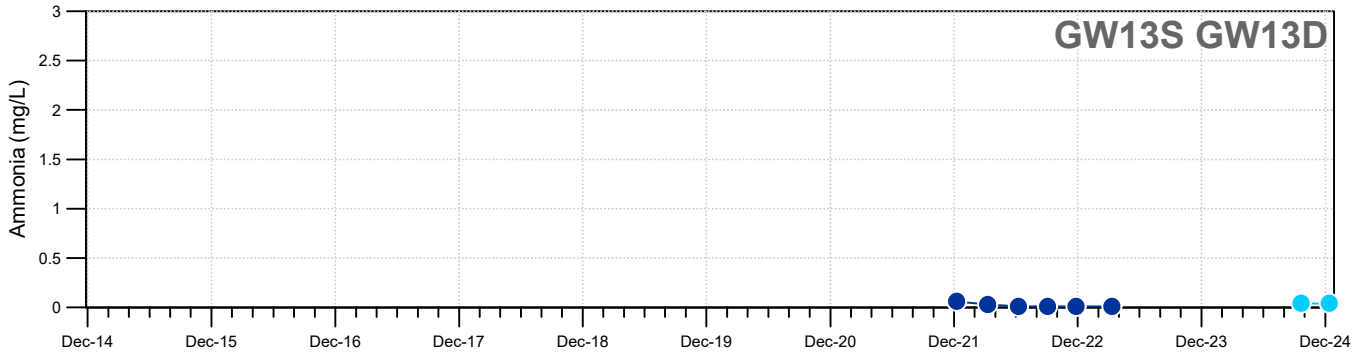

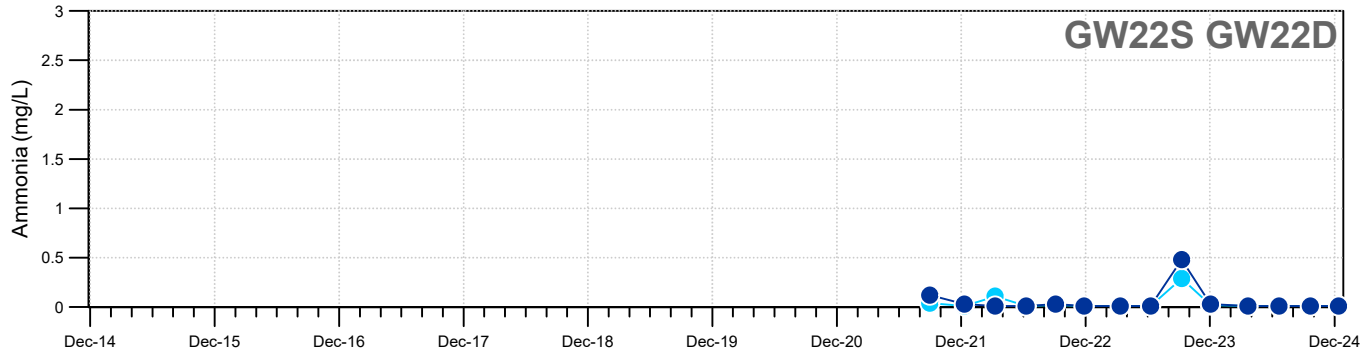

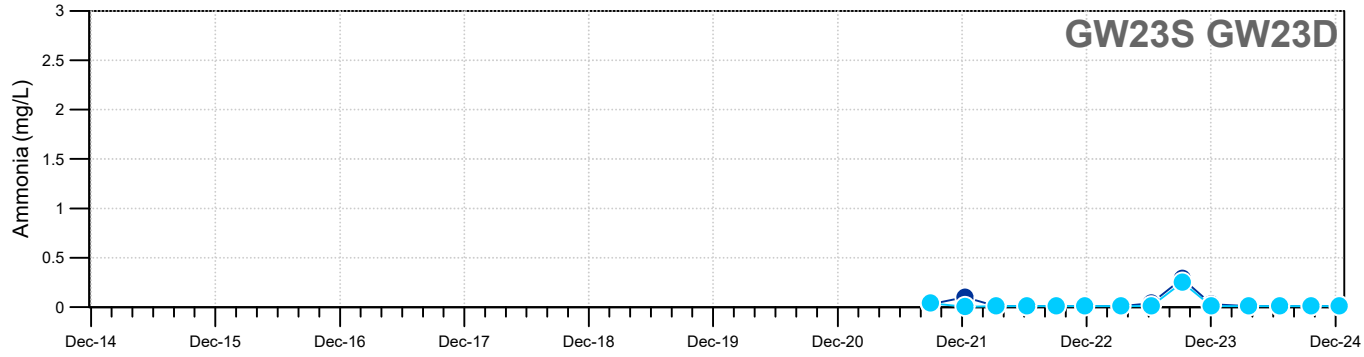

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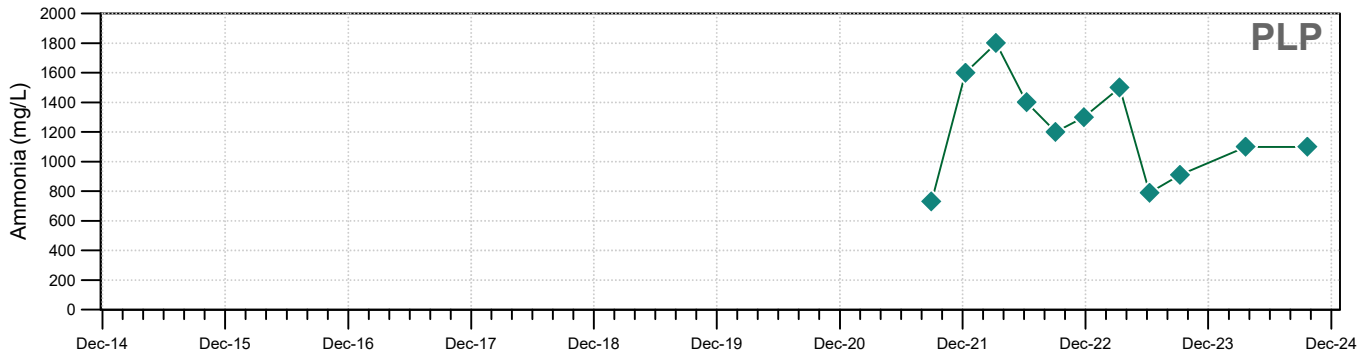

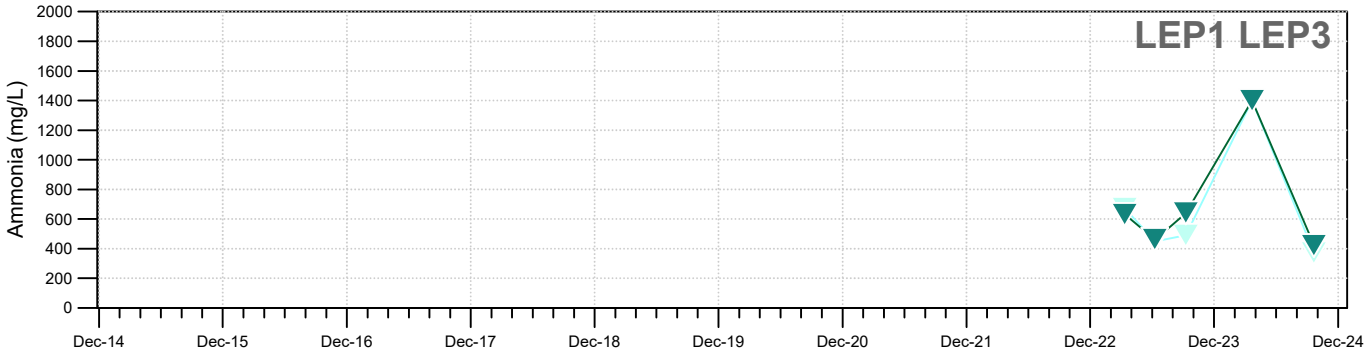

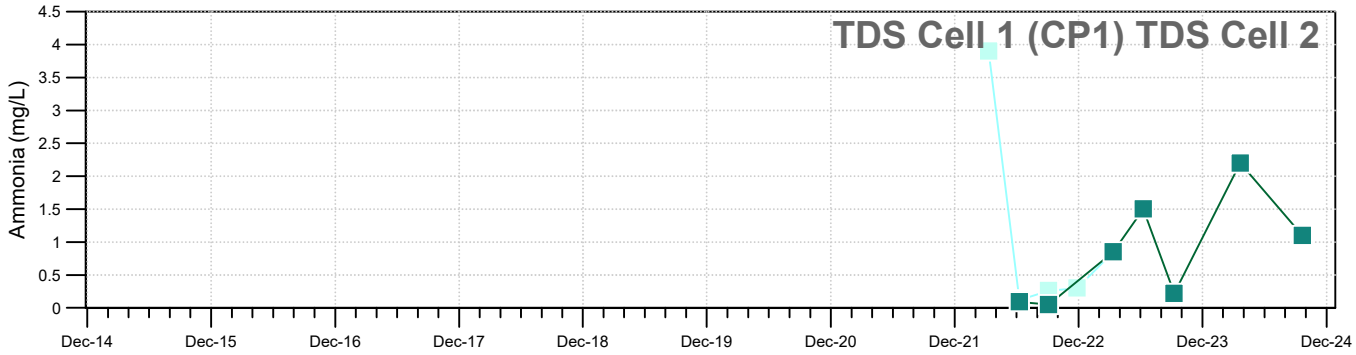

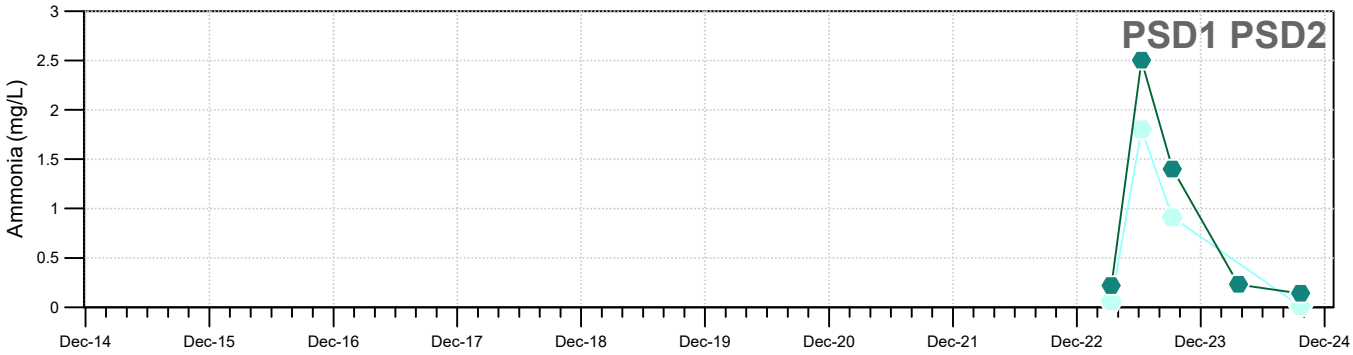

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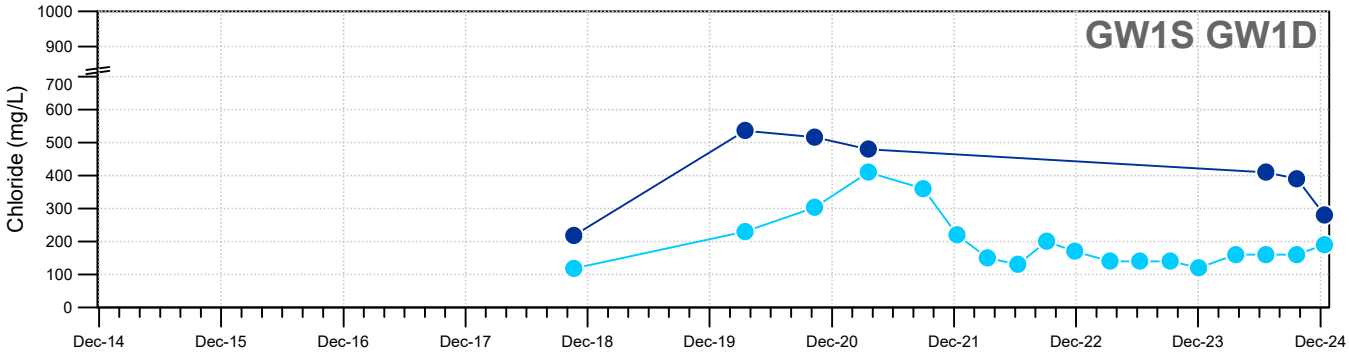
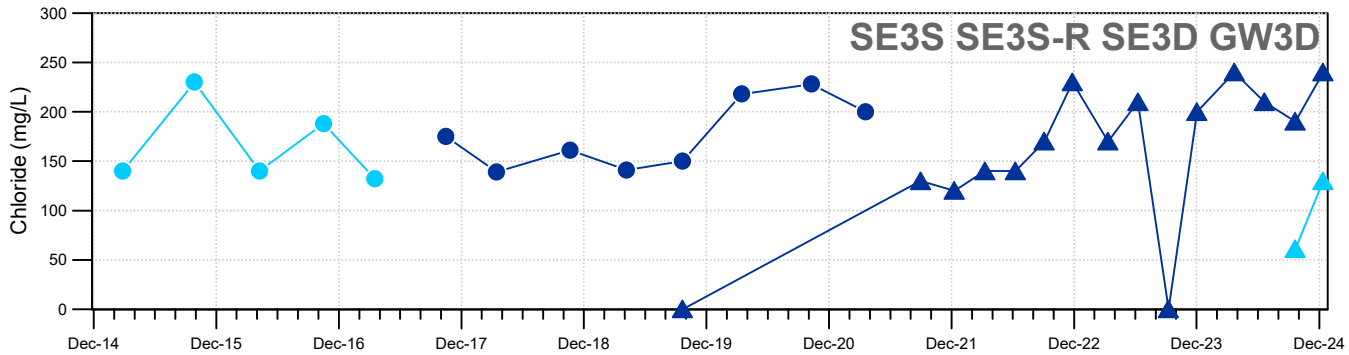
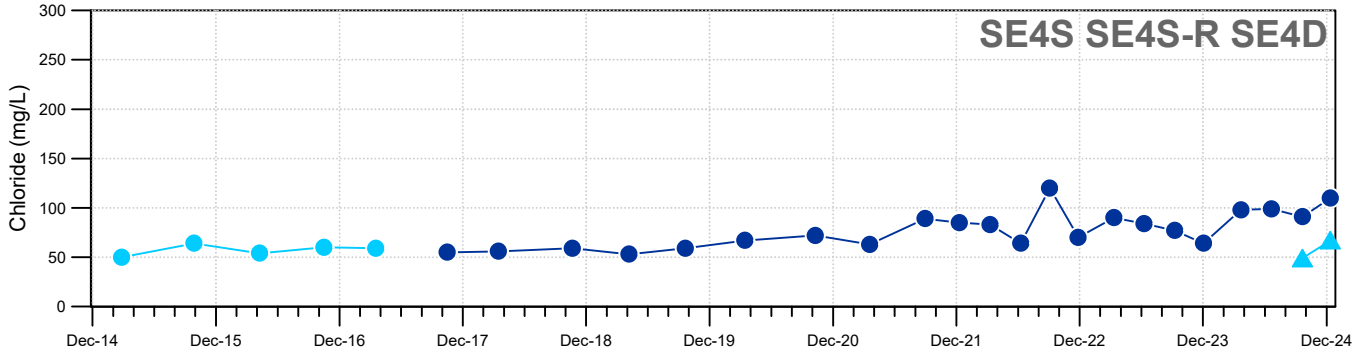
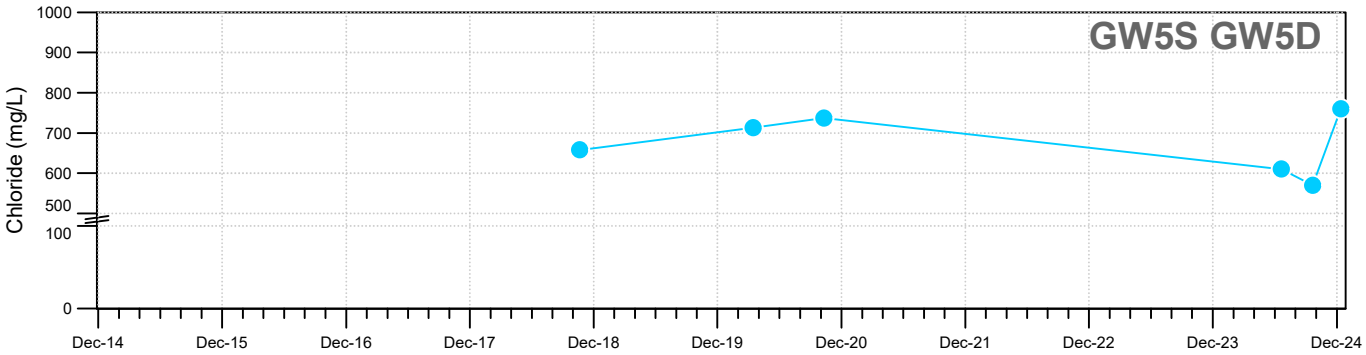
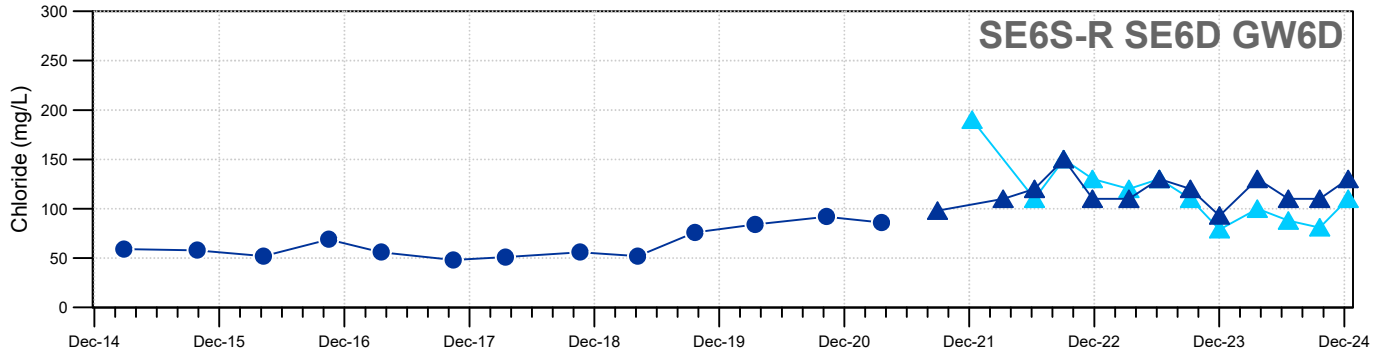










CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

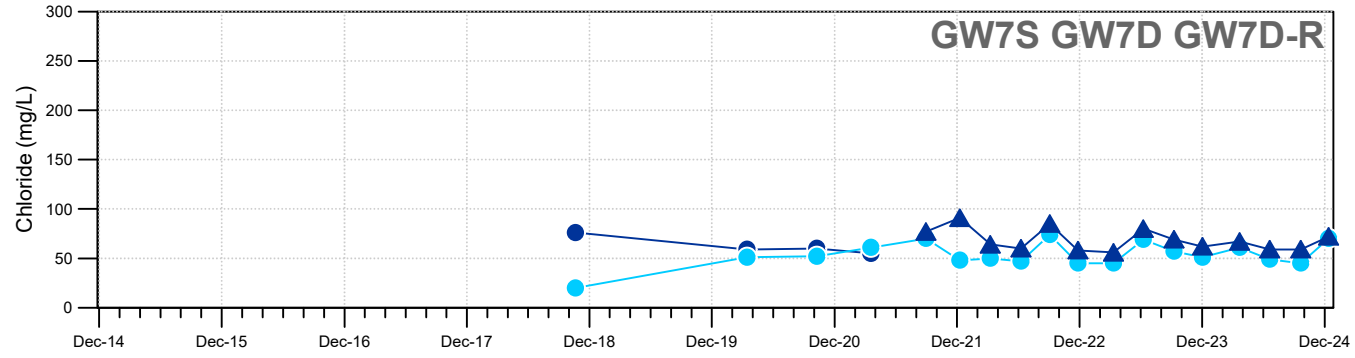
- Shallow Well
- Shallow Well Replacement
- Deep Well
- Deep Well Replacement

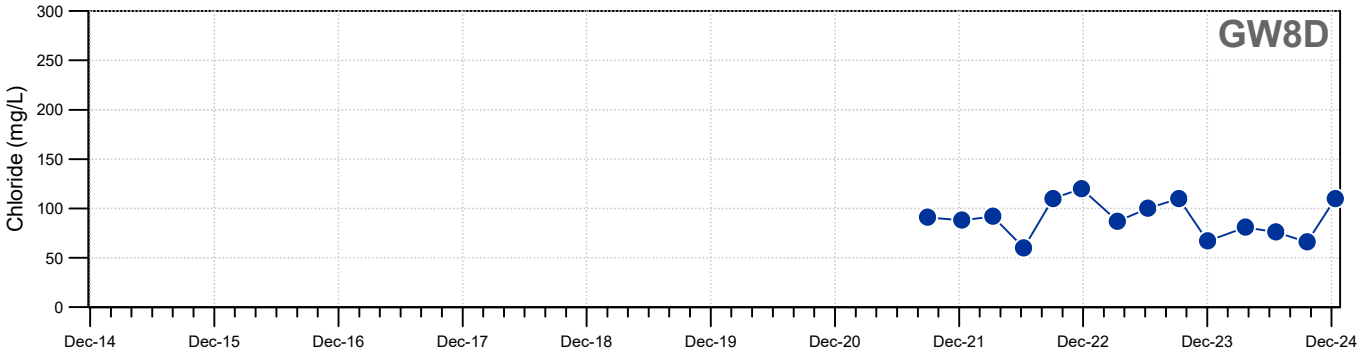
NOTES:
GW5D - dry for all events

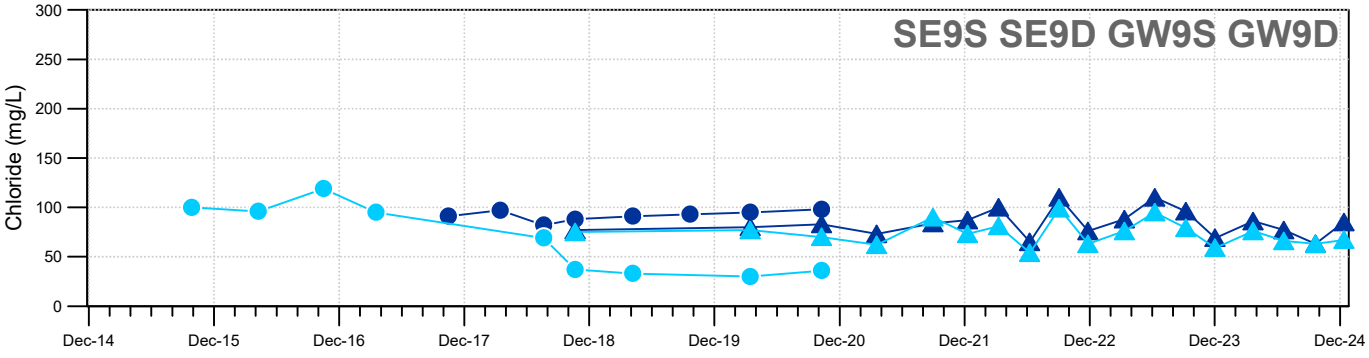
PROJECT No. J-G-AU0010

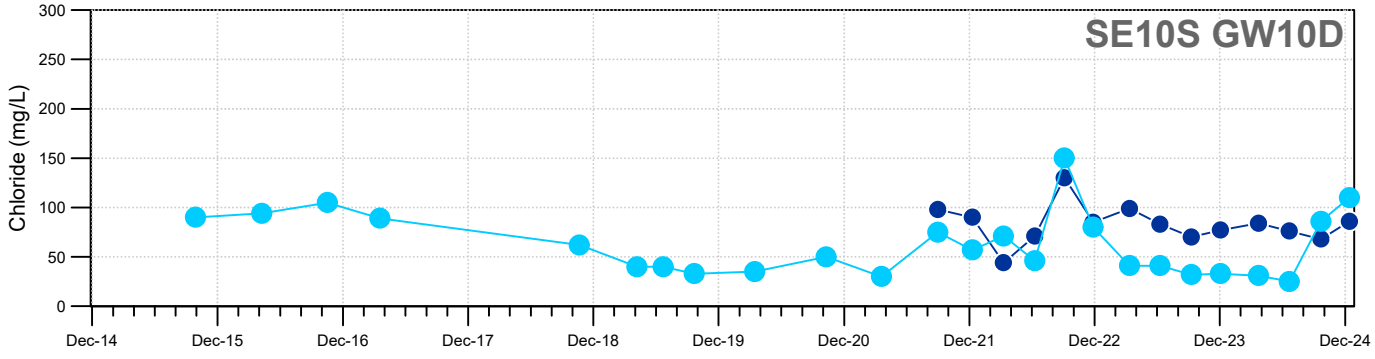
DATE 18/01/2025

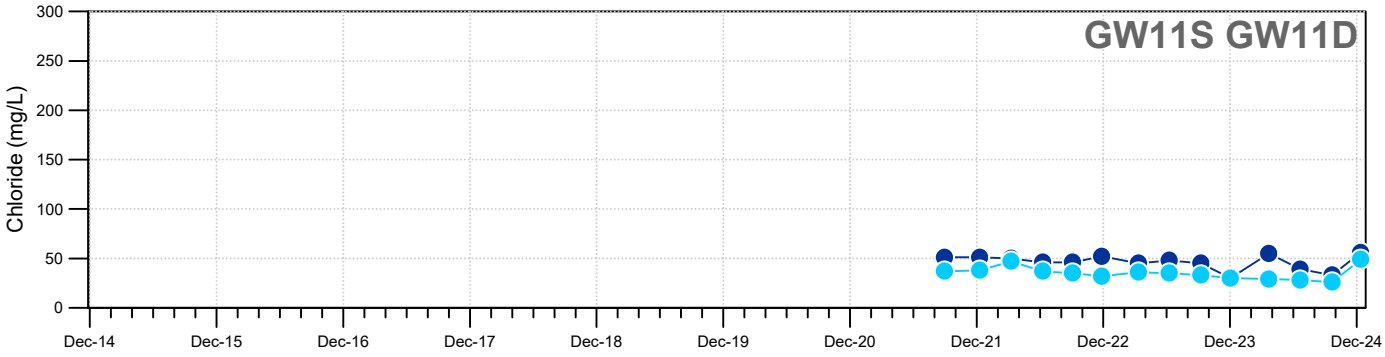
GEOCONTAM RISK MANAGEMENT











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Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
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Legend

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PROJECT No. J-G-AU0010

DATE 18/01/2025

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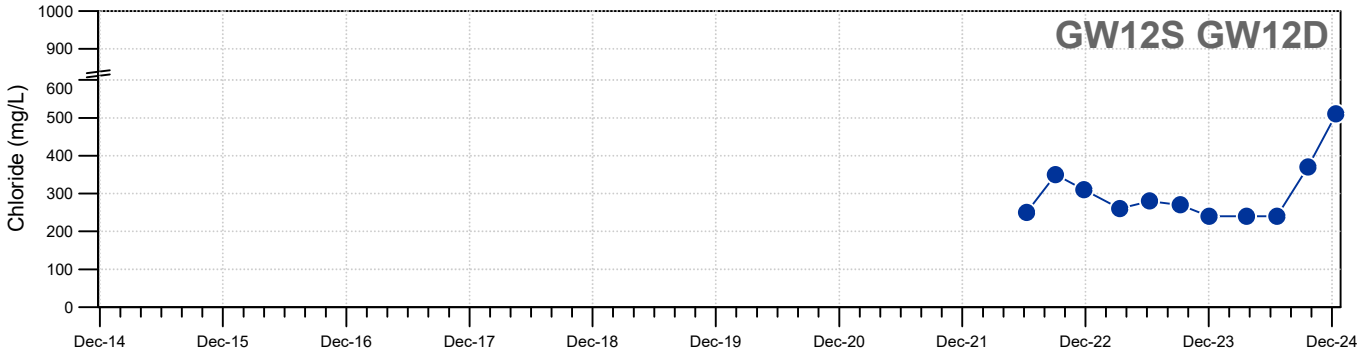
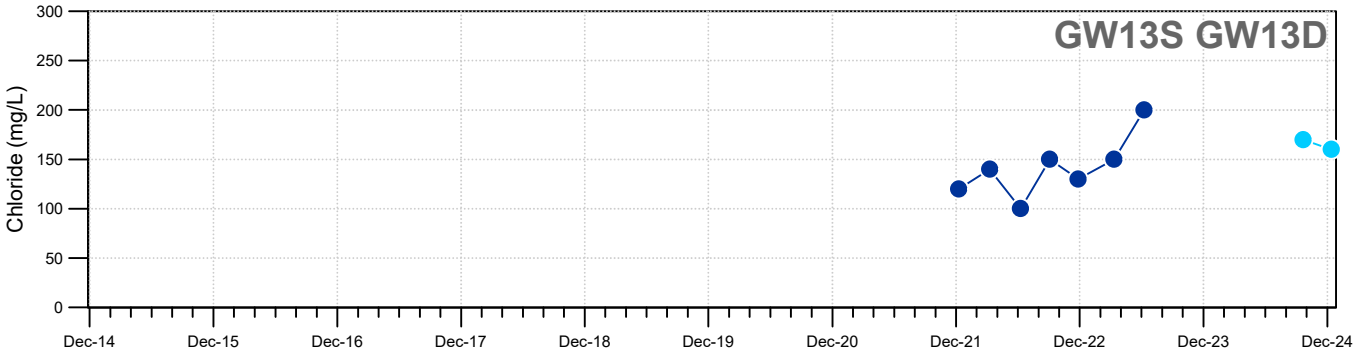
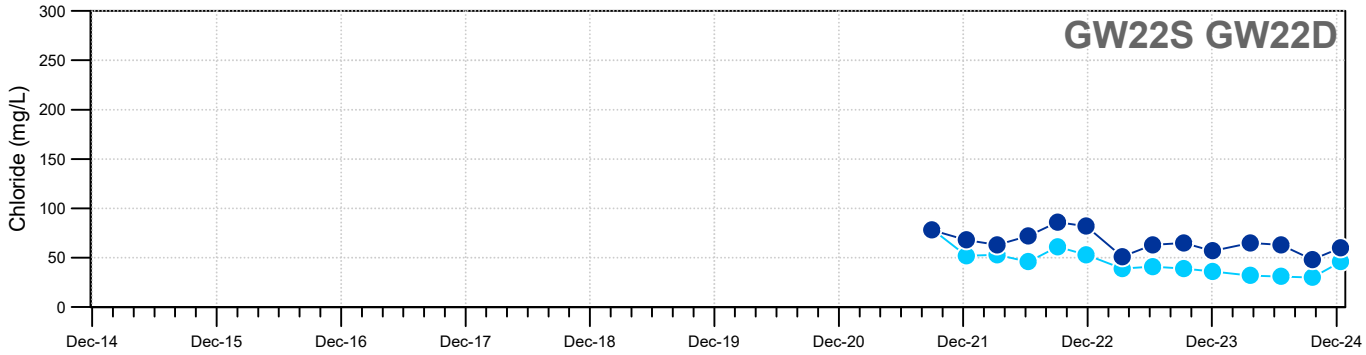
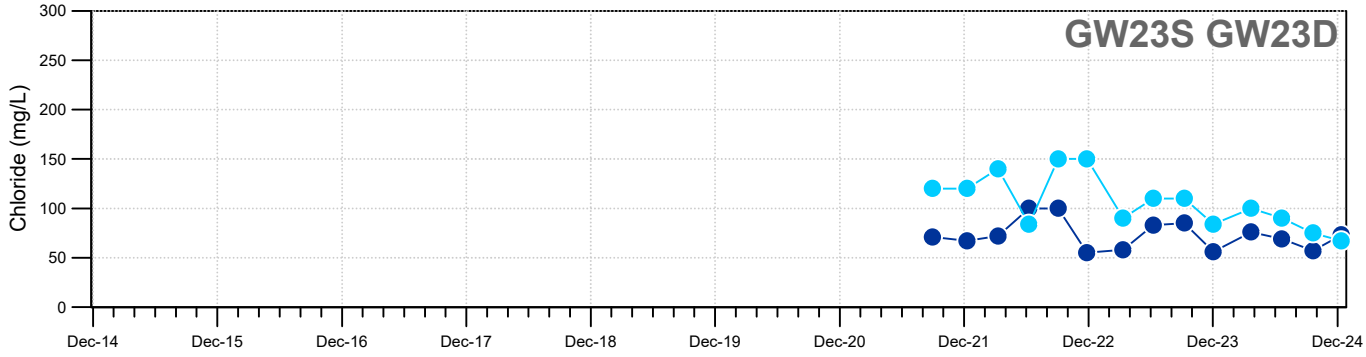








CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

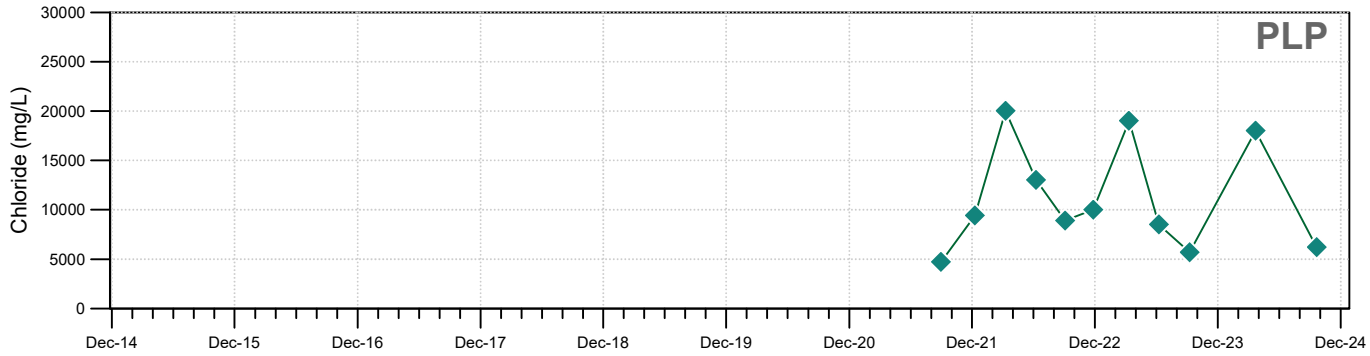
- Shallow Well
- Shallow Well Replacement
- Deep Well
- Deep Well Replacement

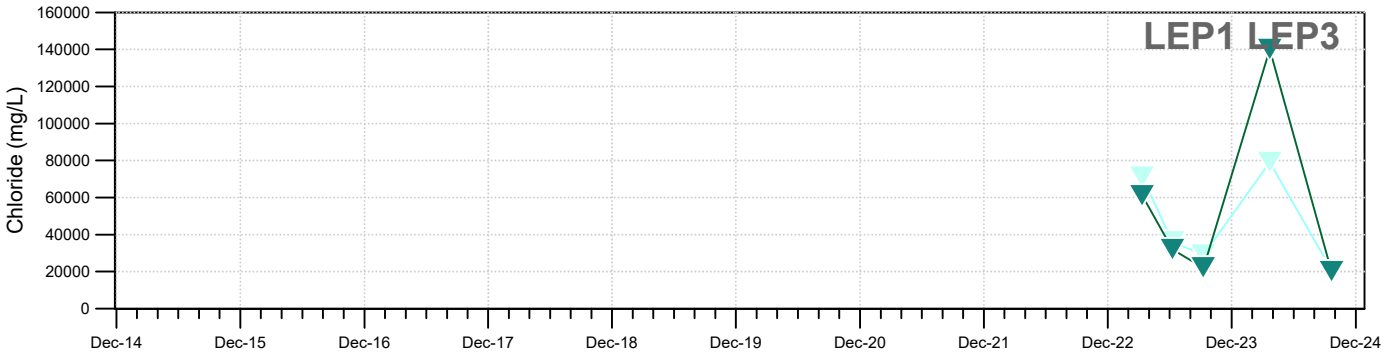
NOTES:
GW12S - dry for all events

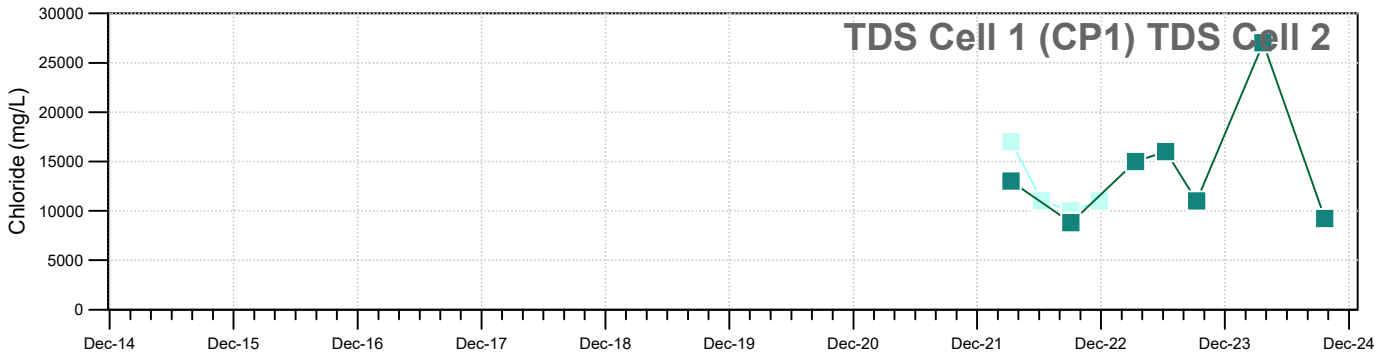
PROJECT No. J-G-AU0010

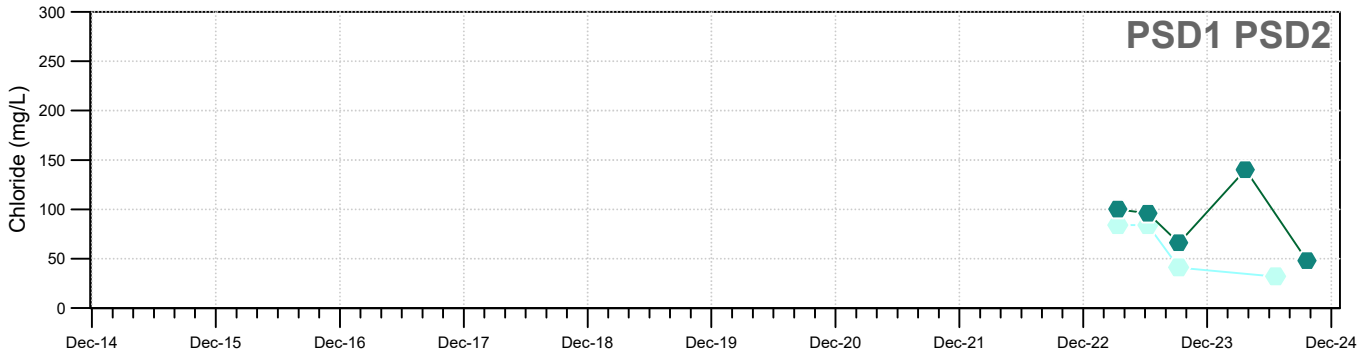
DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT









CLIENT
Cleanaway Waste Management Ltd

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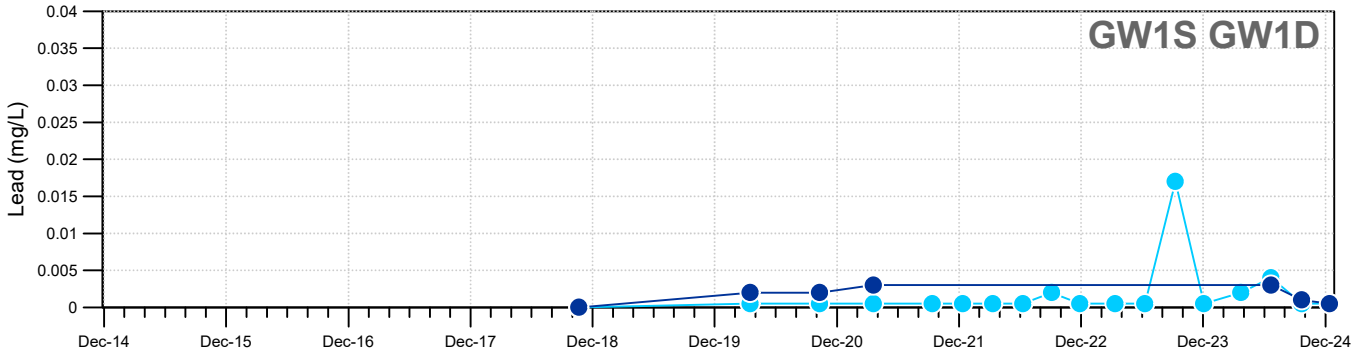
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

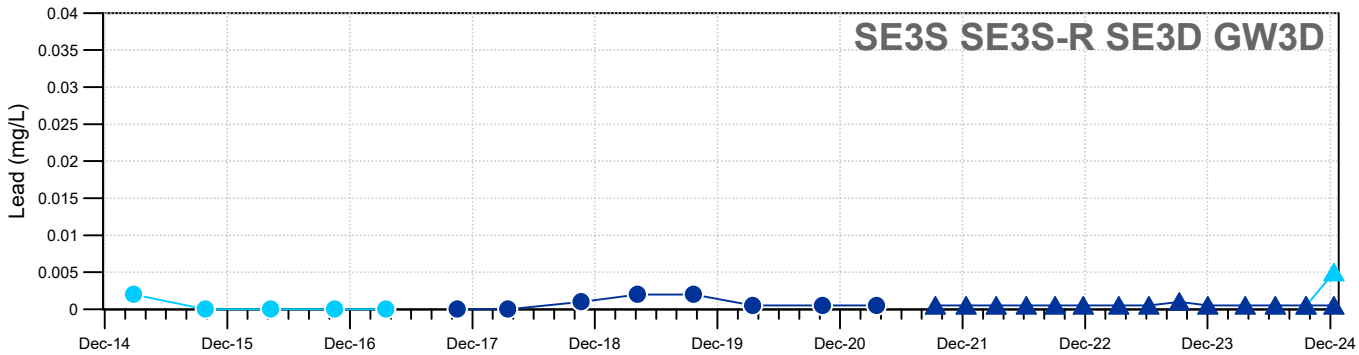
Legend

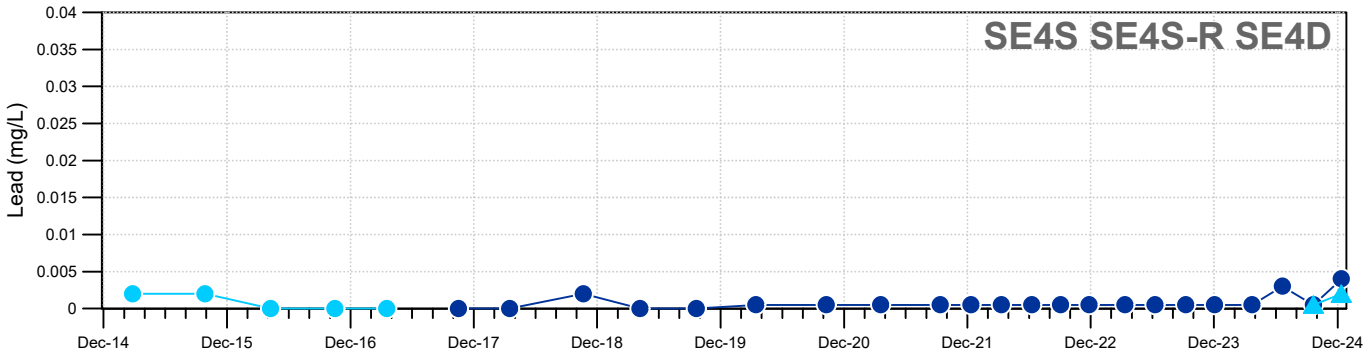
PSD1
PSD2
TDS Cell 1 (CP1)
TDS Cell 2
PLP
LEP1
LEP3

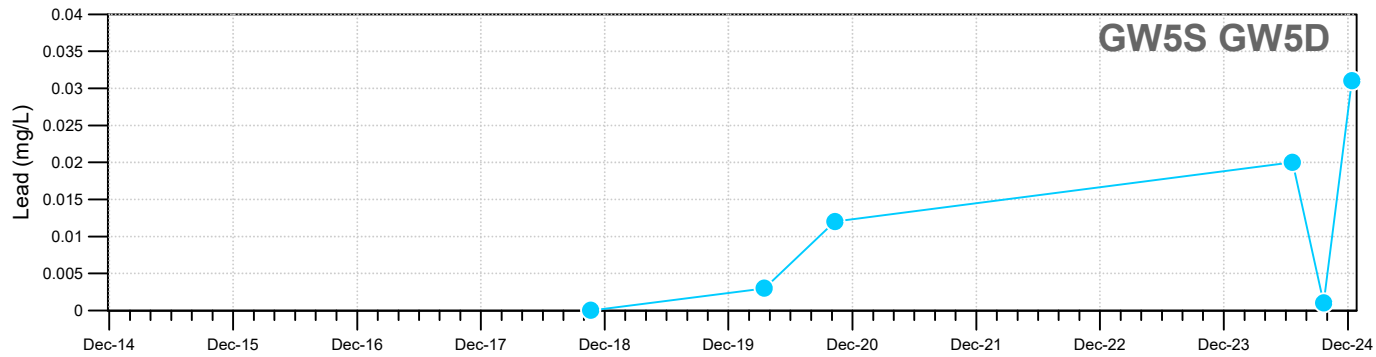
PROJECT No. J-G-AU0010
DATE 18/01/2025

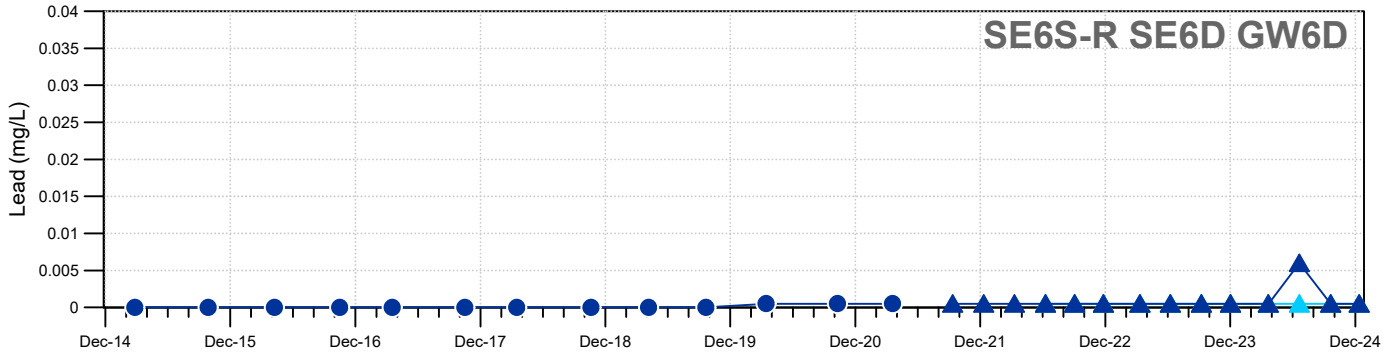
GEOCONTAM RISK MANAGEMENT











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PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

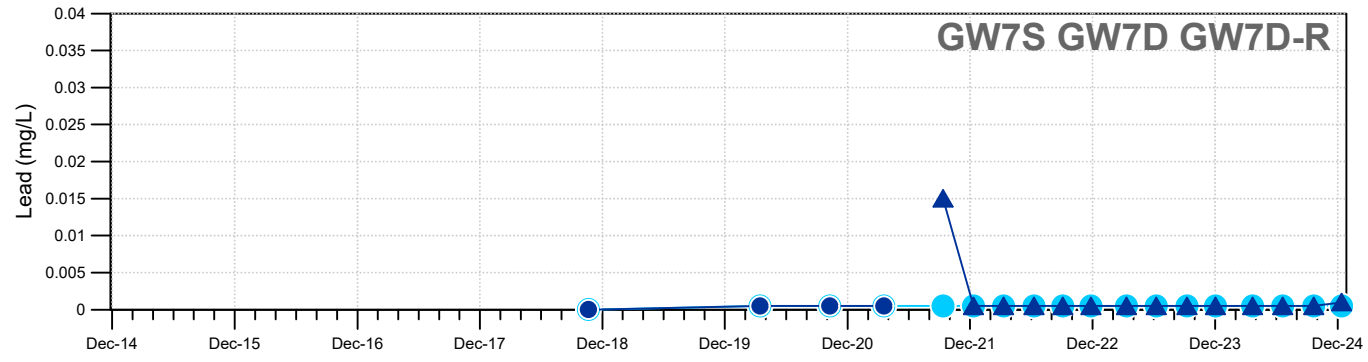
- Shallow Well
- Shallow Well Replacement
- Deep Well
- Deep Well Replacement

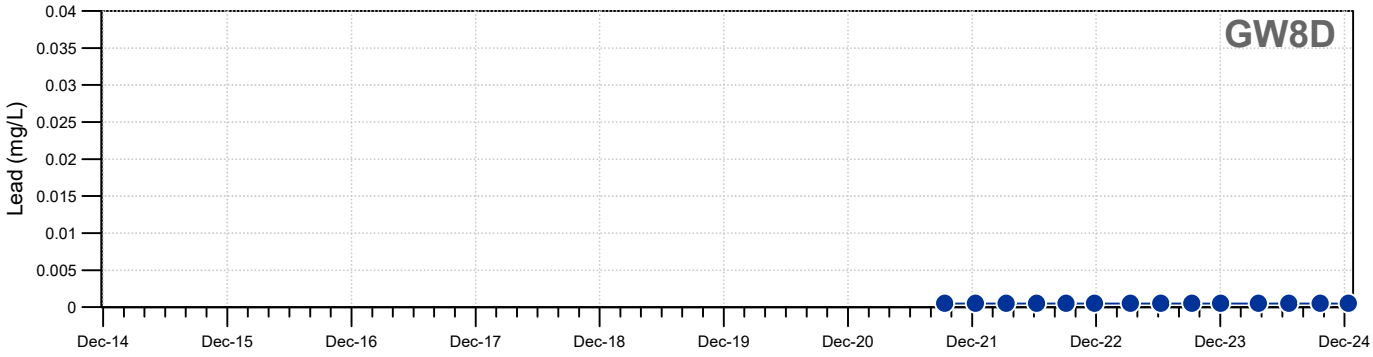
NOTES:
GW5D - dry for all events

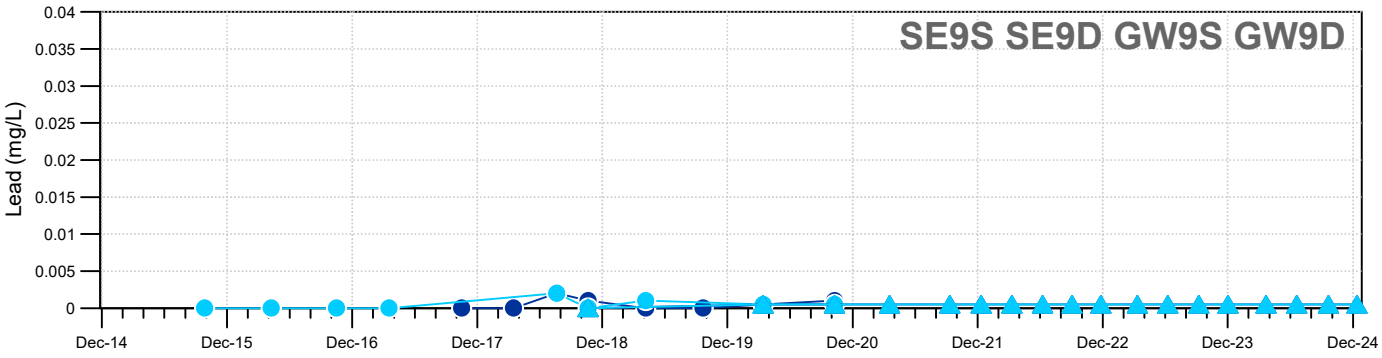
PROJECT No. J-G-AU0010

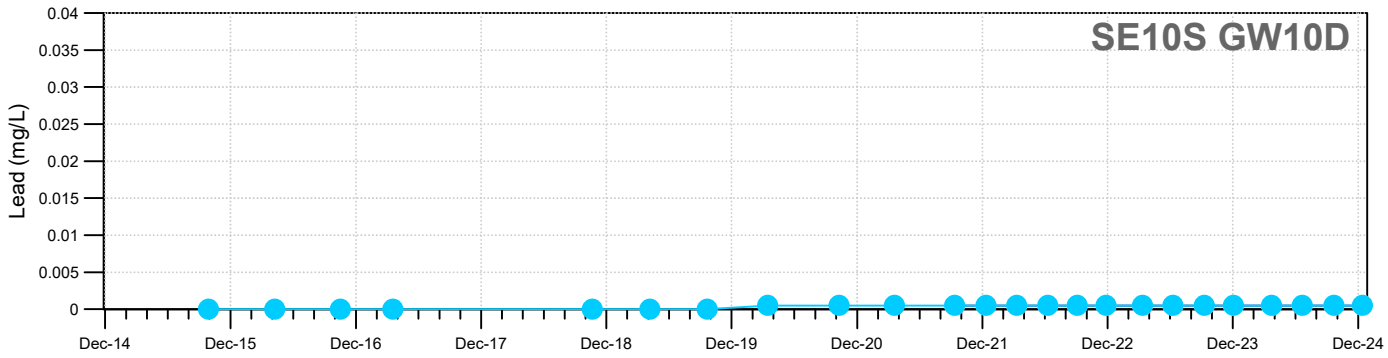
DATE 18/01/2025

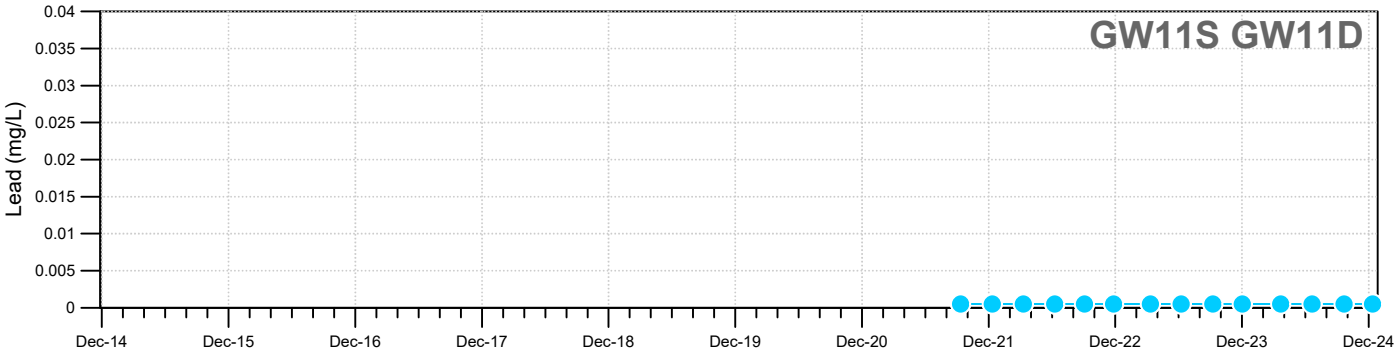
GEOCONTAM RISK MANAGEMENT











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Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
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PROJECT No. J-G-AU0010

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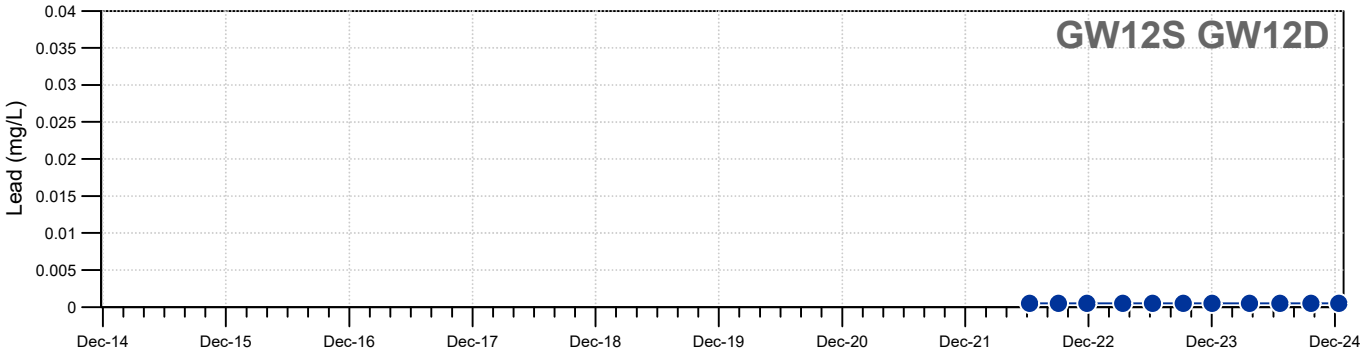

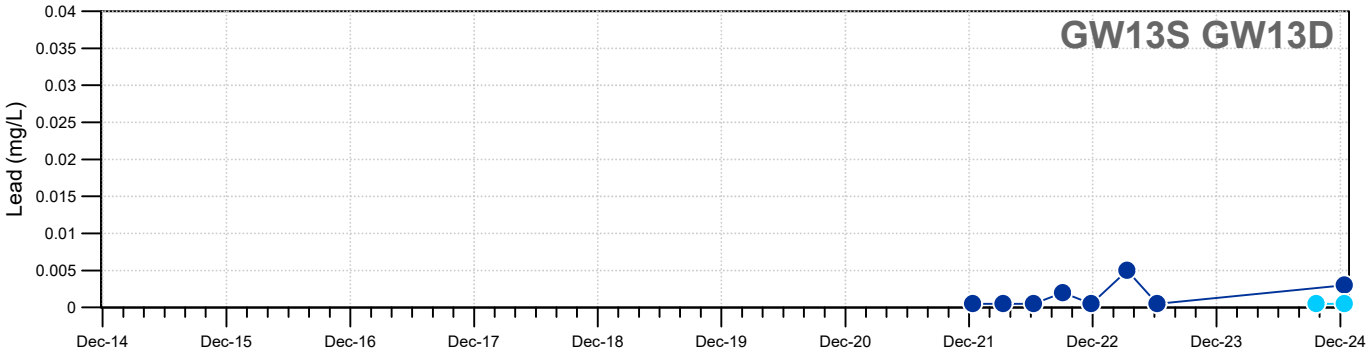

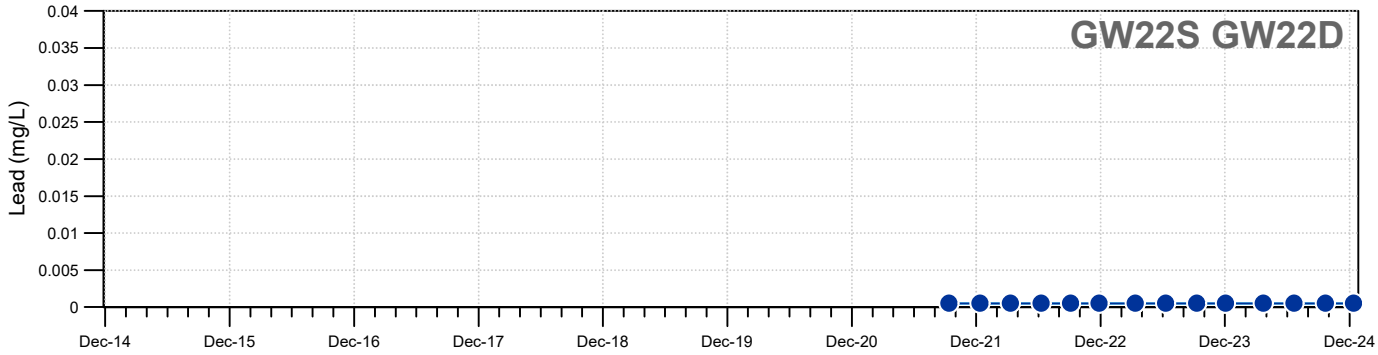

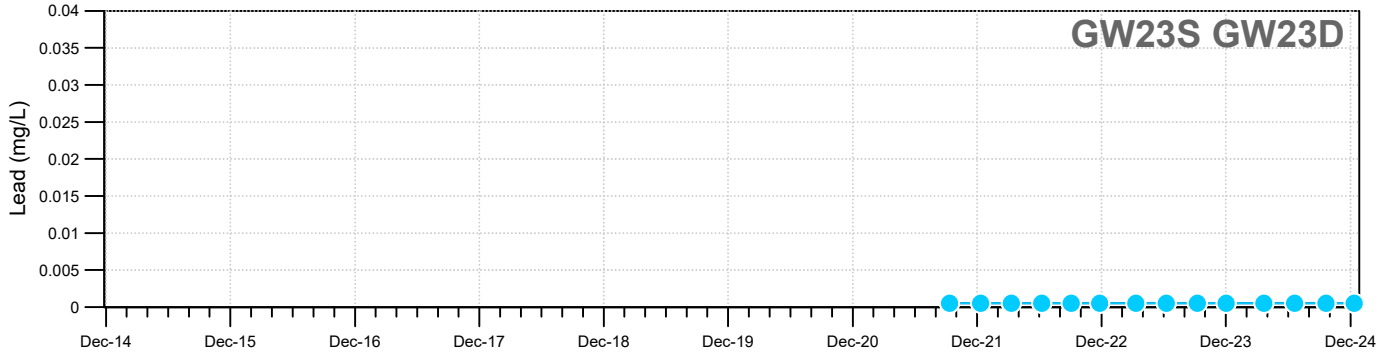

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PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

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NOTES:
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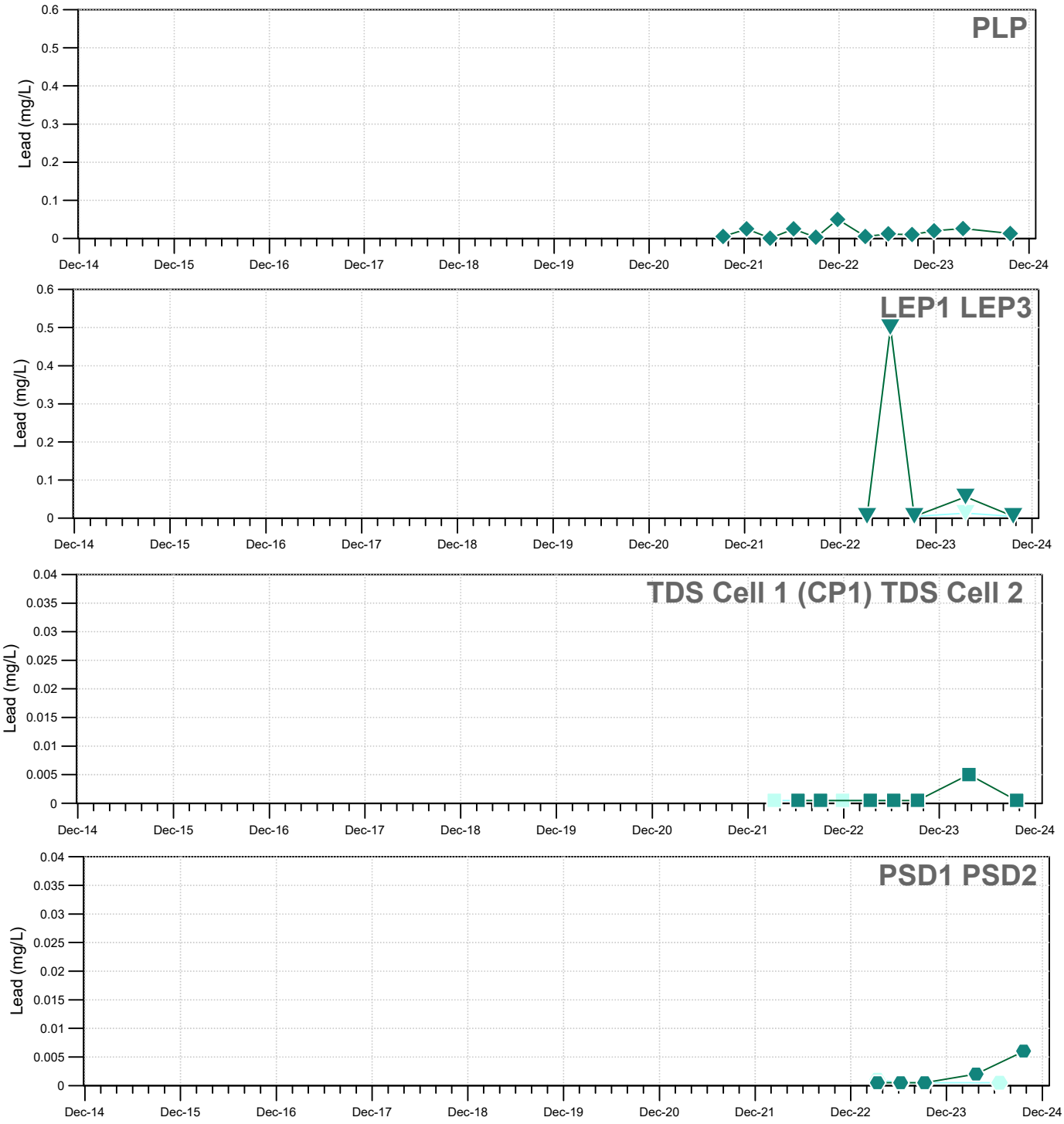
PROJECT No. J-G-AU0010

DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT



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Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

PSD1
PSD2
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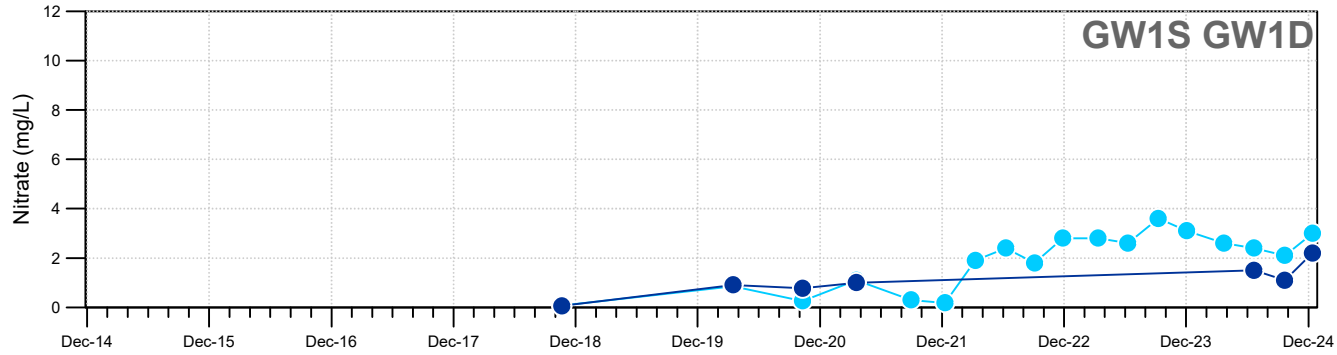
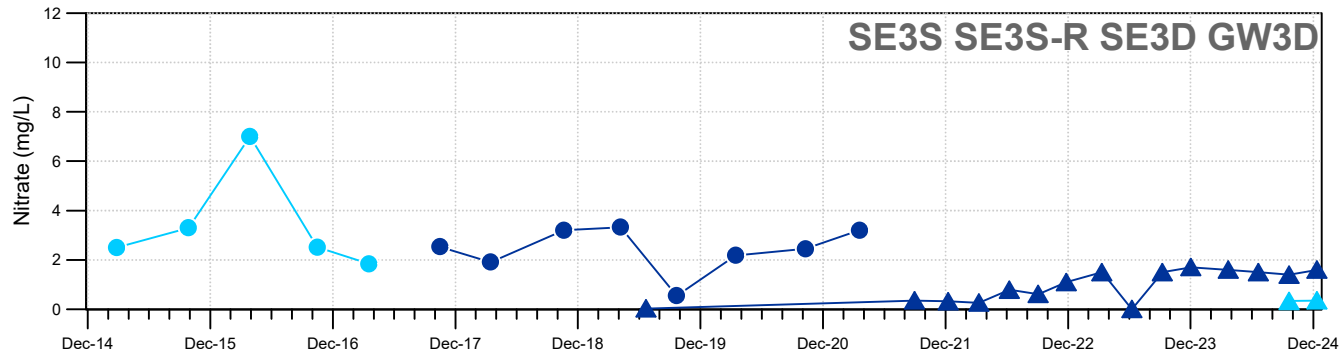
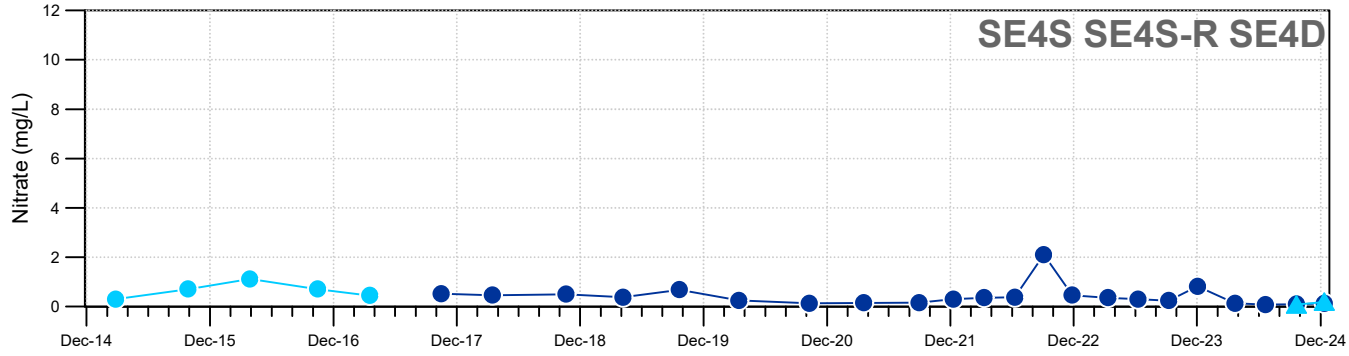
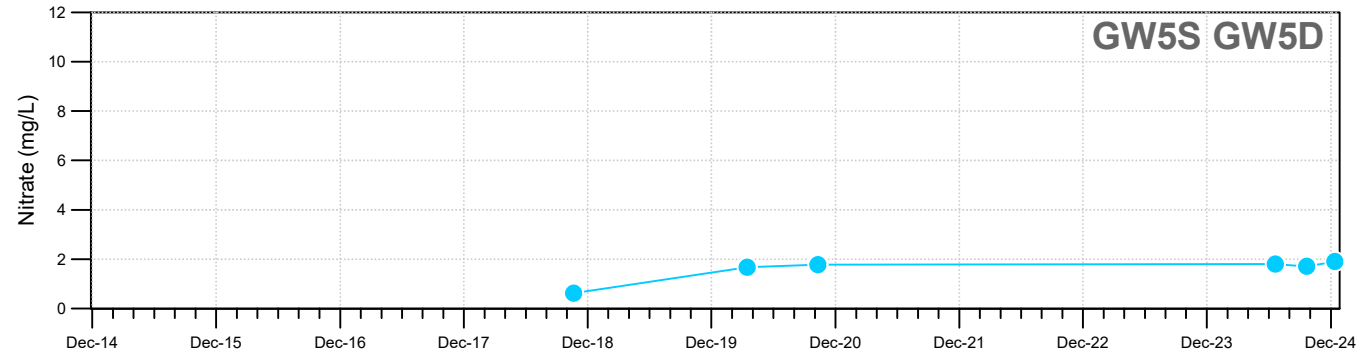
PROJECT No. J-G-AU0010
DATE 18/01/2025

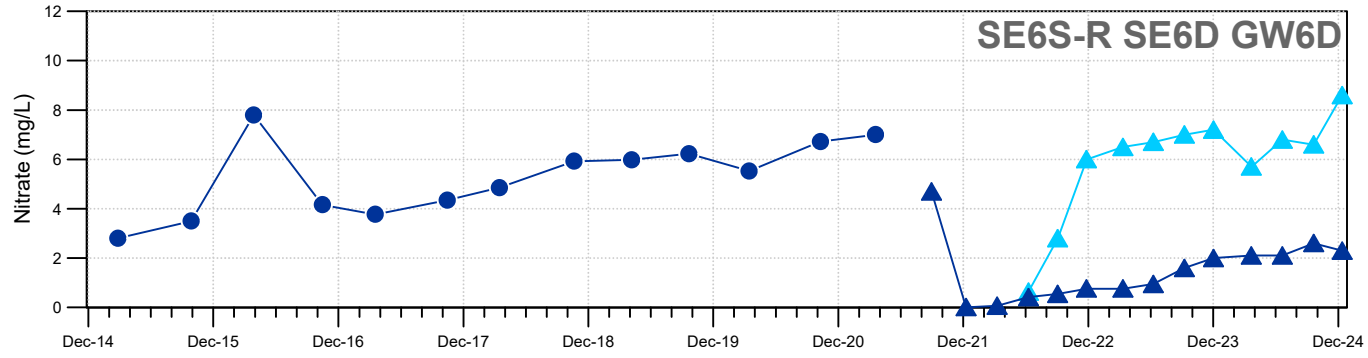
GEOCONTAM RISK MANAGEMENT











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Lot 2 Banksia Road, Crooked Brook, WA
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NOTES:
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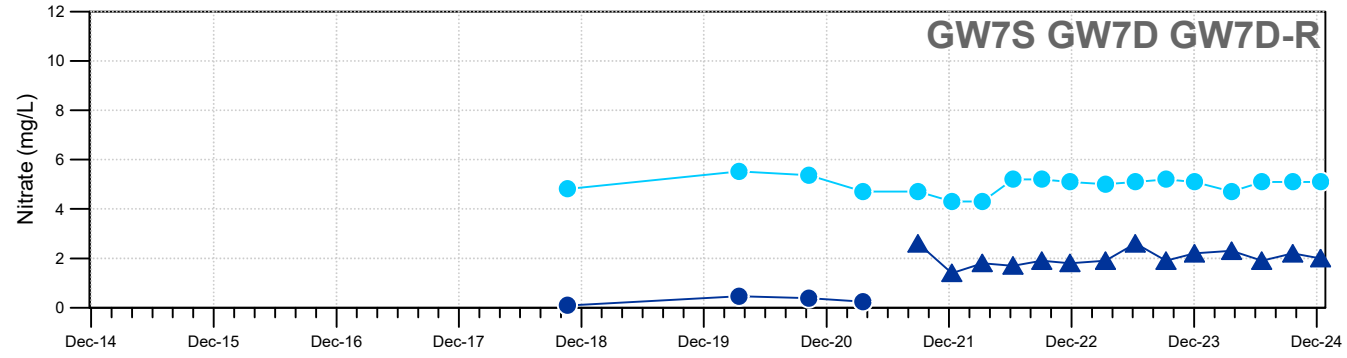
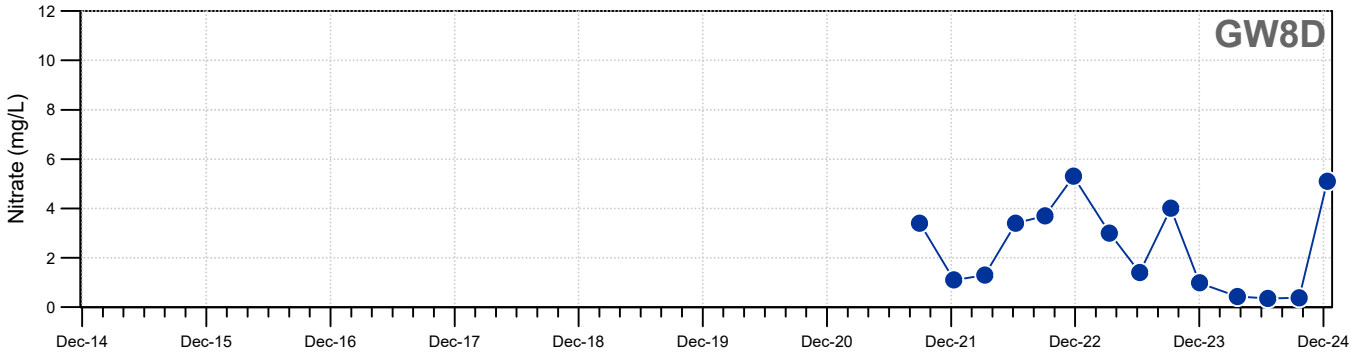
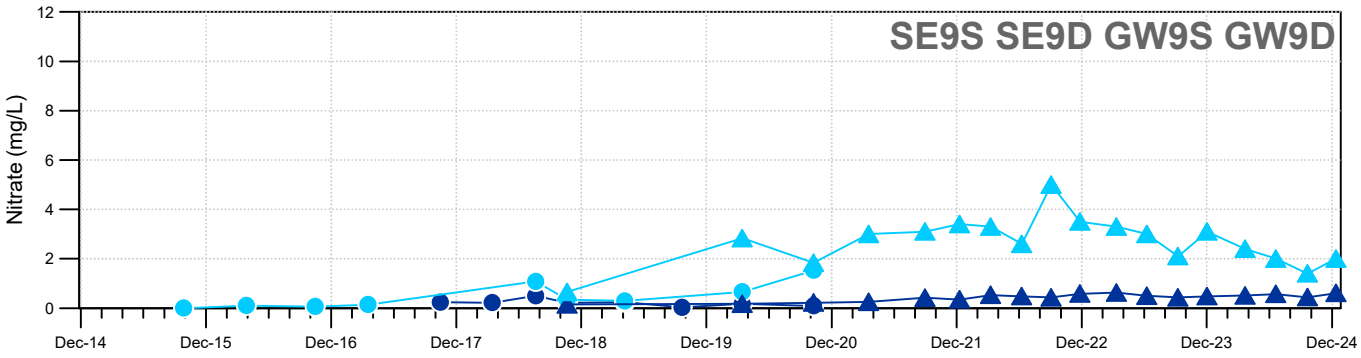
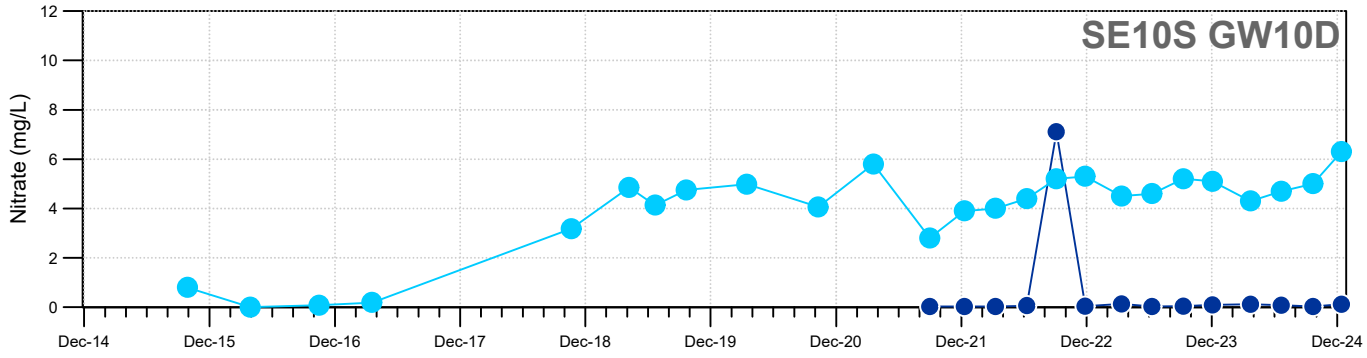
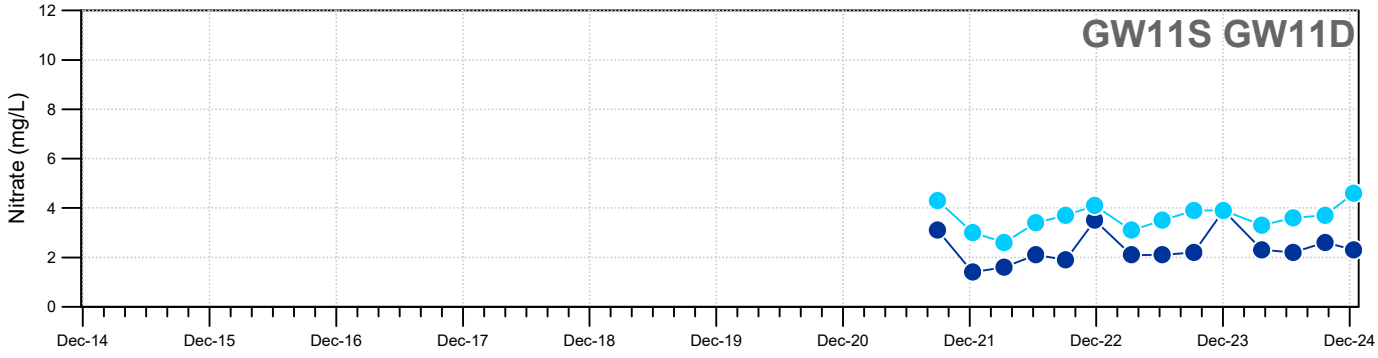
GEOCONTAM RISK MANAGEMENT











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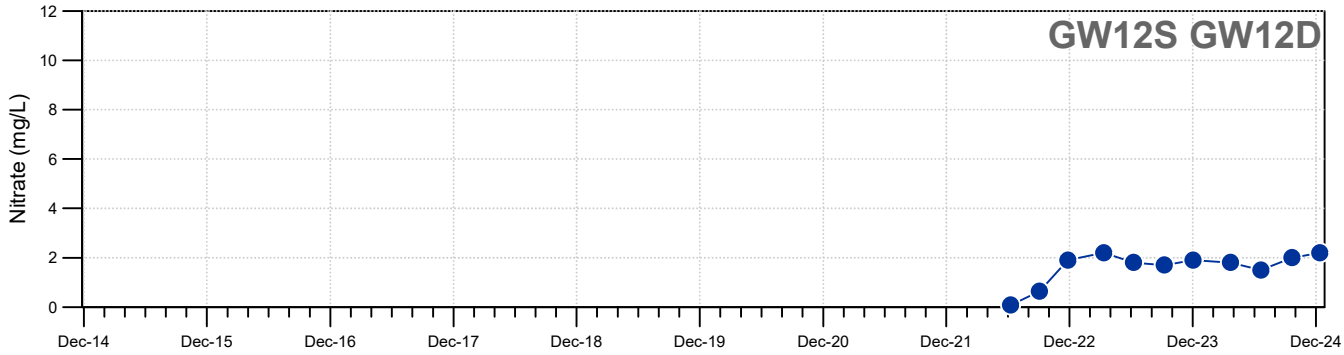

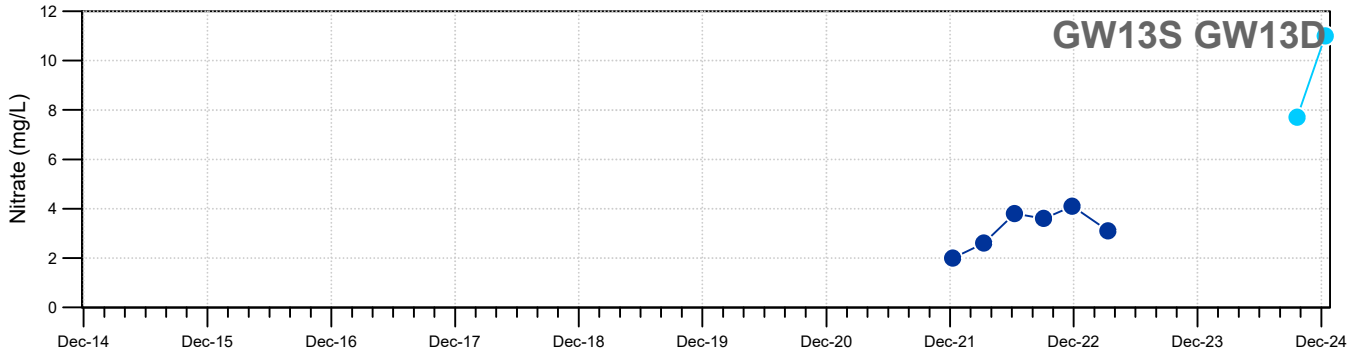

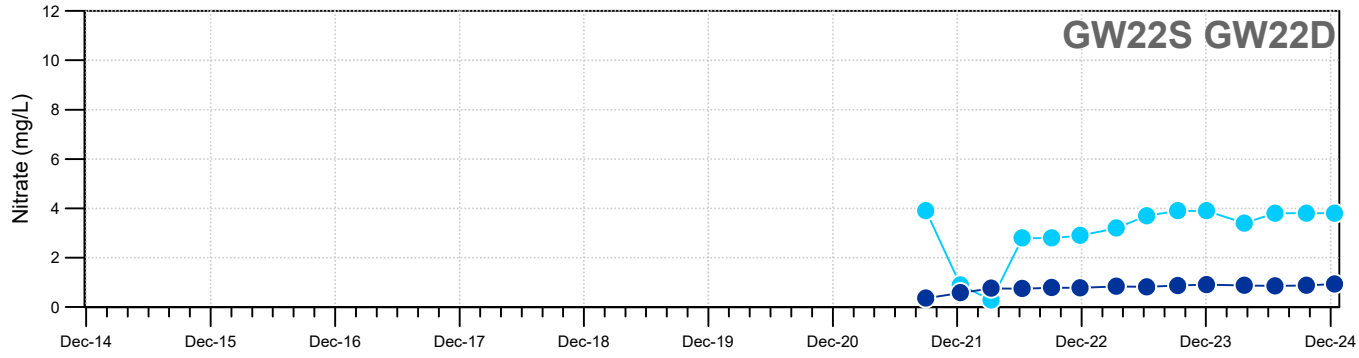

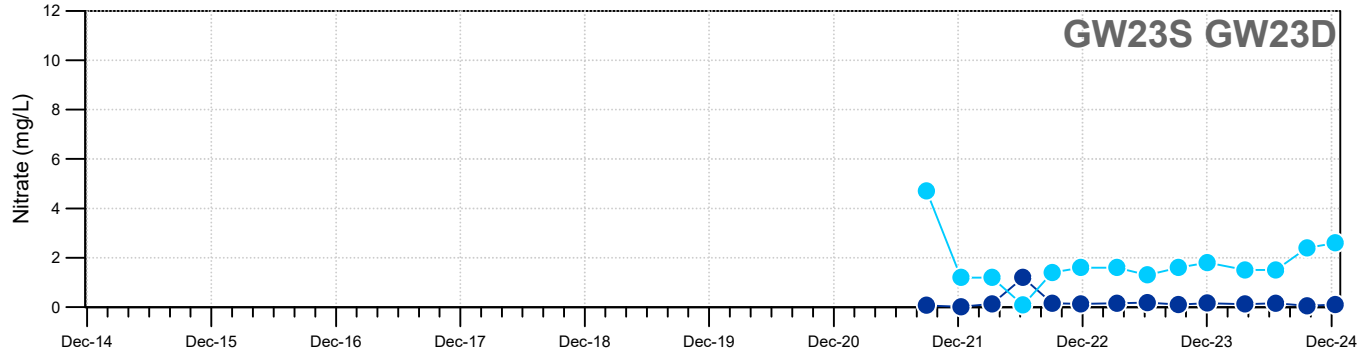

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PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
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NOTES:
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PROJECT No. J-G-AU0010

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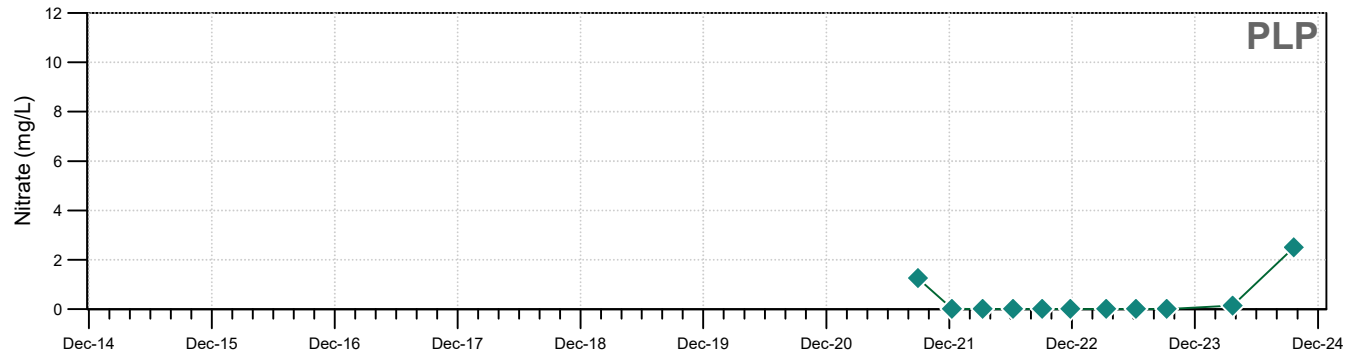
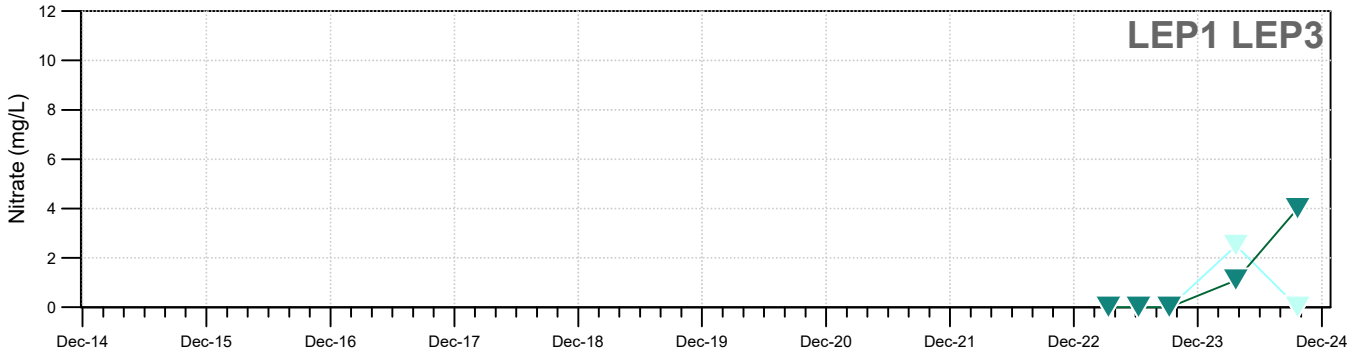
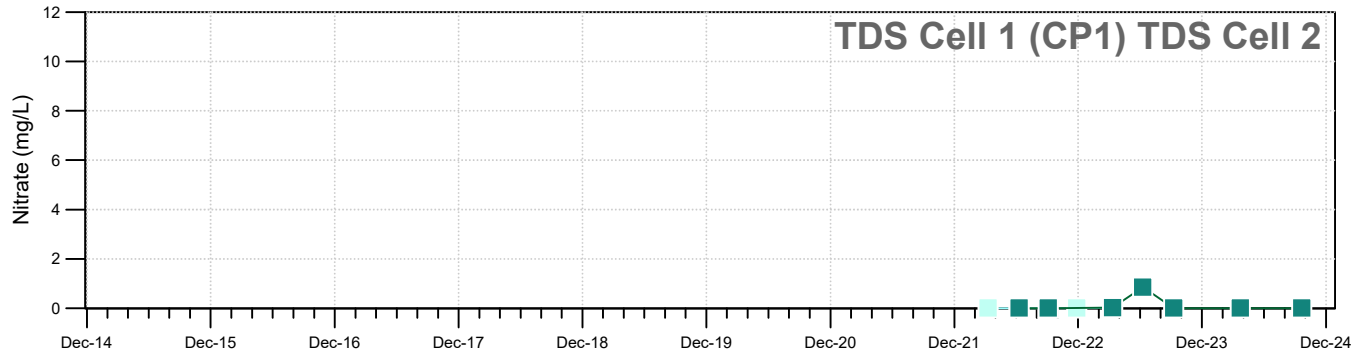
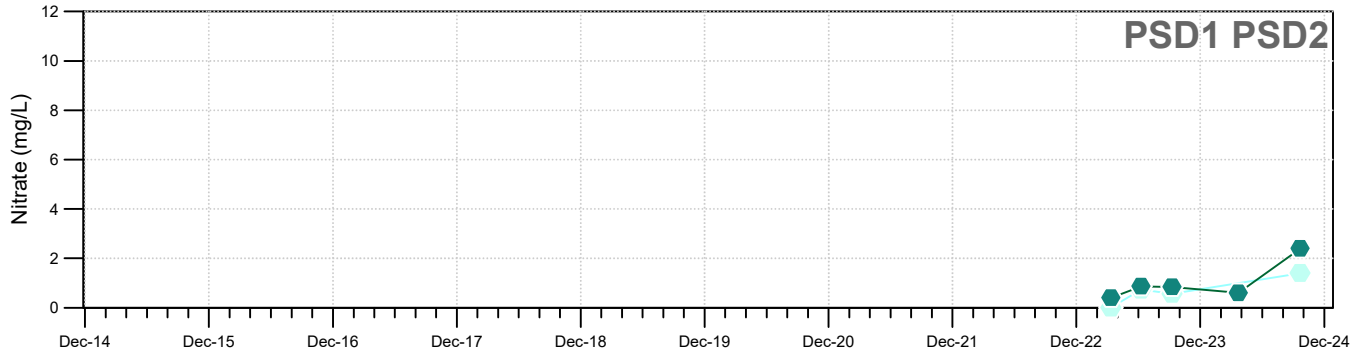
GEOCONTAM RISK MANAGEMENT









CLIENT
Cleanaway Waste Management Ltd

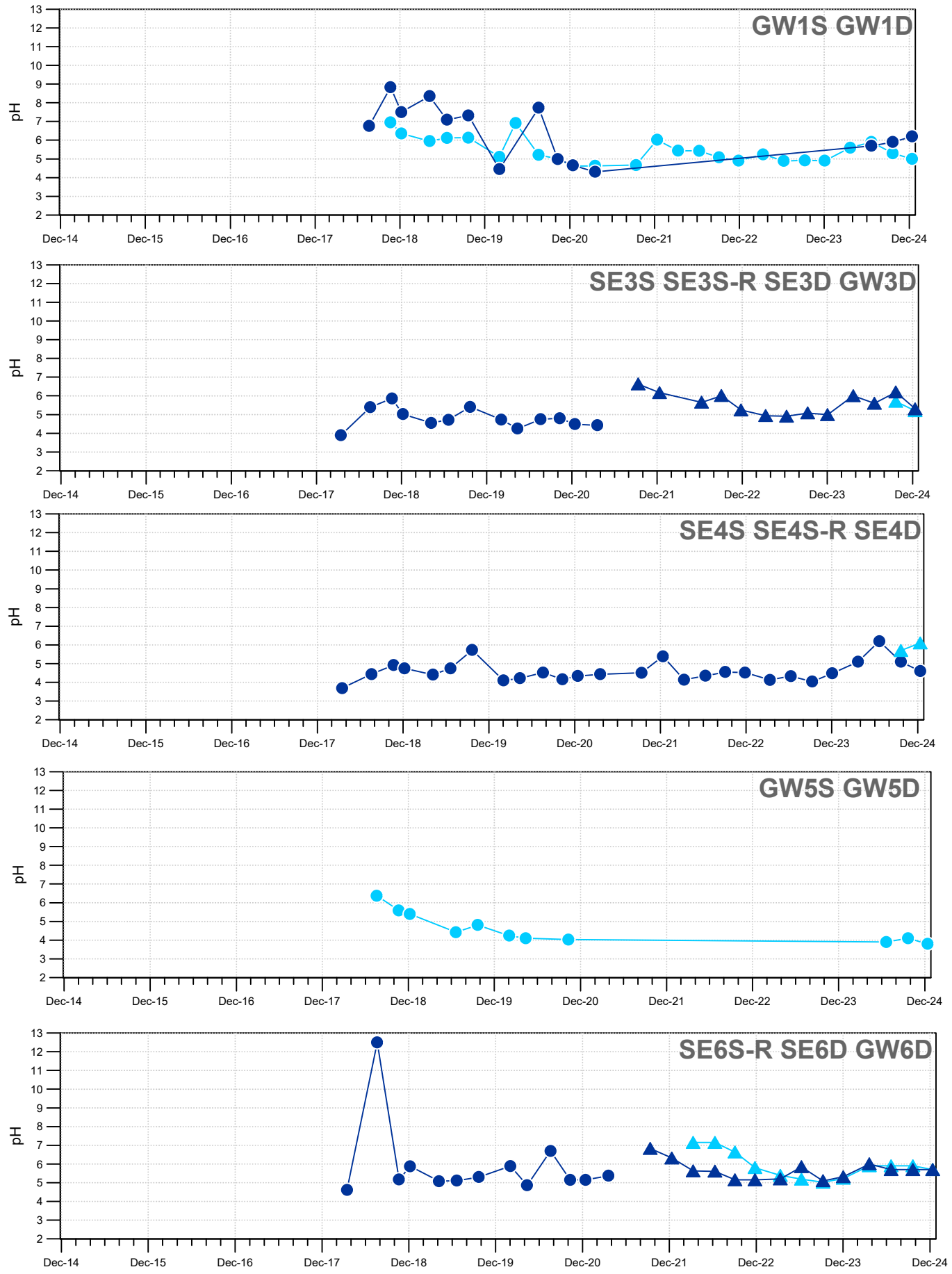
PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

PSD1
PSD2
TDS Cell 1 (CP1)
TDS Cell 2
PLP
LEP1
LEP3

PROJECT No. J-G-AU0010
DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT



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Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
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Legend

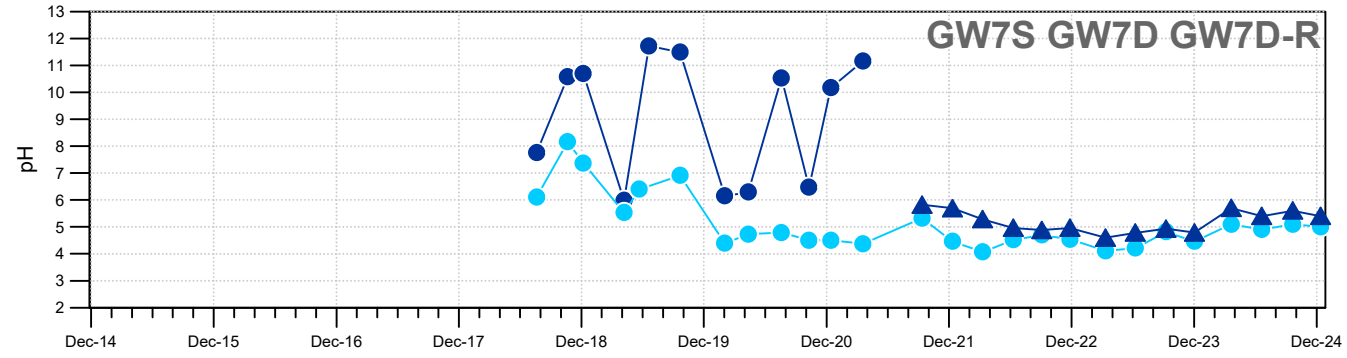
- Shallow Well
- Shallow Well Replacement
- Deep Well
- Deep Well Replacement

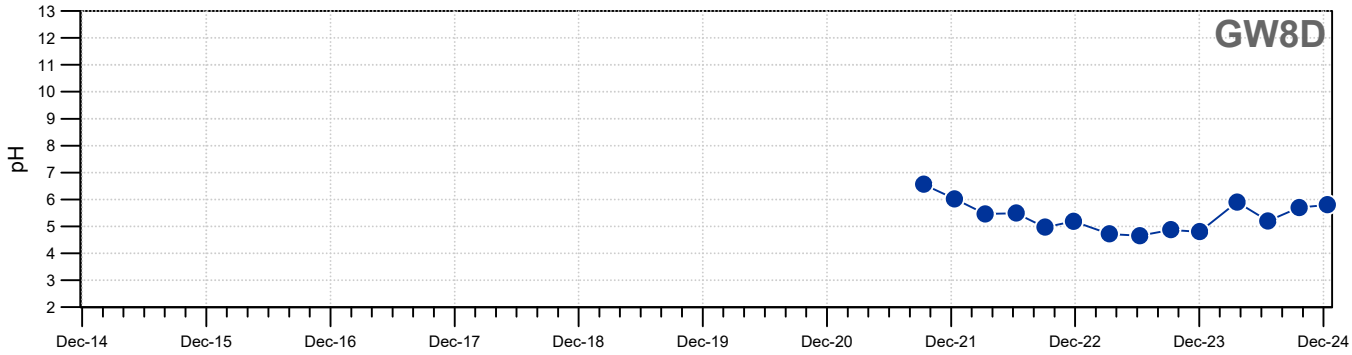
NOTES:
GW5D - dry for all events

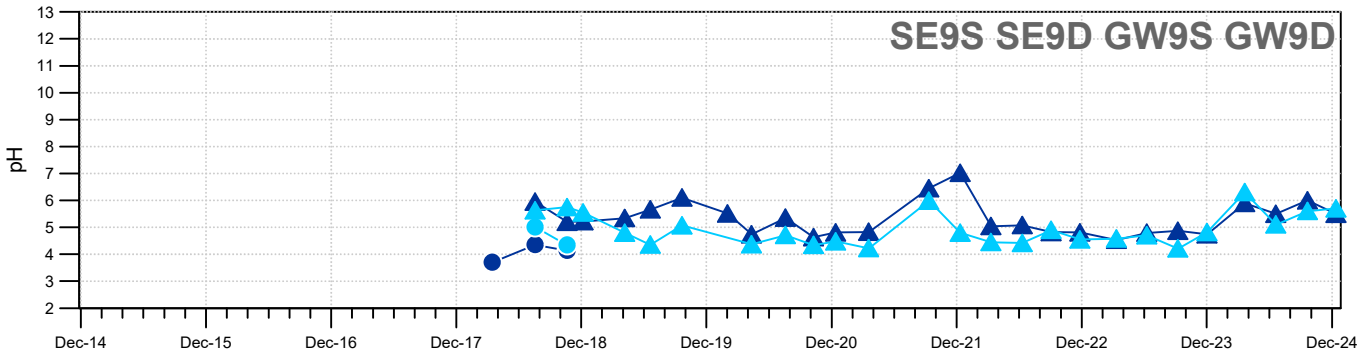
PROJECT No. J-G-AU0010

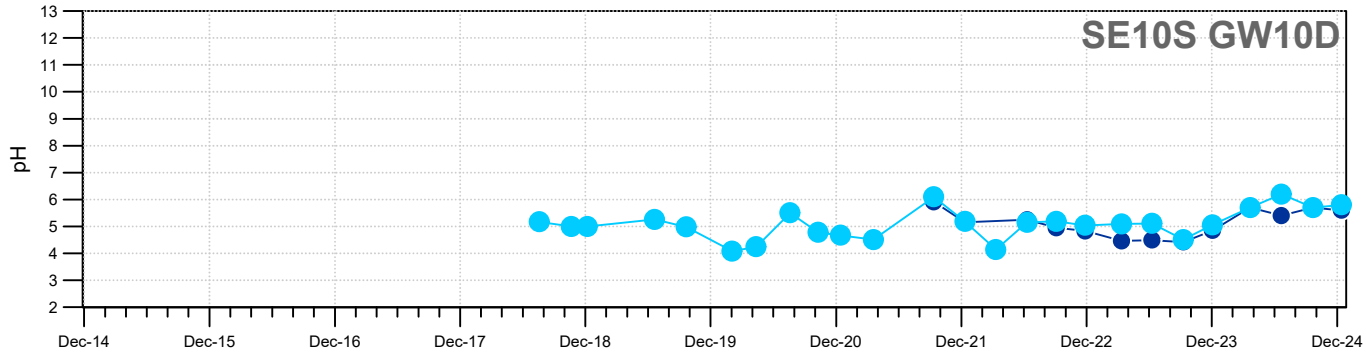
DATE 18/01/2025

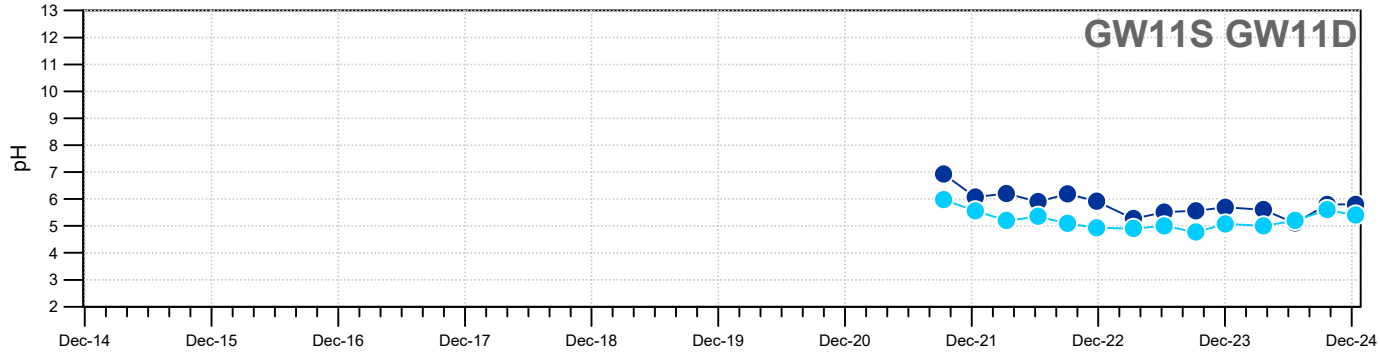
GEOCONTAM RISK MANAGEMENT











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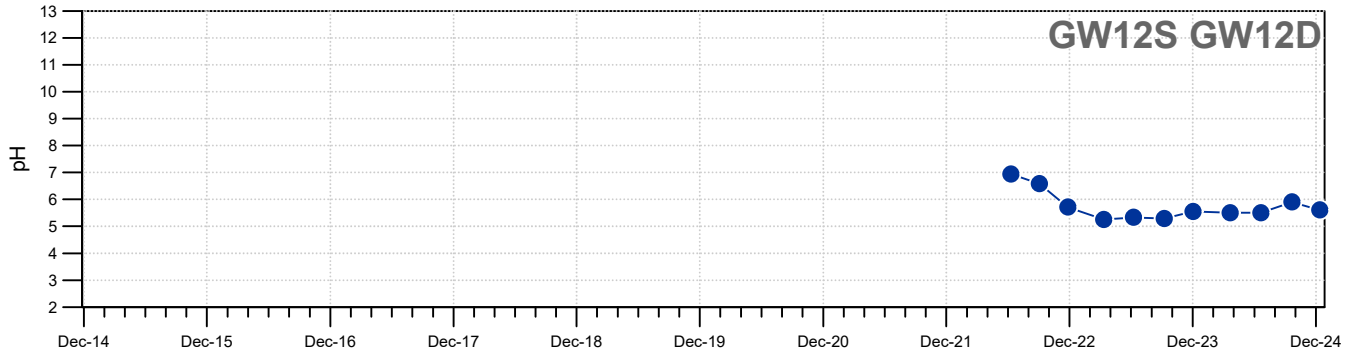

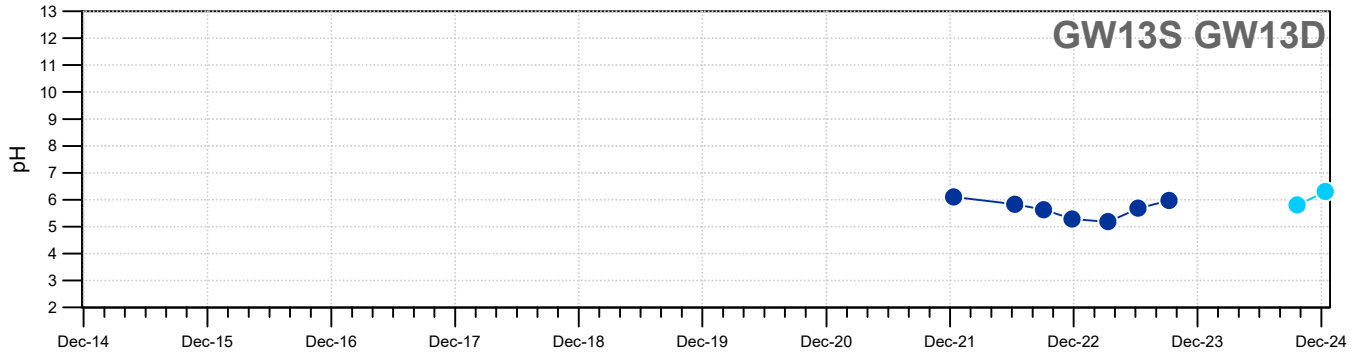

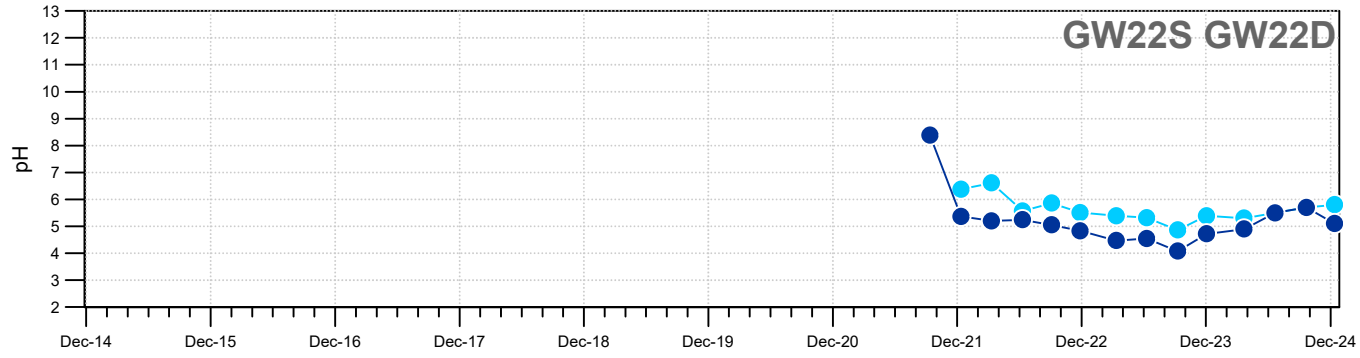

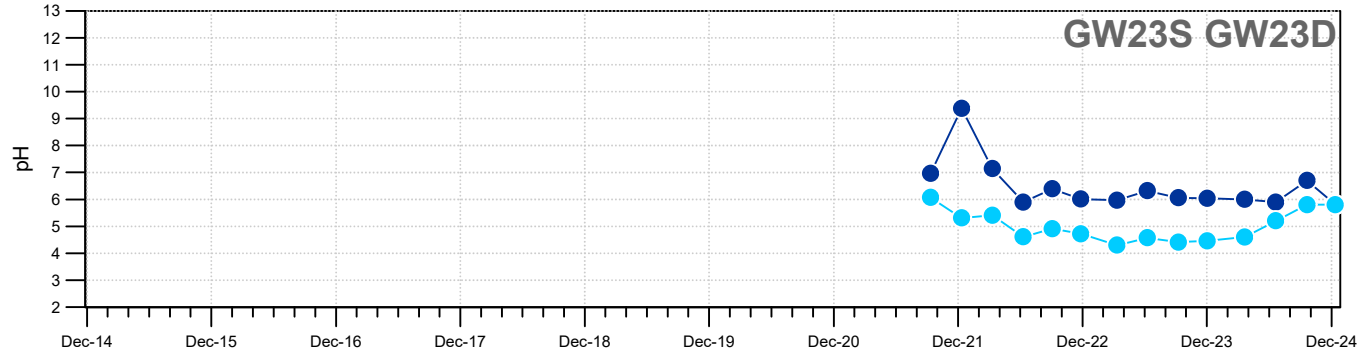

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- Deep Well Replacement

NOTES:
GW12S - dry for all events

PROJECT No. J-G-AU0010

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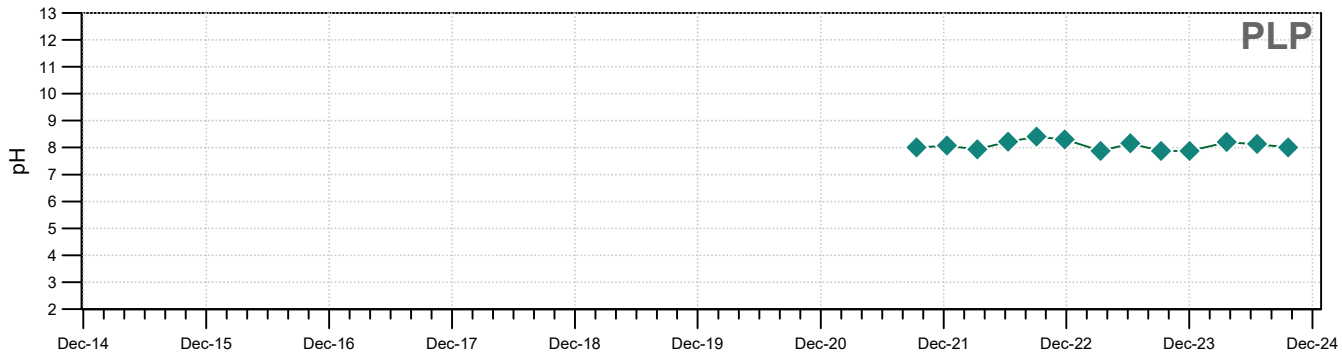

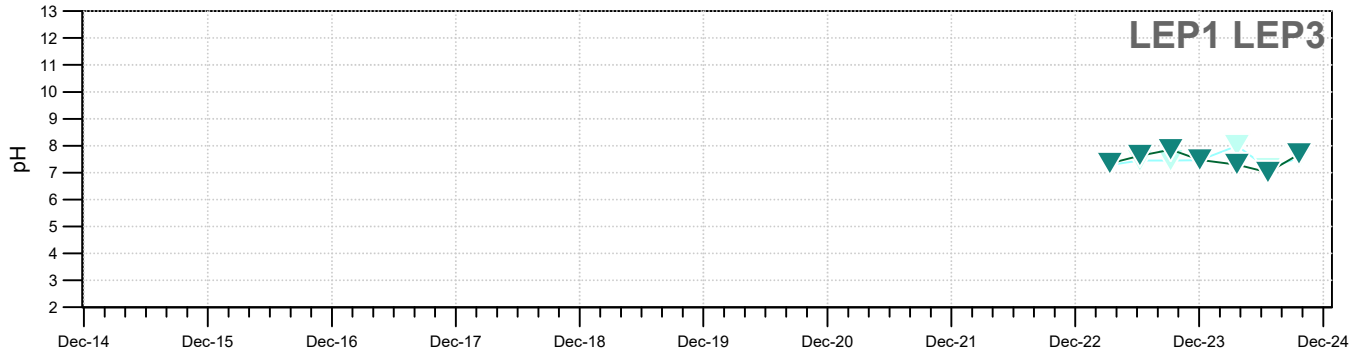

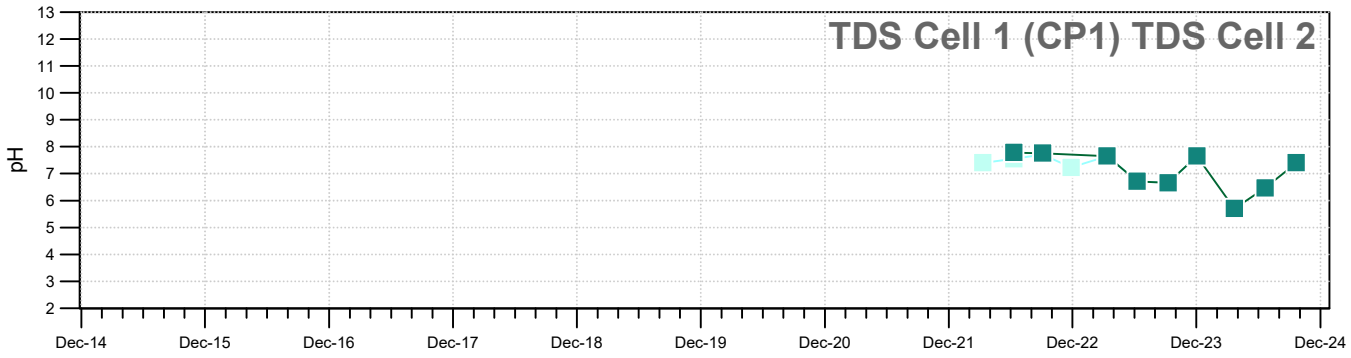

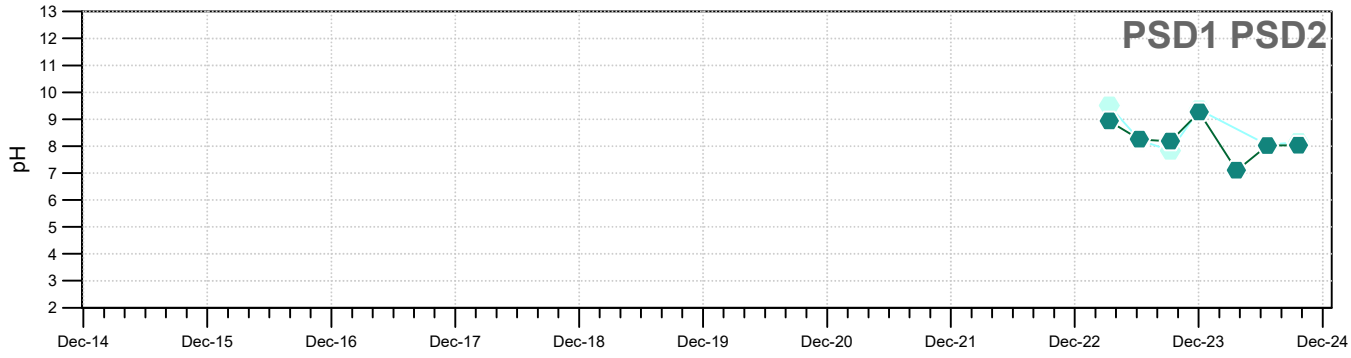

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PSD1
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PLP
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PROJECT No. J-G-AU0010
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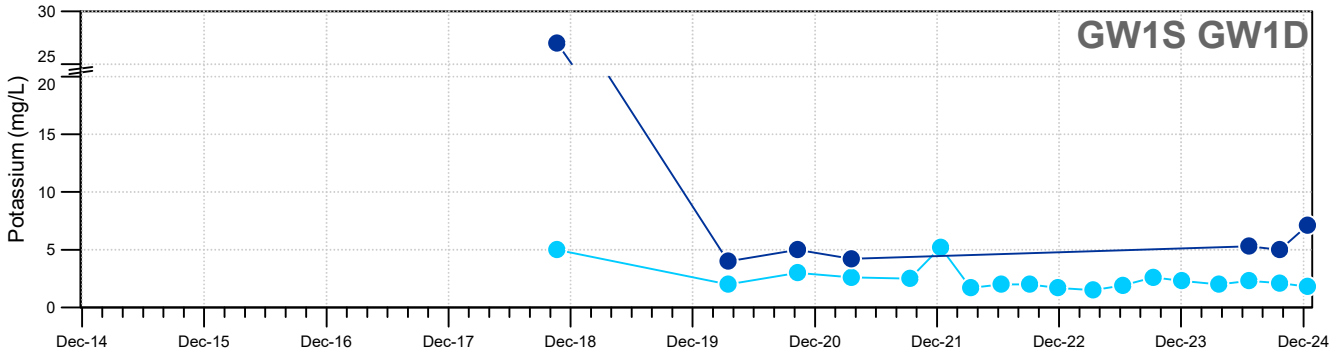
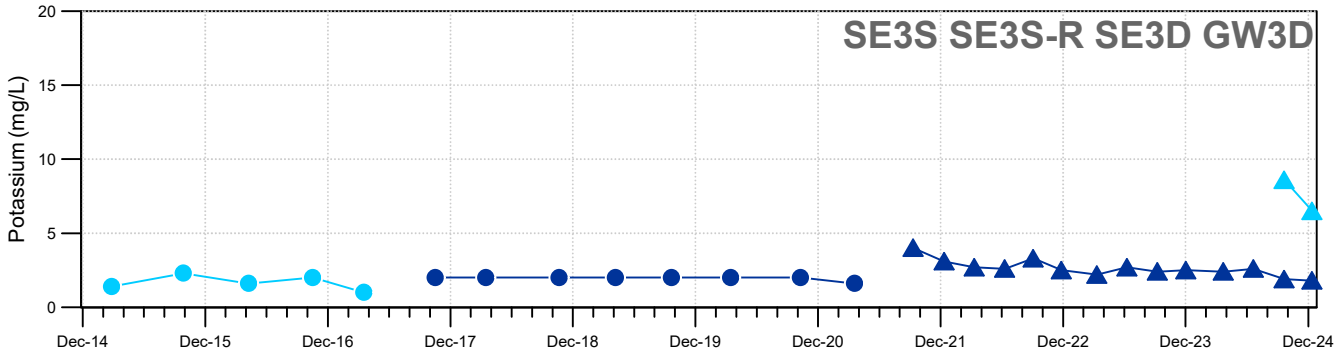
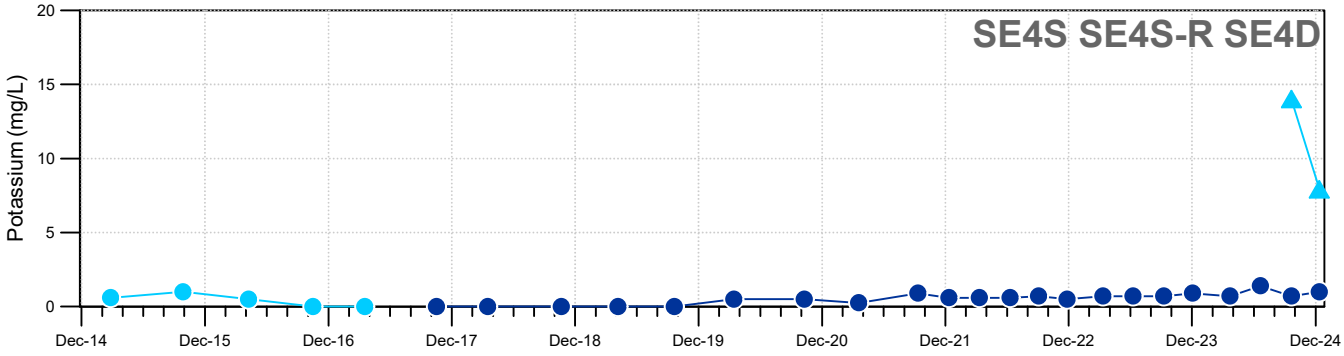
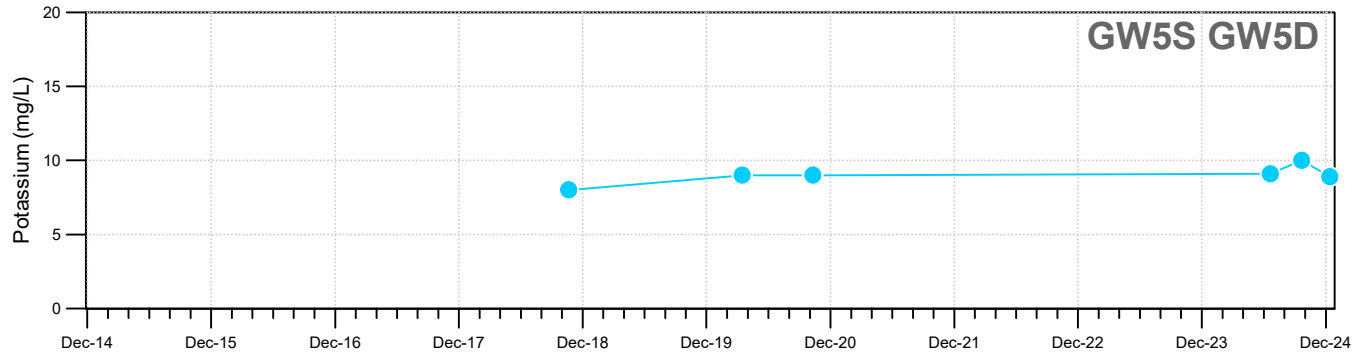
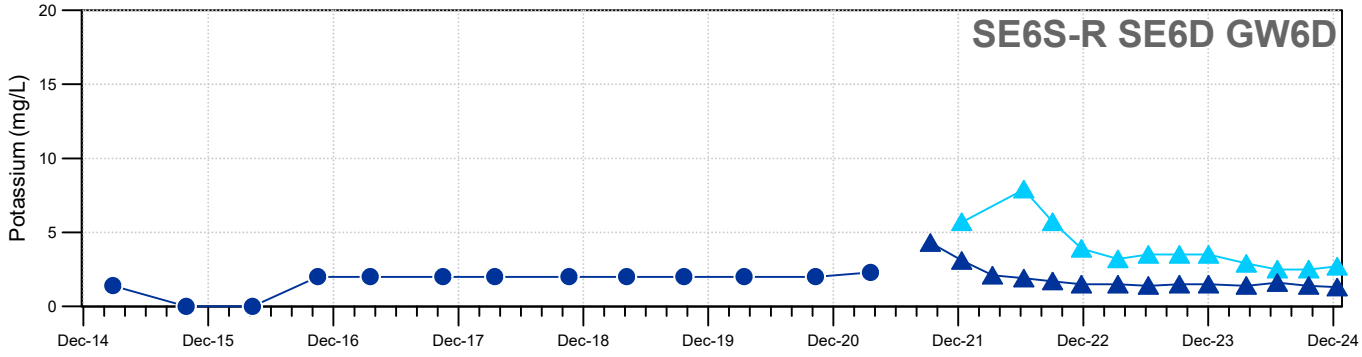
GEOCONTAM RISK MANAGEMENT











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Lot 2 Banksia Road, Crooked Brook, WA
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- Shallow Well Replacement
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- Deep Well Replacement

NOTES:
GW5D - dry for all events

PROJECT No. J-G-AU0010

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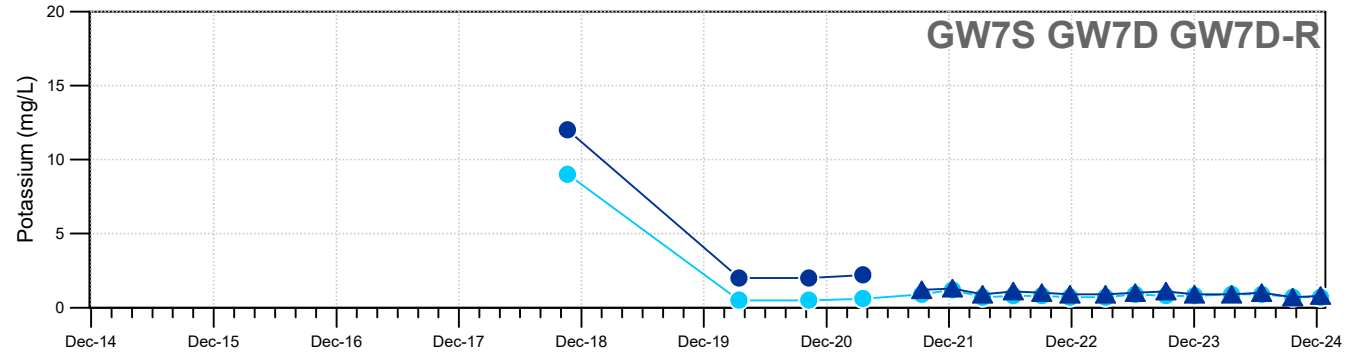
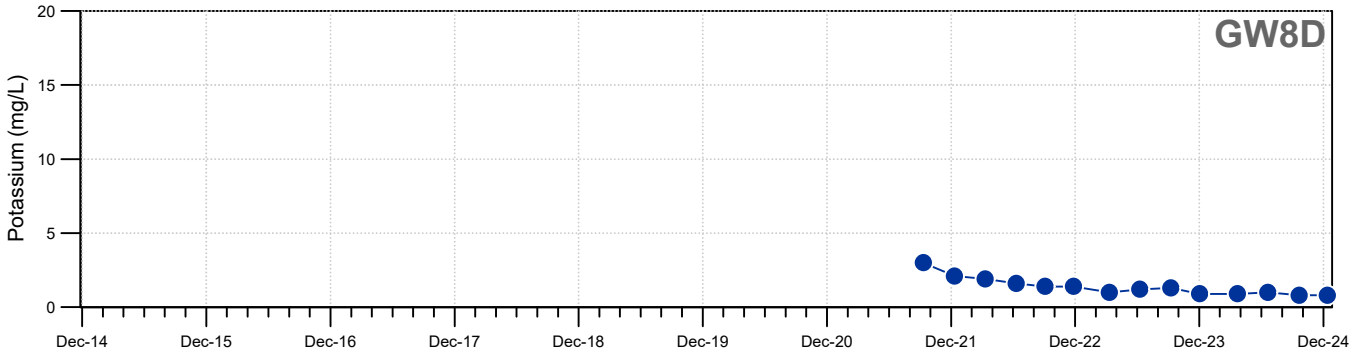
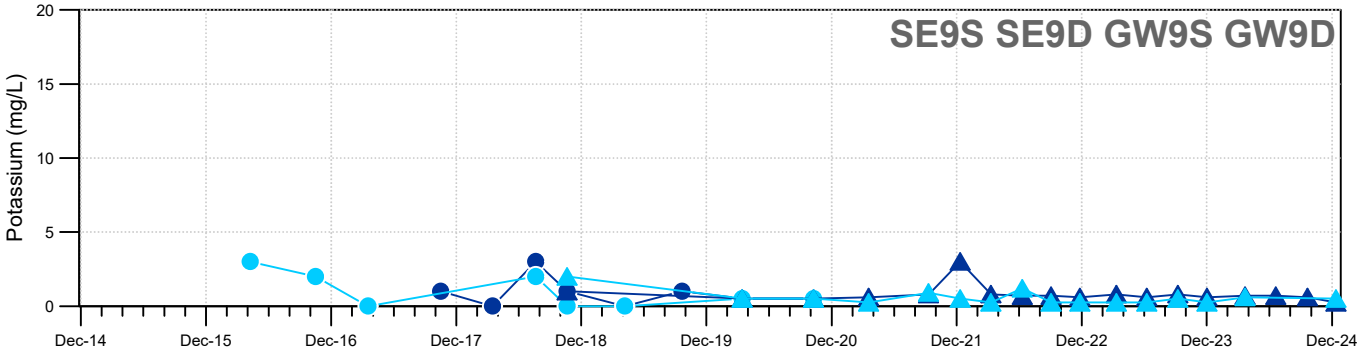
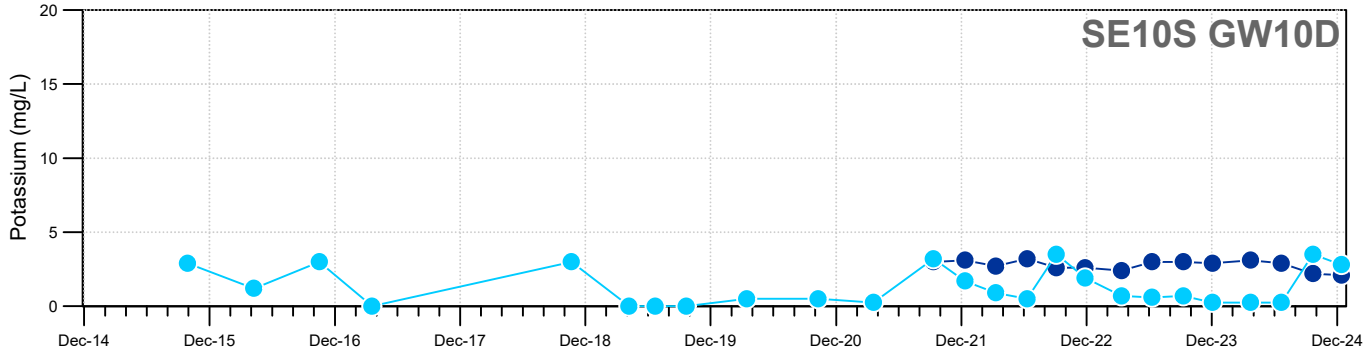
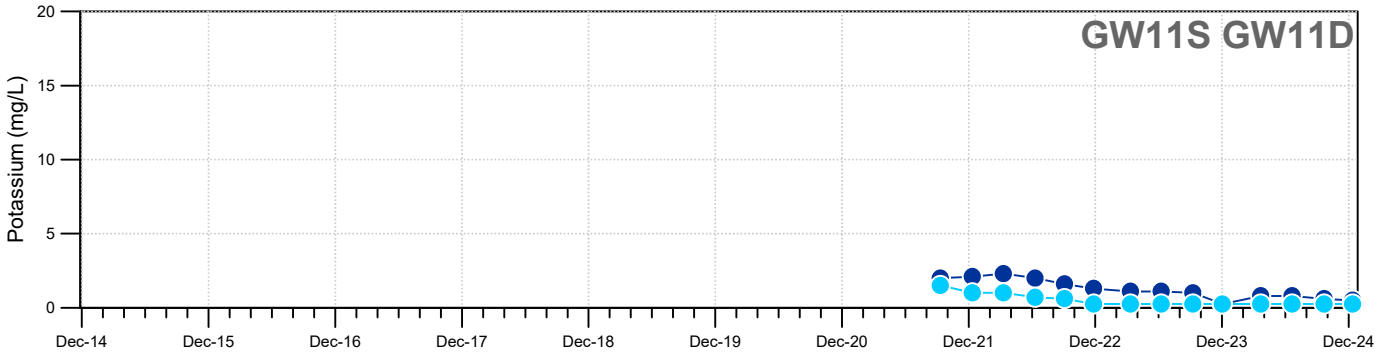
GEOCONTAM RISK MANAGEMENT











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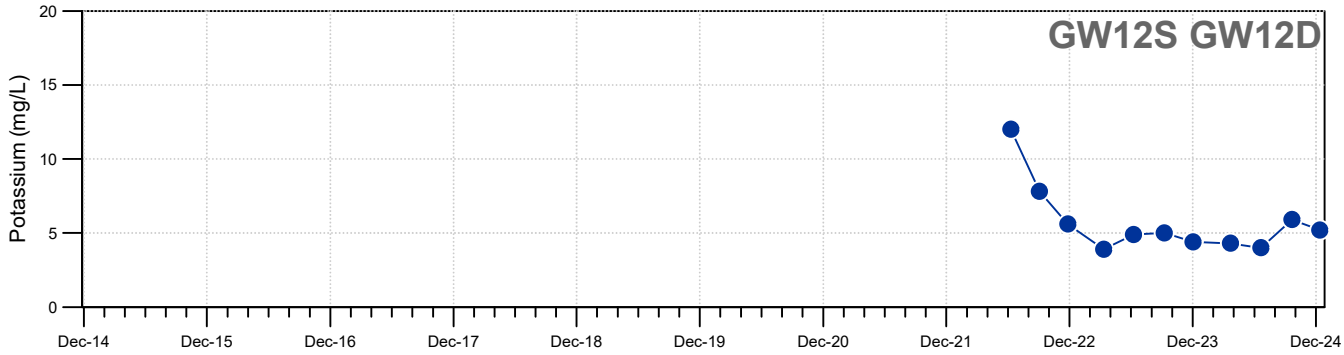

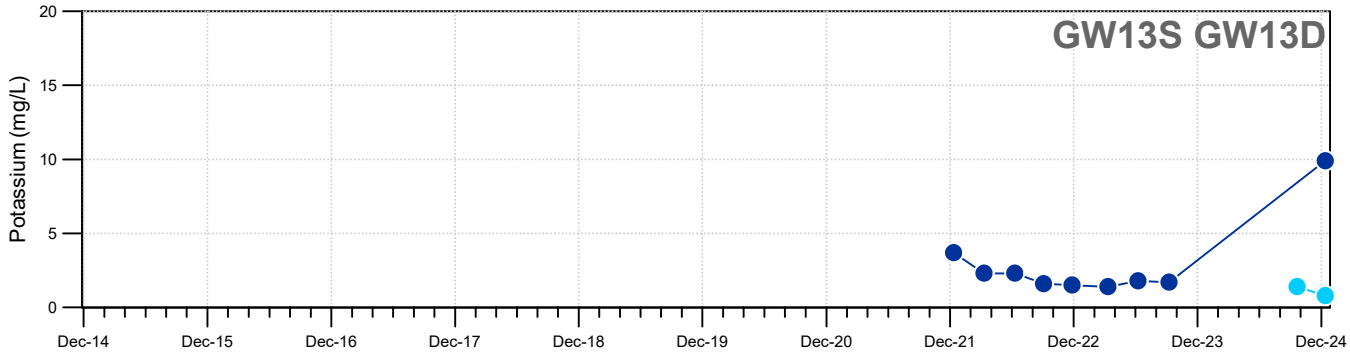

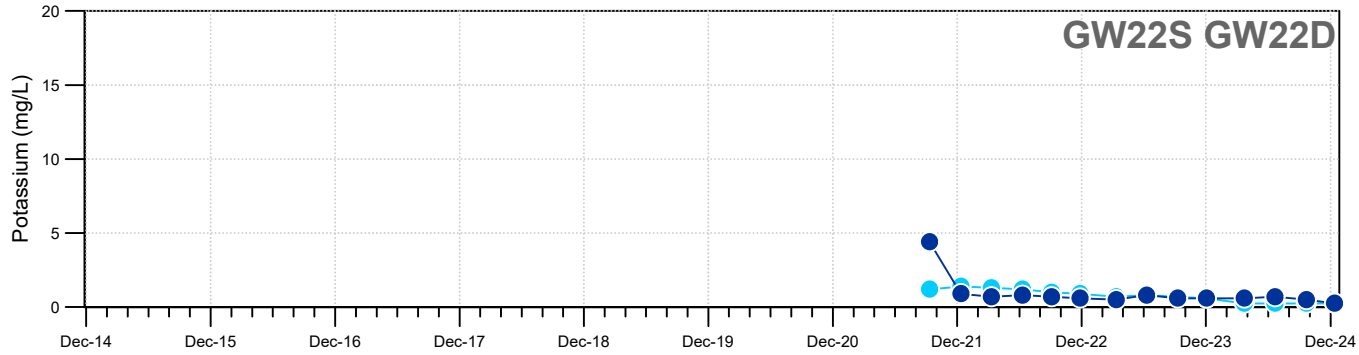

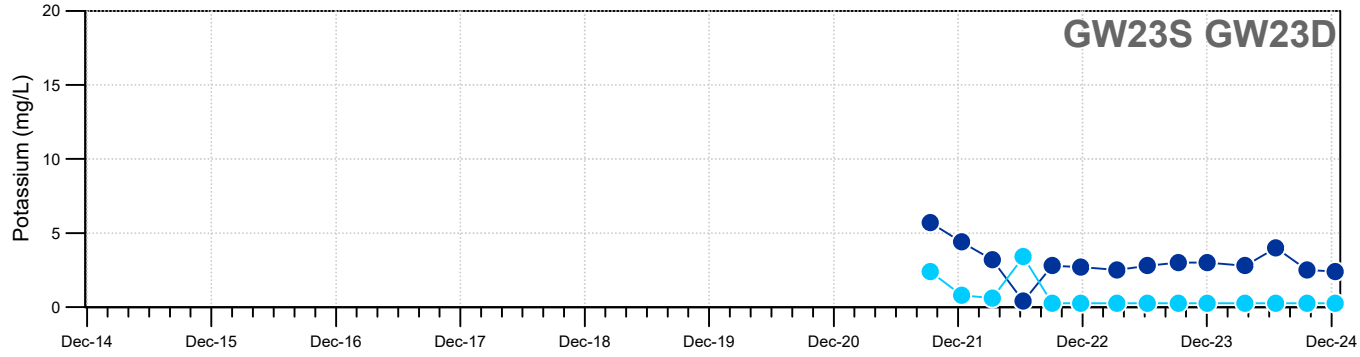

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Lot 2 Banksia Road, Crooked Brook, WA
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NOTES:
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PROJECT No. J-G-AU0010

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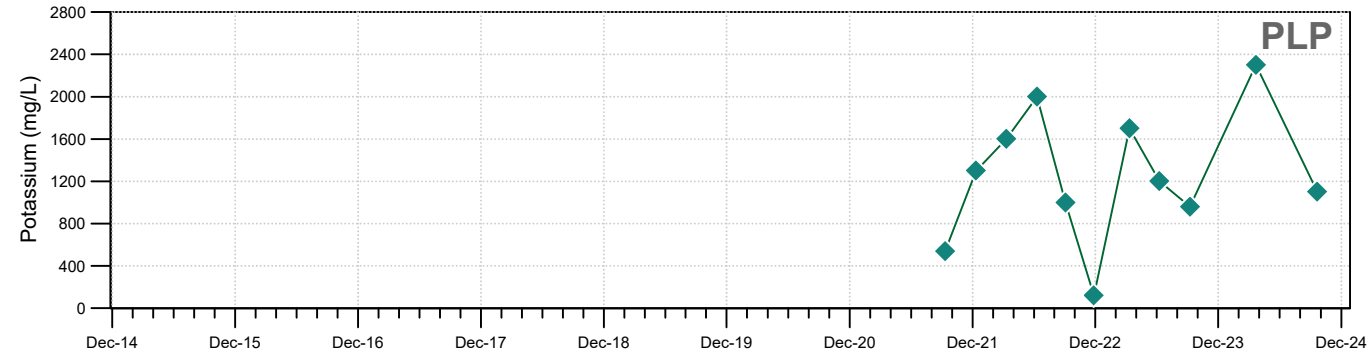
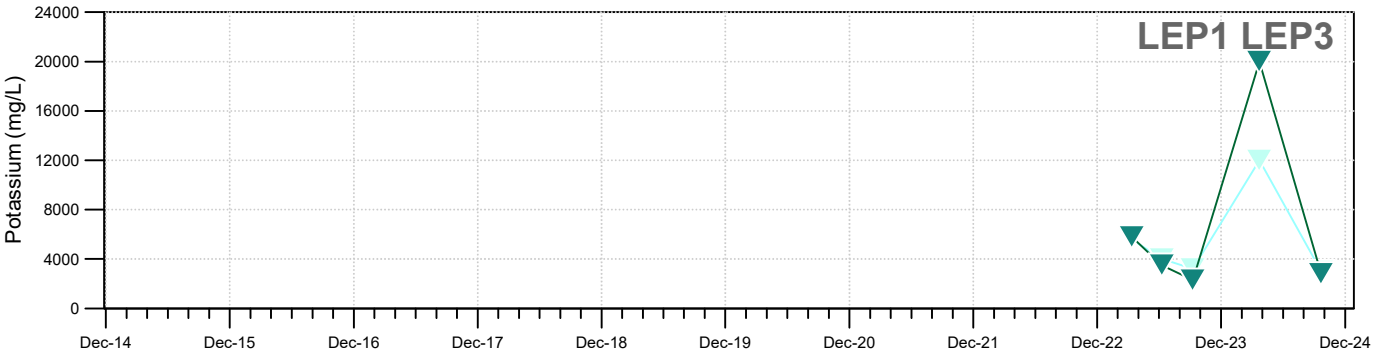
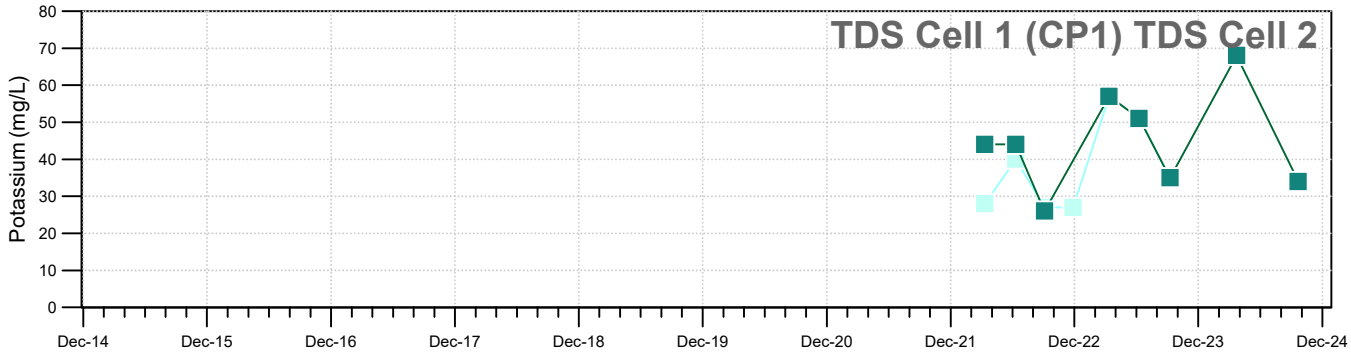
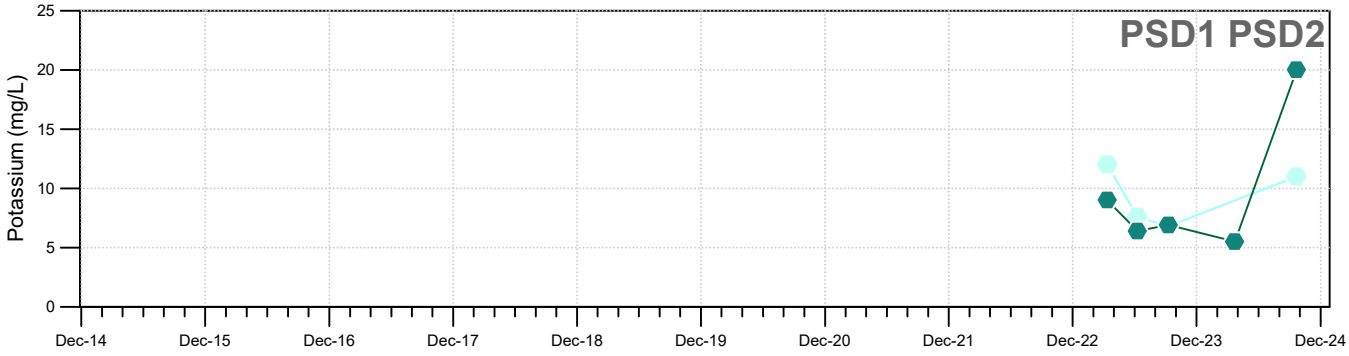
GEOCONTAM RISK MANAGEMENT









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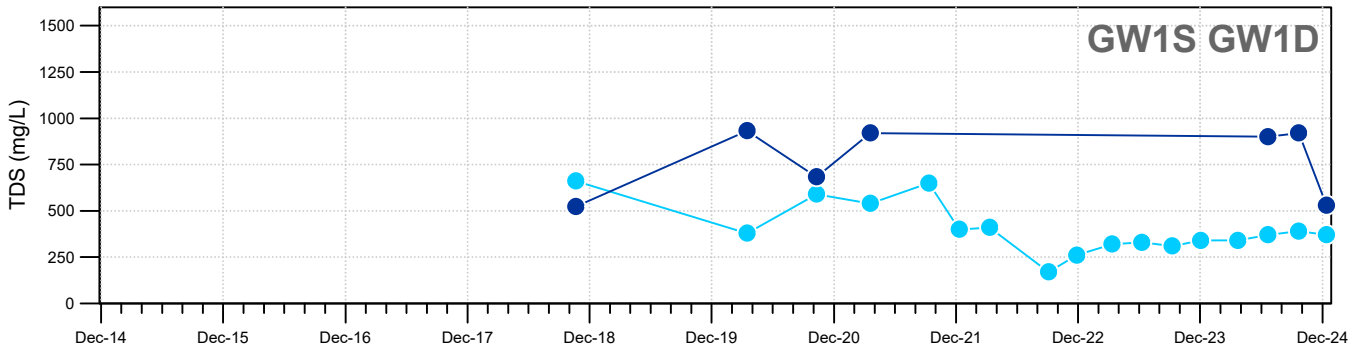

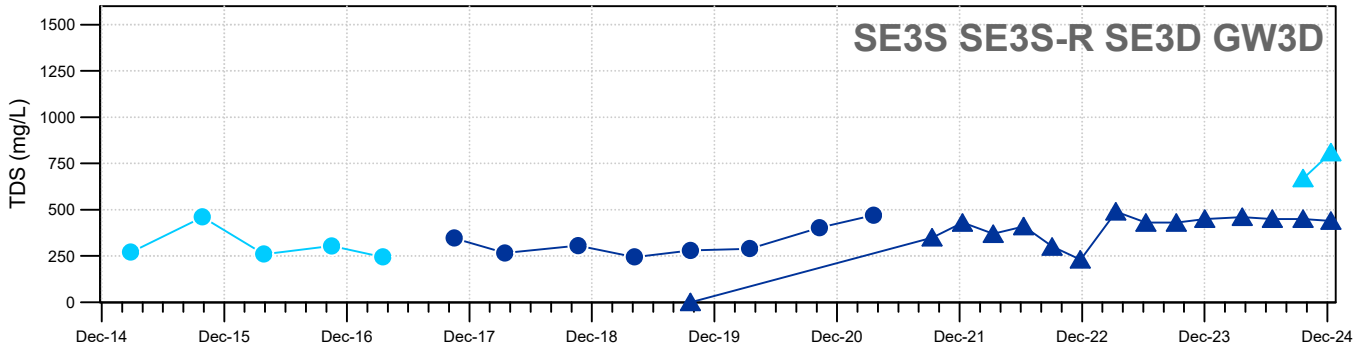

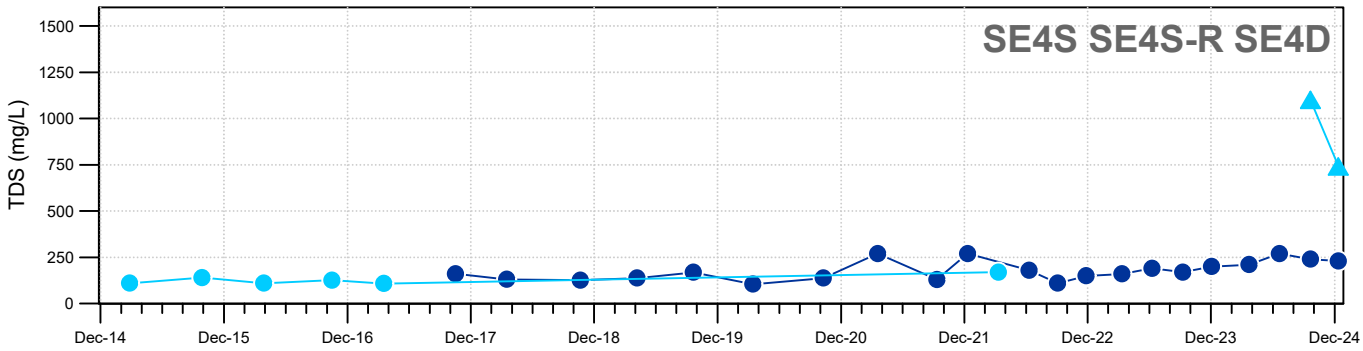

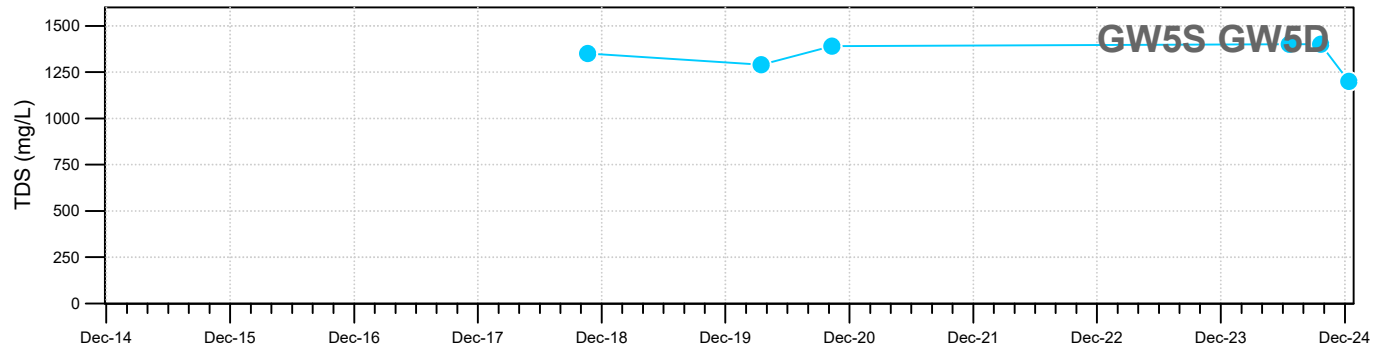

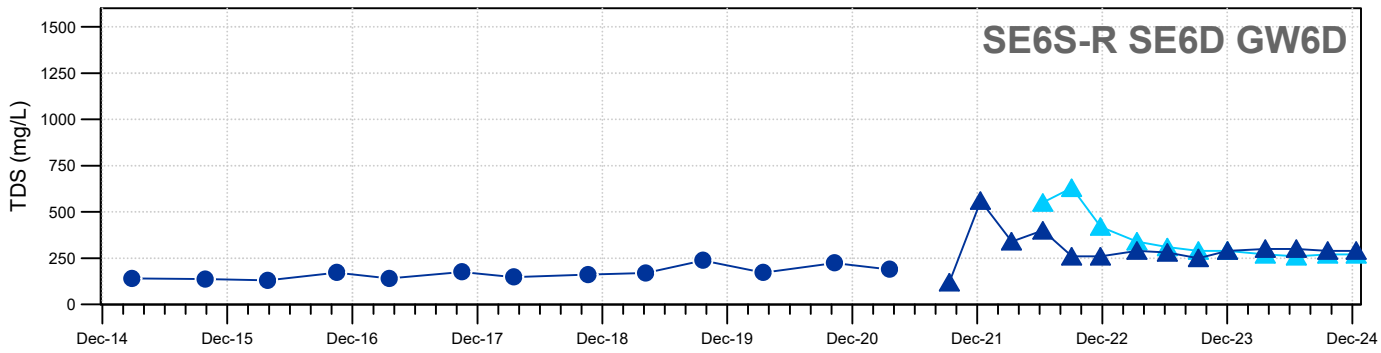

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NOTES:
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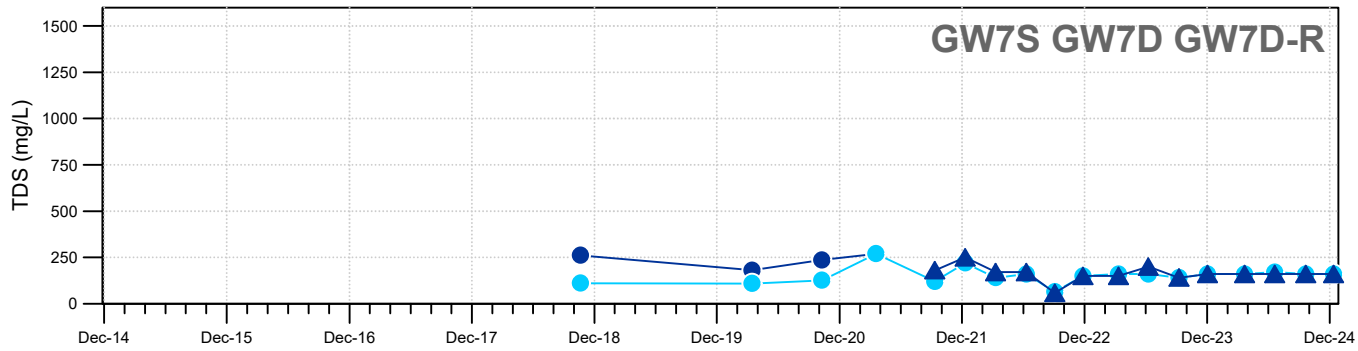

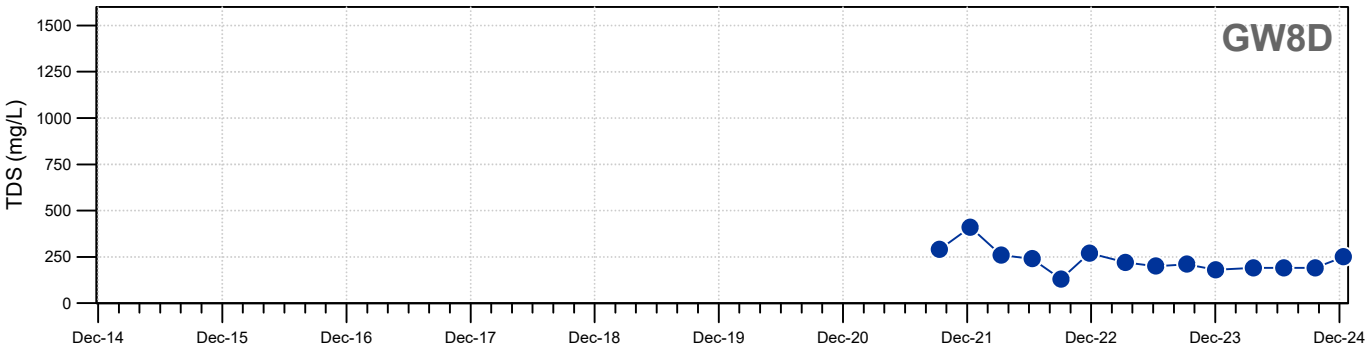

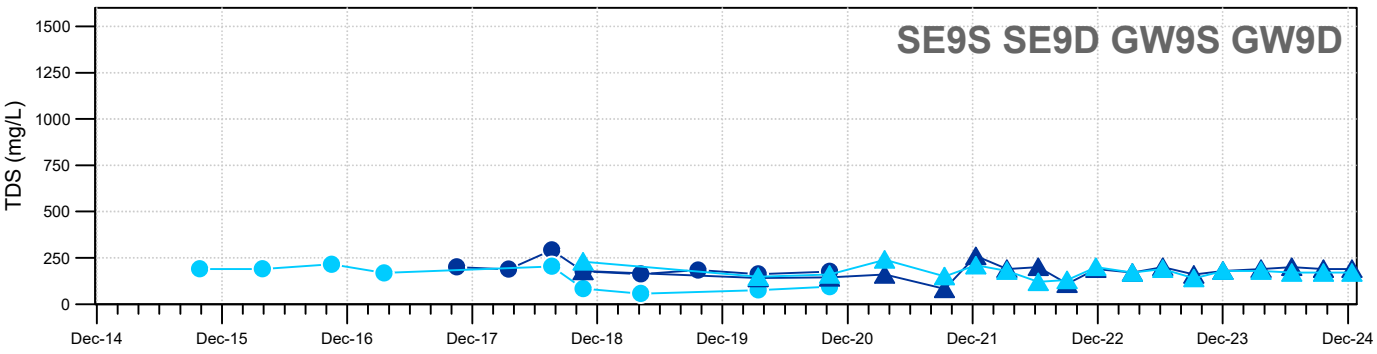

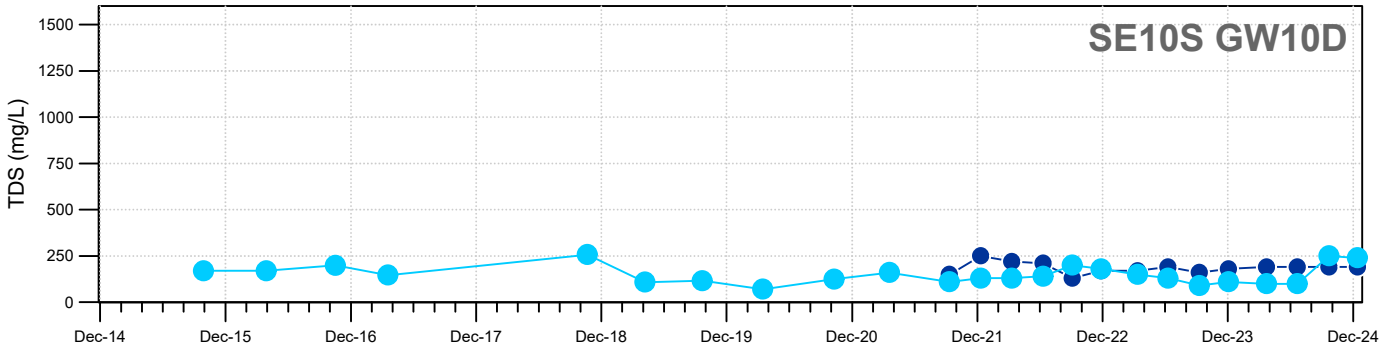

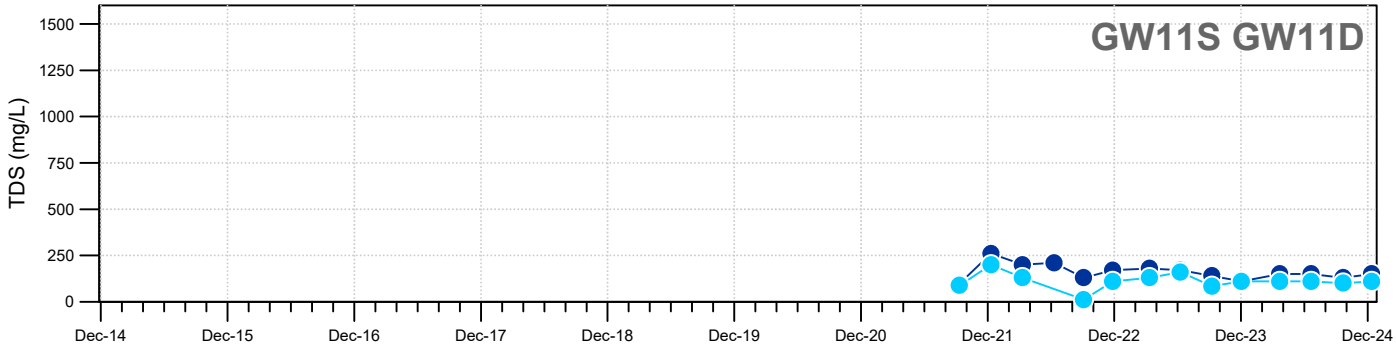

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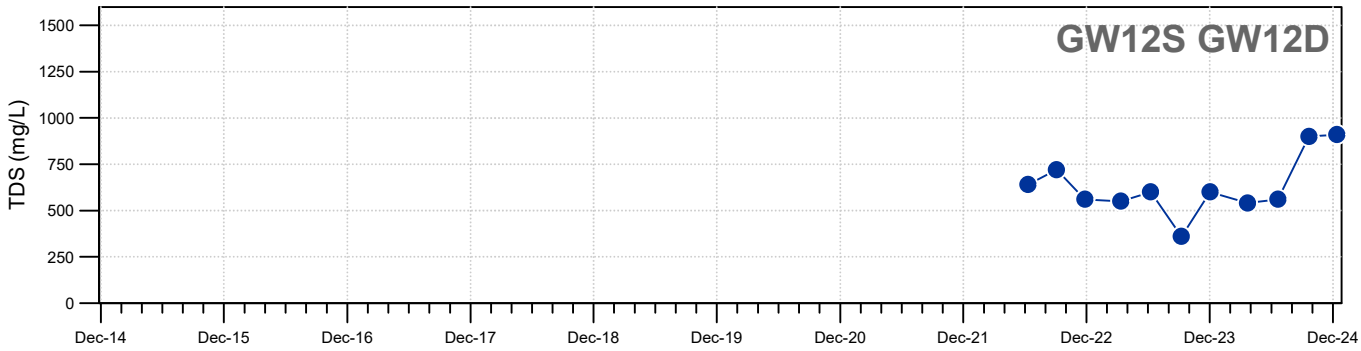
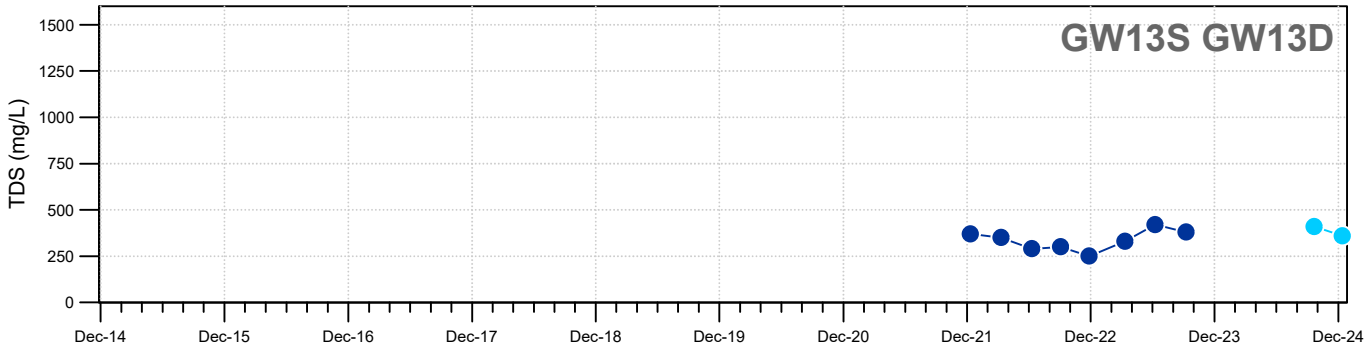
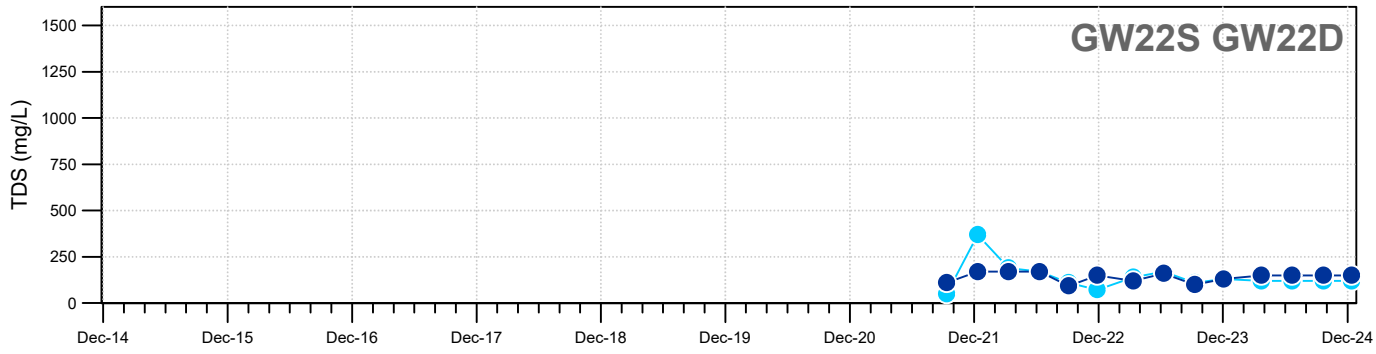
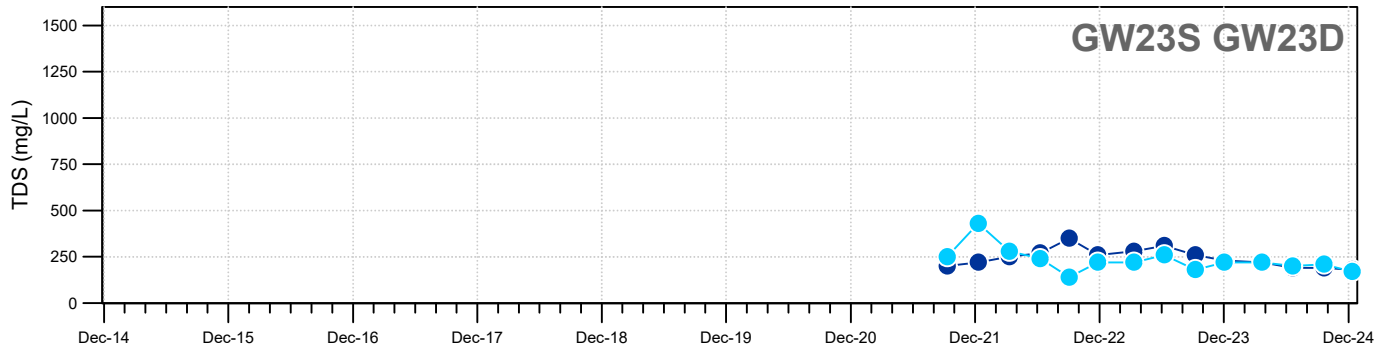








CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

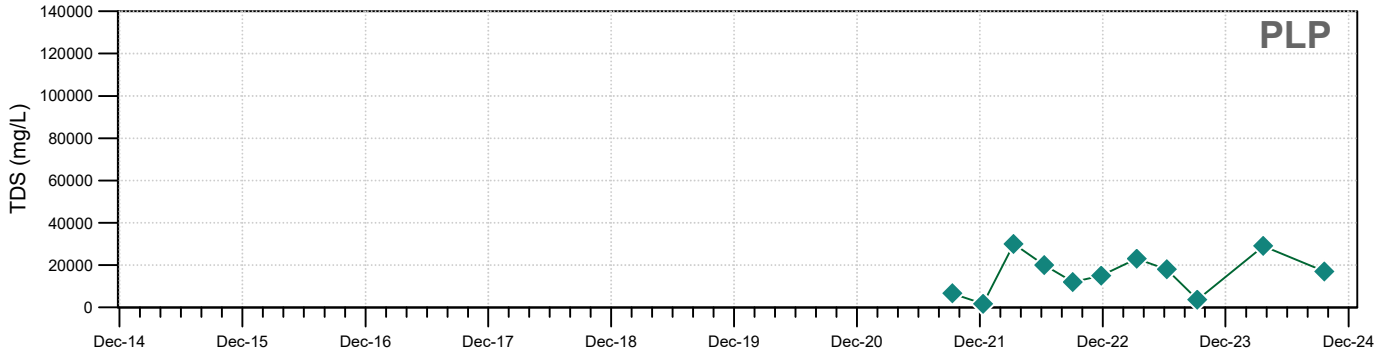
- Shallow Well
- Shallow Well Replacement
- Deep Well
- Deep Well Replacement

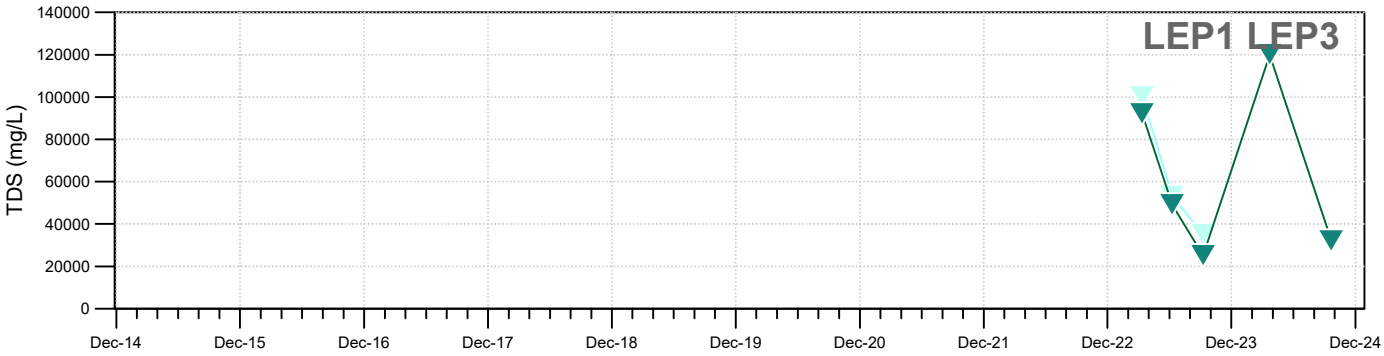
NOTES:
GW12S - dry for all events

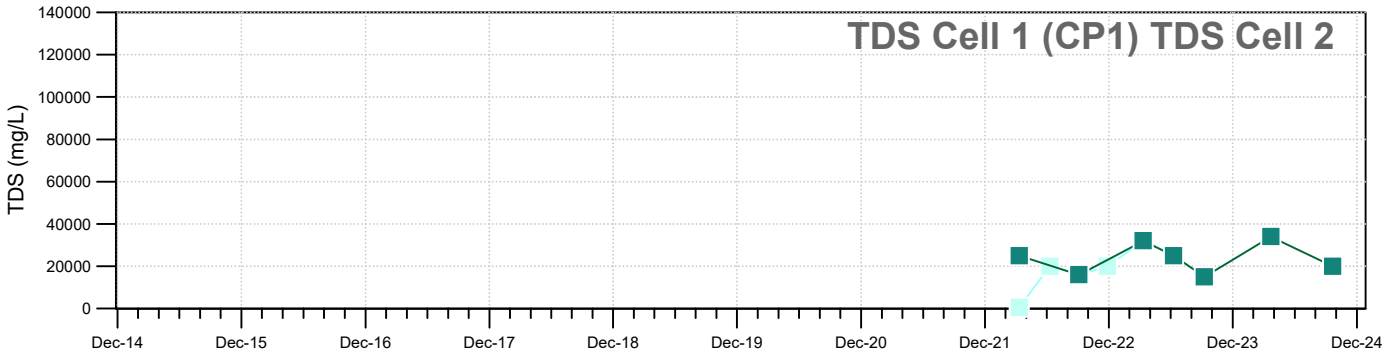
PROJECT No. J-G-AU0010

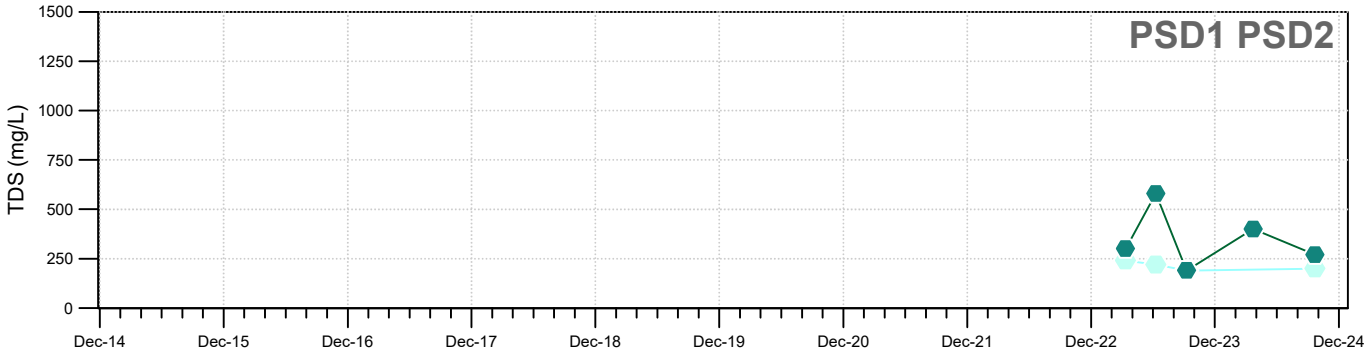
DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT









CLIENT
Cleanaway Waste Management Ltd

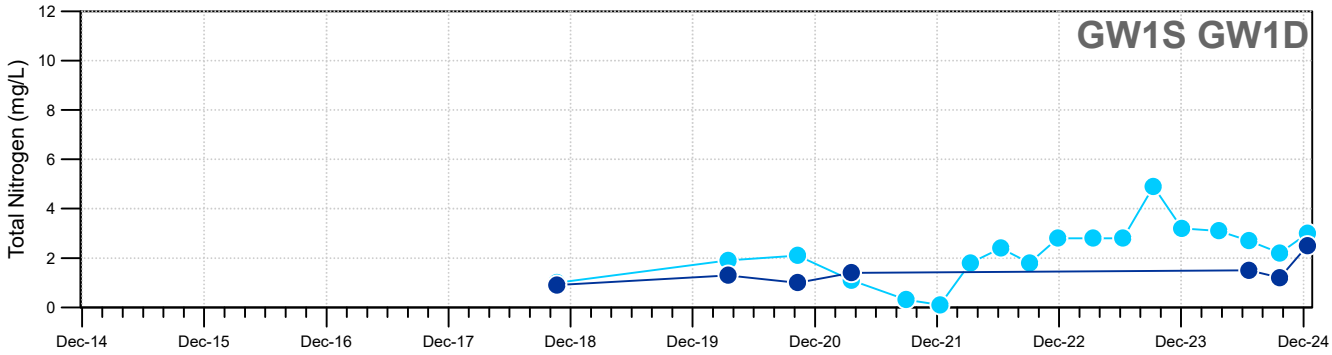
PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

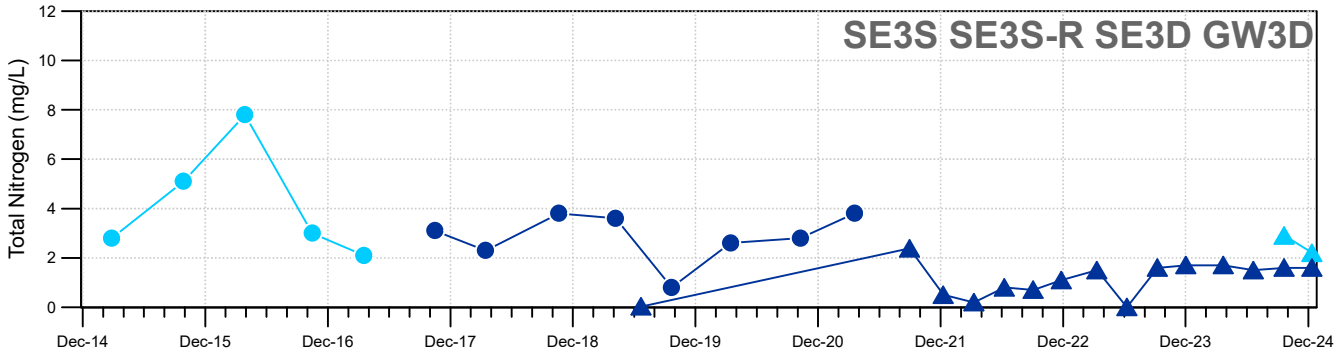
Legend

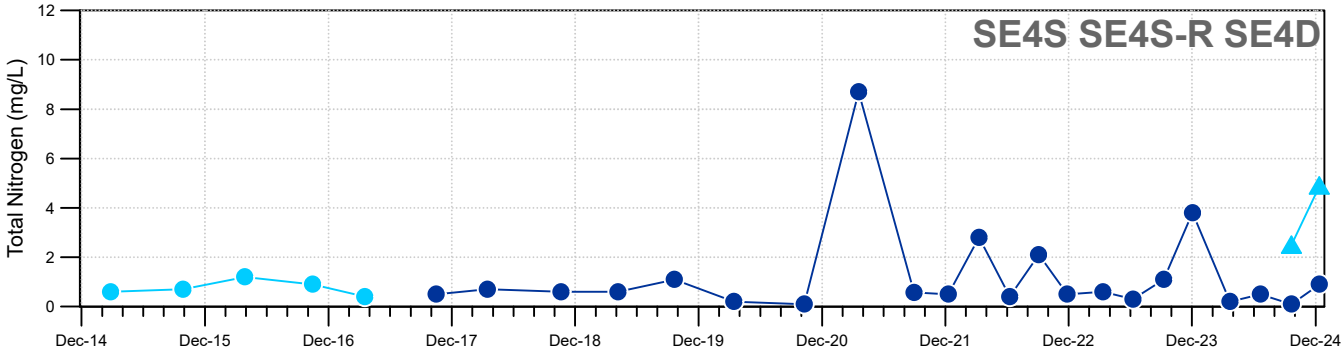
PSD1
PSD2
TDS Cell 1 (CP1)
TDS Cell 2
PLP
LEP1
LEP3

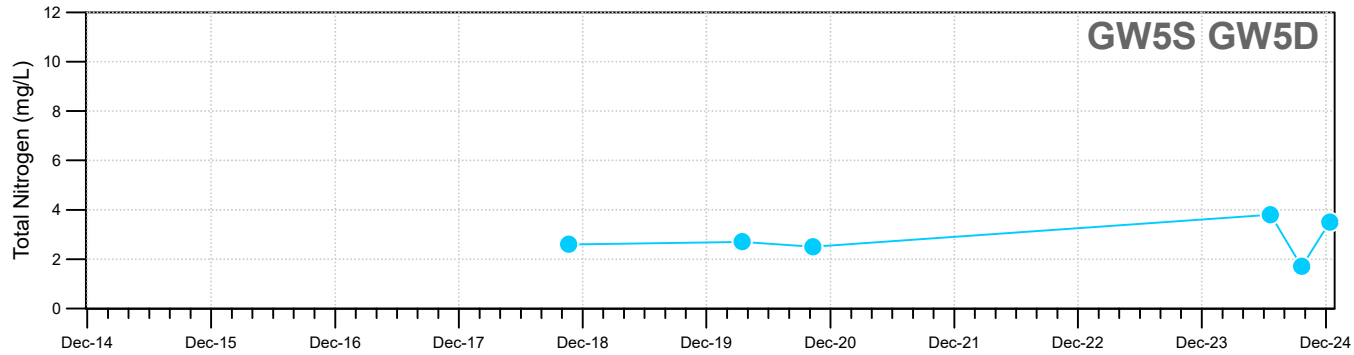
PROJECT No. J-G-AU0010
DATE 18/01/2025

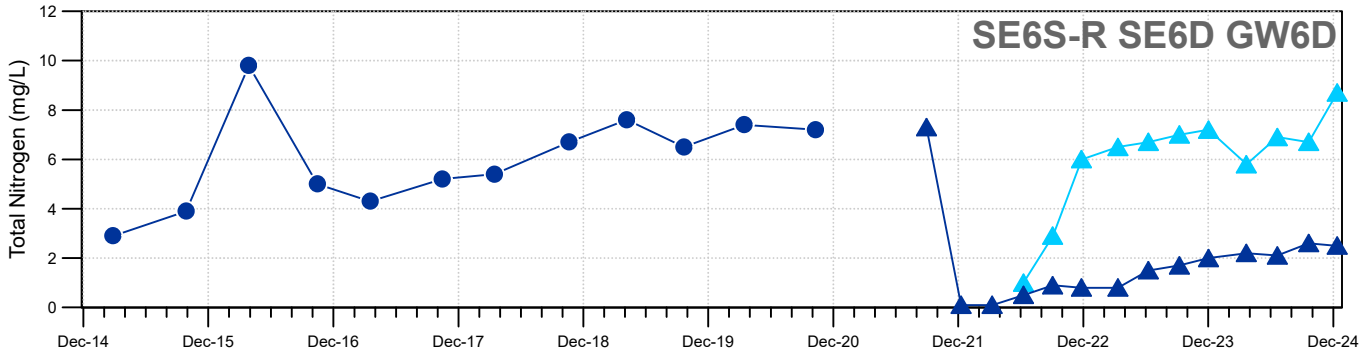
GEOCONTAM RISK MANAGEMENT











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Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

- Shallow Well
- Shallow Well Replacement
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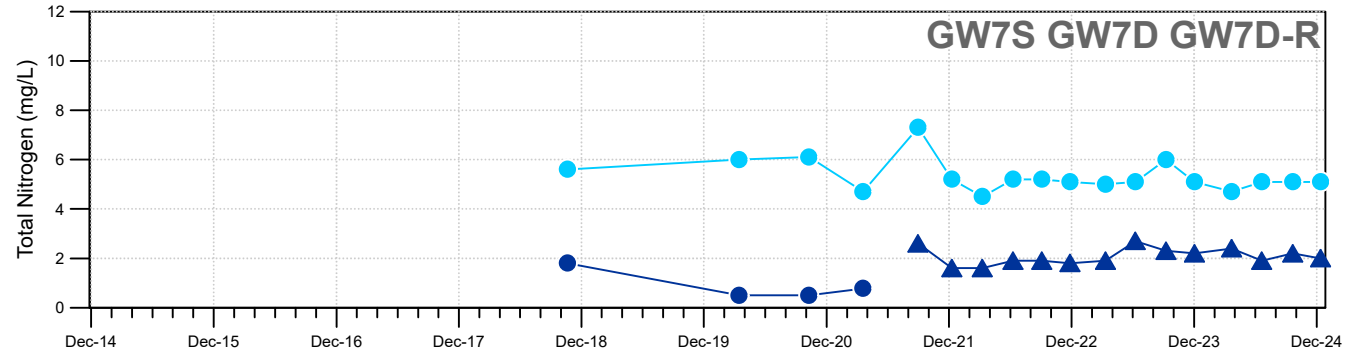
- Deep Well Replacement

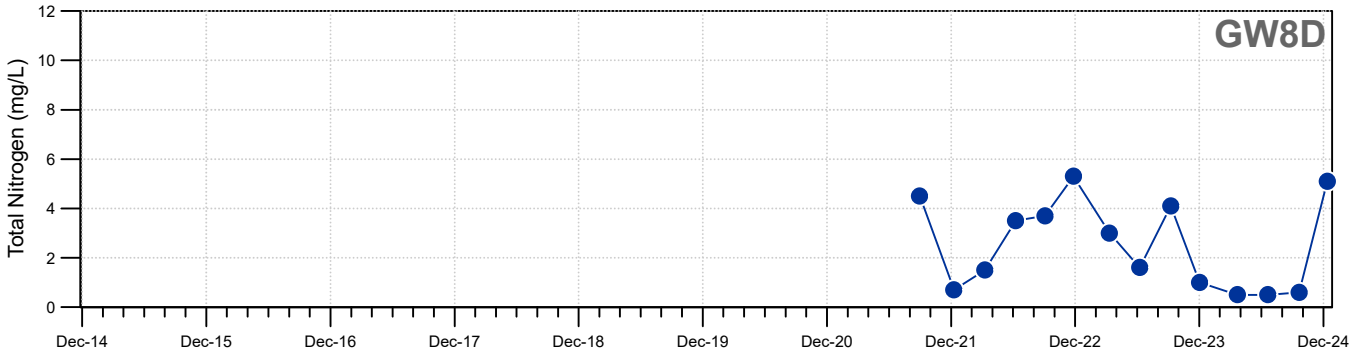
NOTES:
GW5D - dry for all events

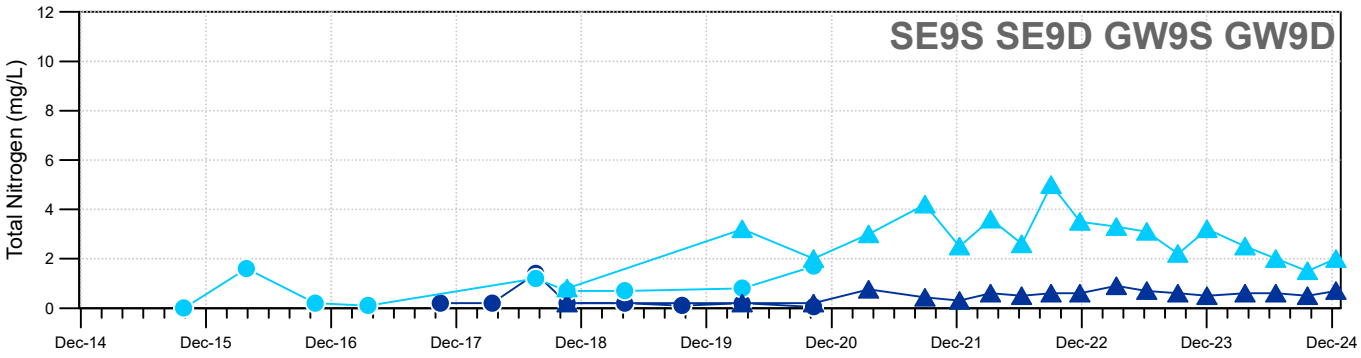
PROJECT No. J-G-AU0010

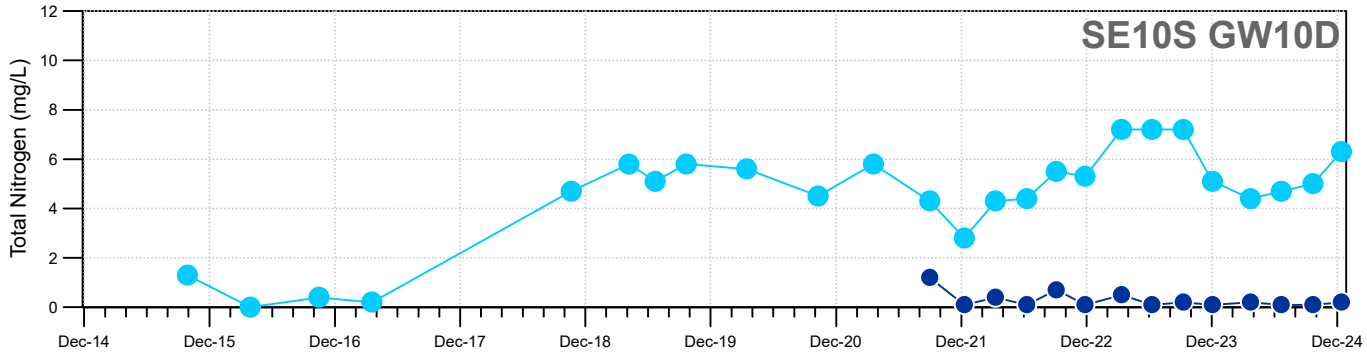
DATE 18/01/2025

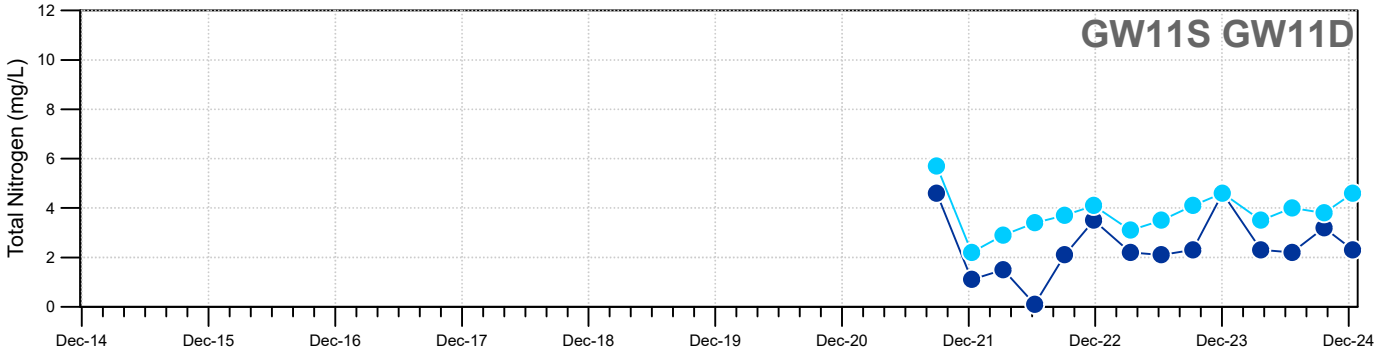
GEOCONTAM RISK MANAGEMENT











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PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
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Legend

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PROJECT No. J-G-AU0010

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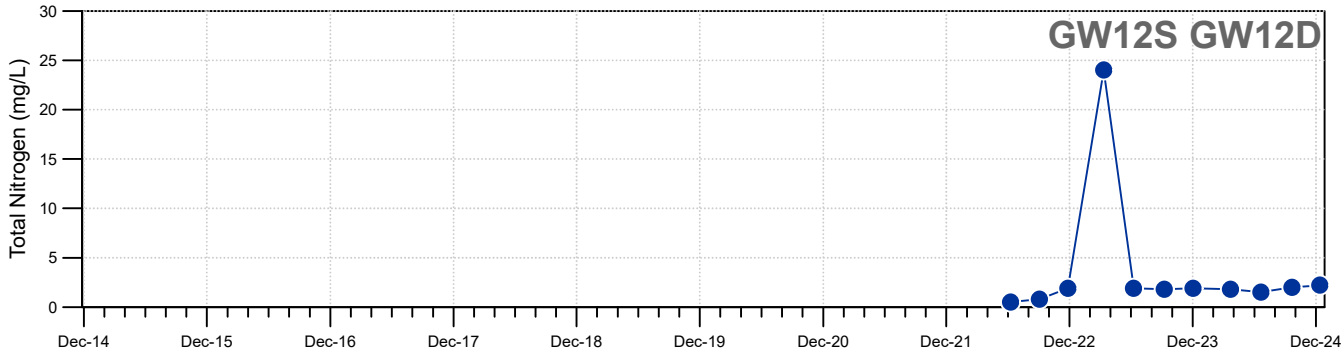
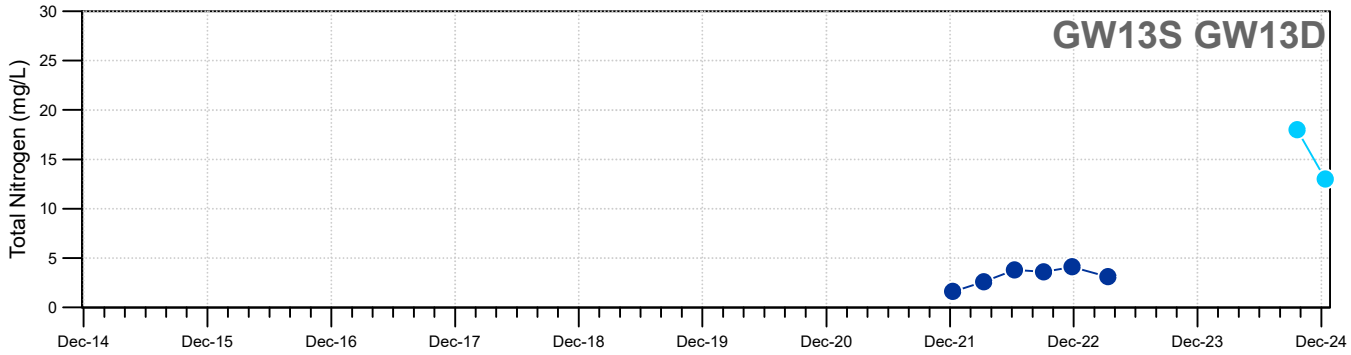
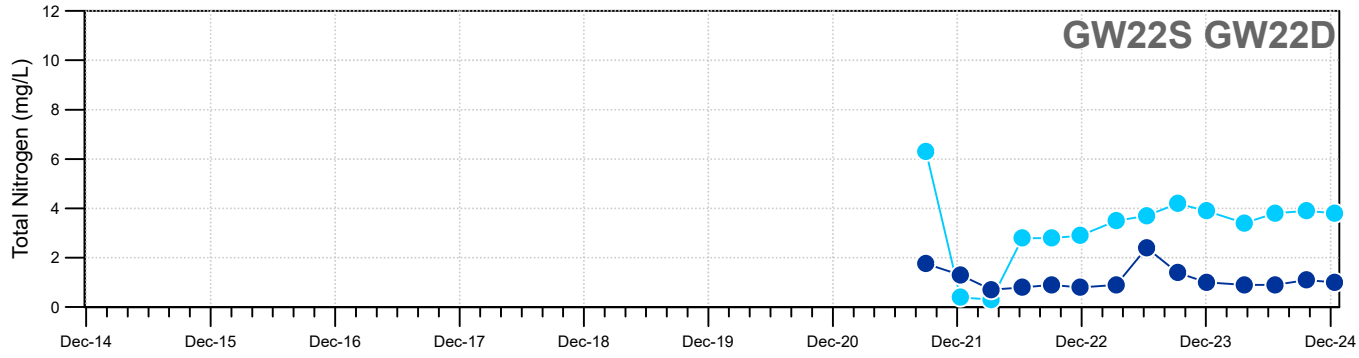
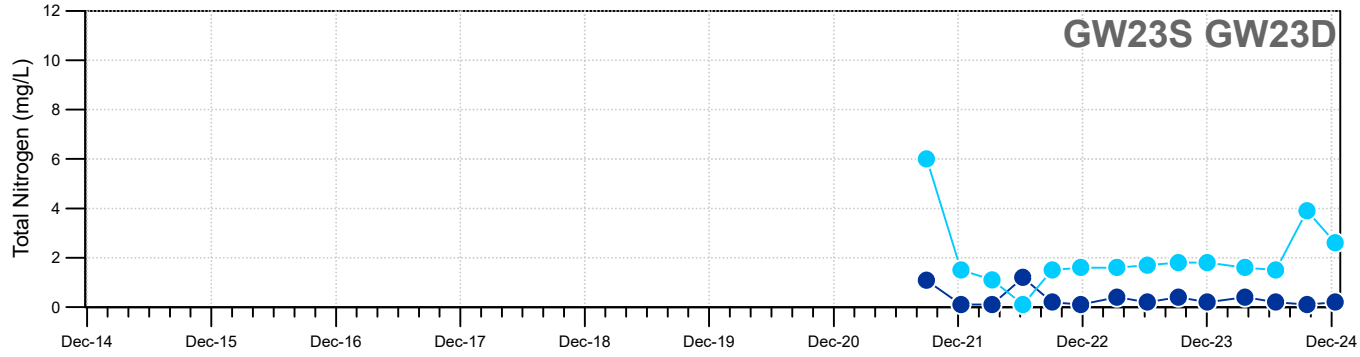
GEOCONTAM RISK MANAGEMENT









CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

- Shallow Well
- Shallow Well Replacement
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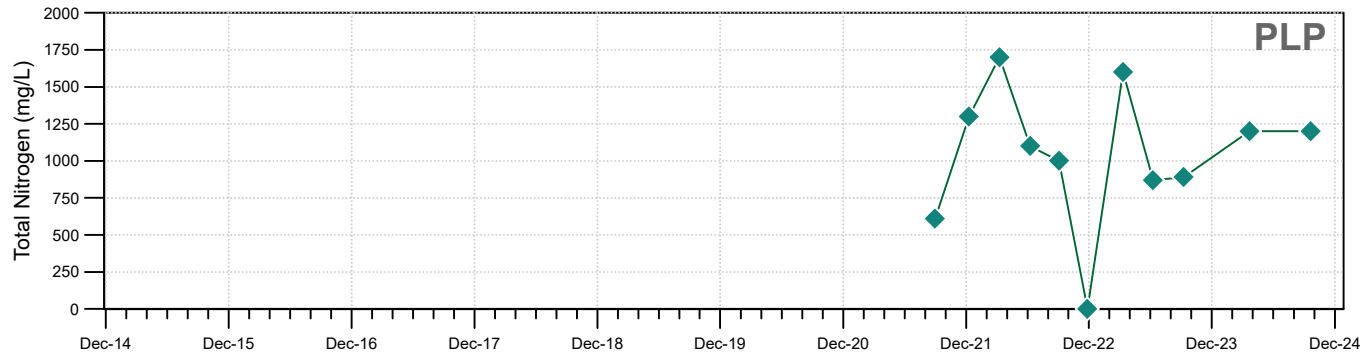
- Deep Well Replacement

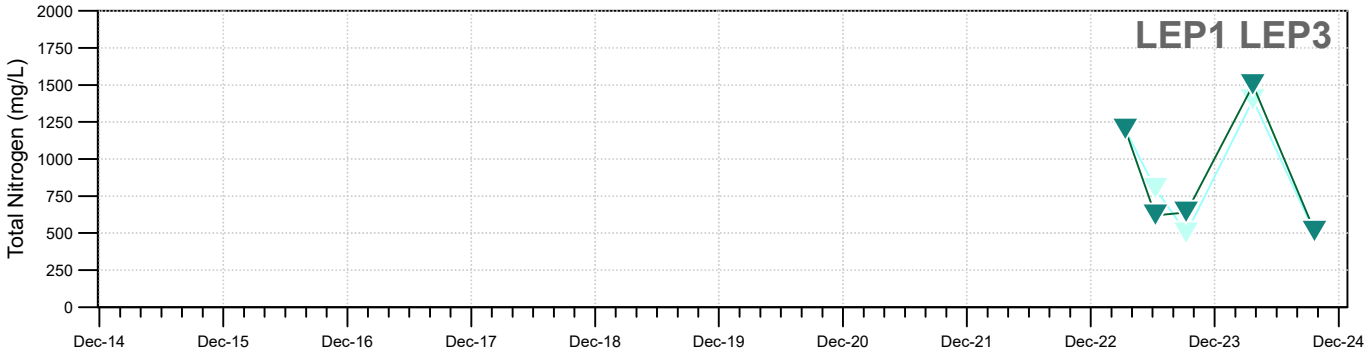
NOTES:
GW12S - dry for all events

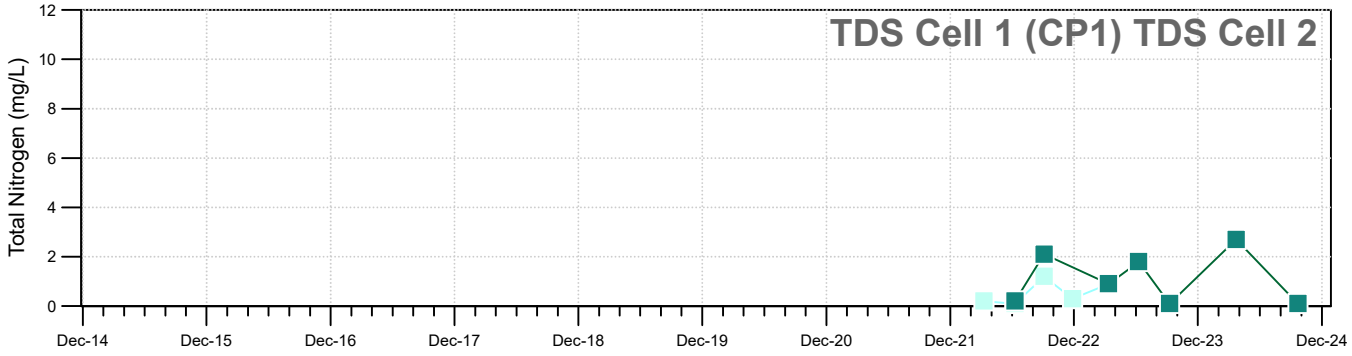
PROJECT No. J-G-AU0010

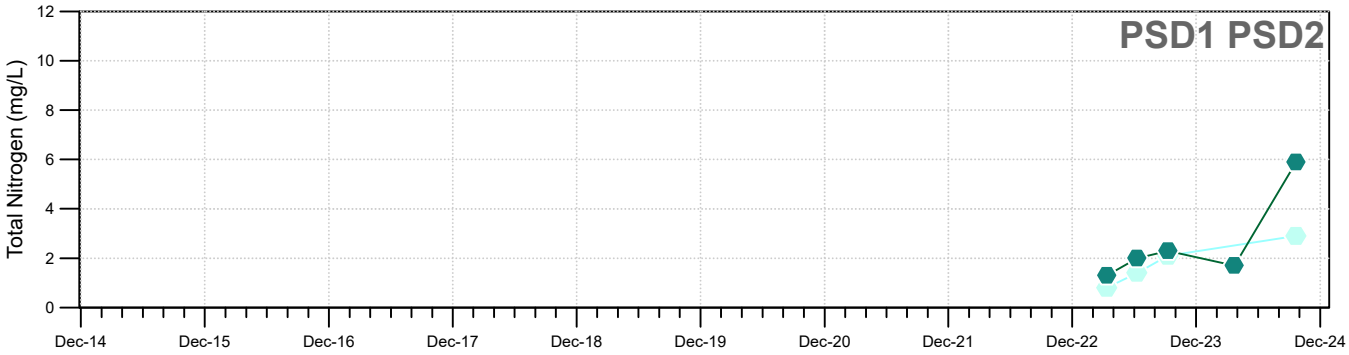
DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT









CLIENT
Cleanaway Waste Management Ltd

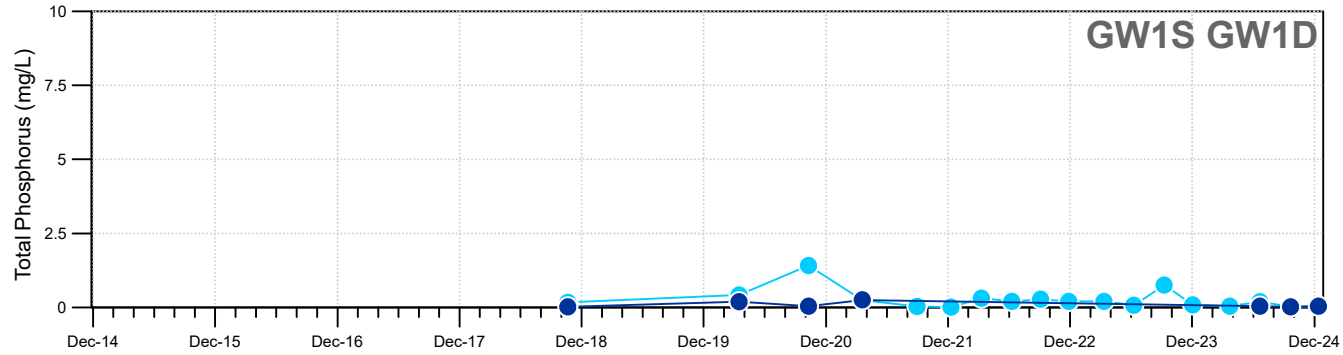
PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

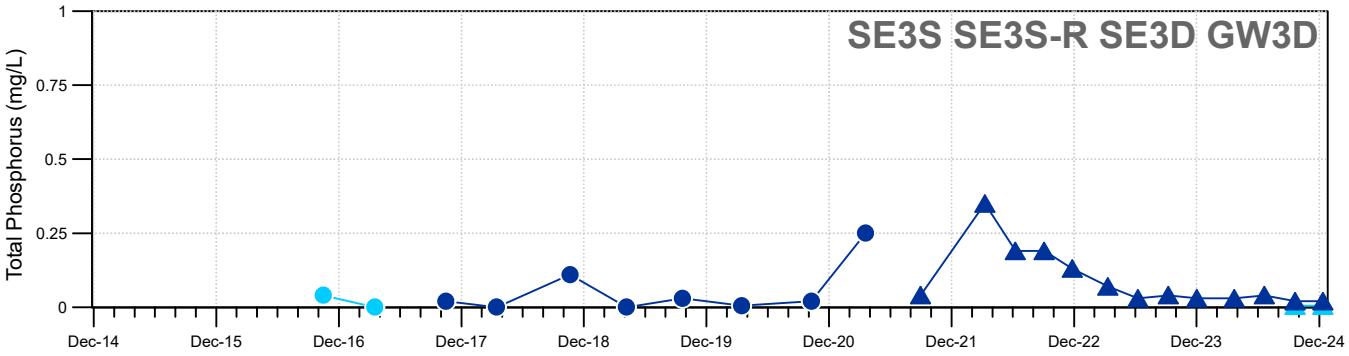
Legend

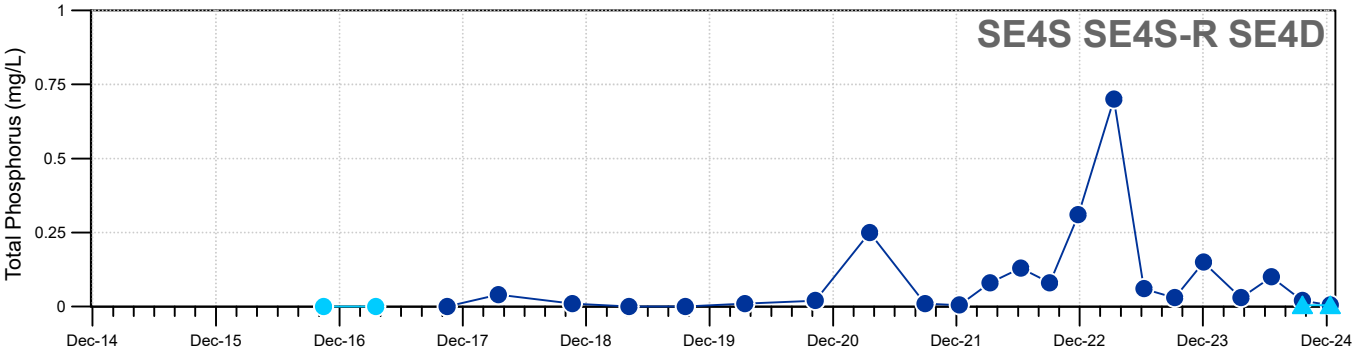
PSD1
PSD2
TDS Cell 1 (CP1)
TDS Cell 2
PLP
LEP1
LEP3

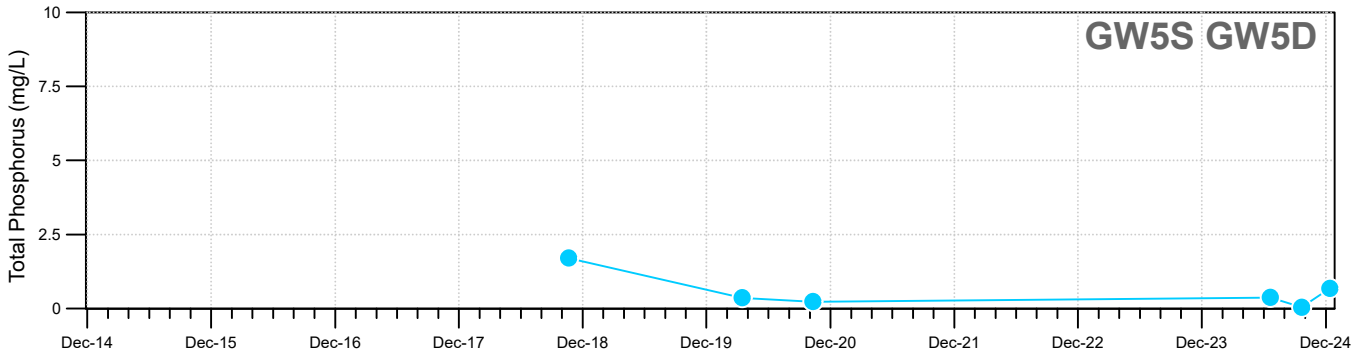
PROJECT No. J-G-AU0010
DATE 18/01/2025

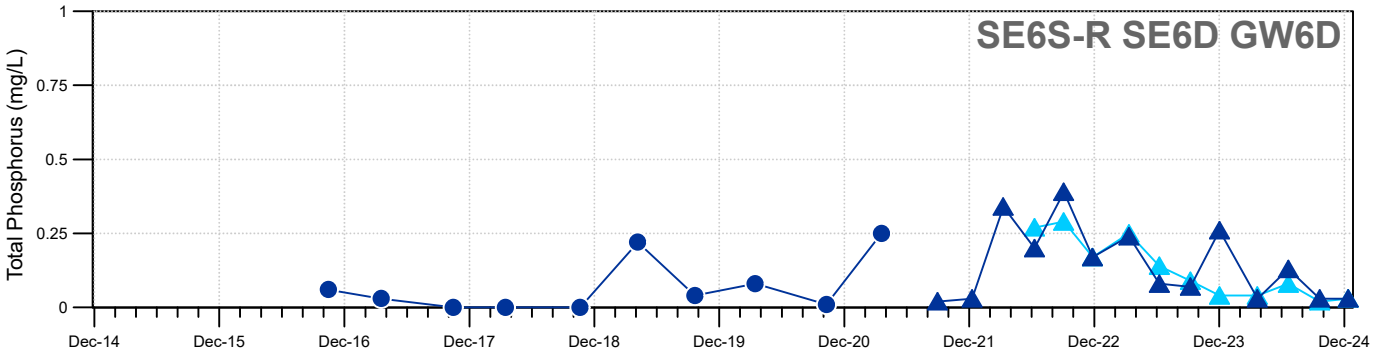
GEOCONTAM RISK MANAGEMENT











CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

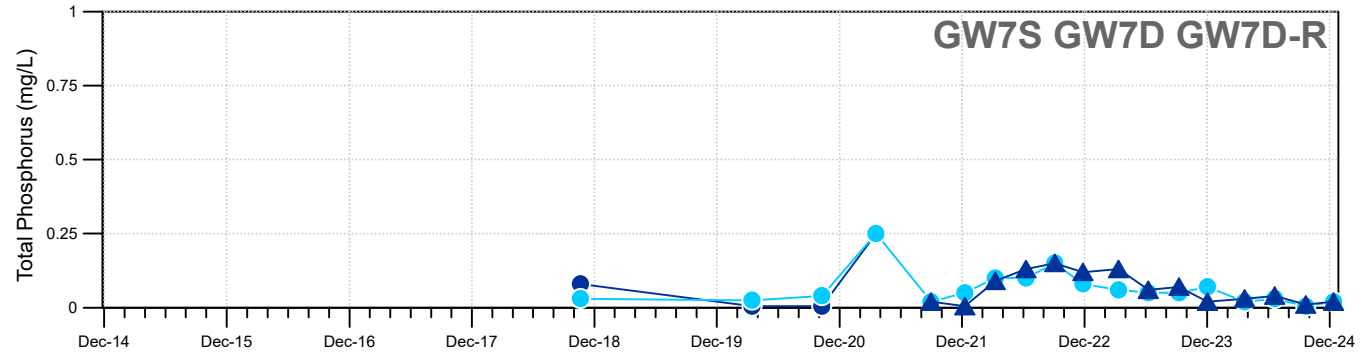
- Shallow Well
- Shallow Well Replacement
- Deep Well
- Deep Well Replacement

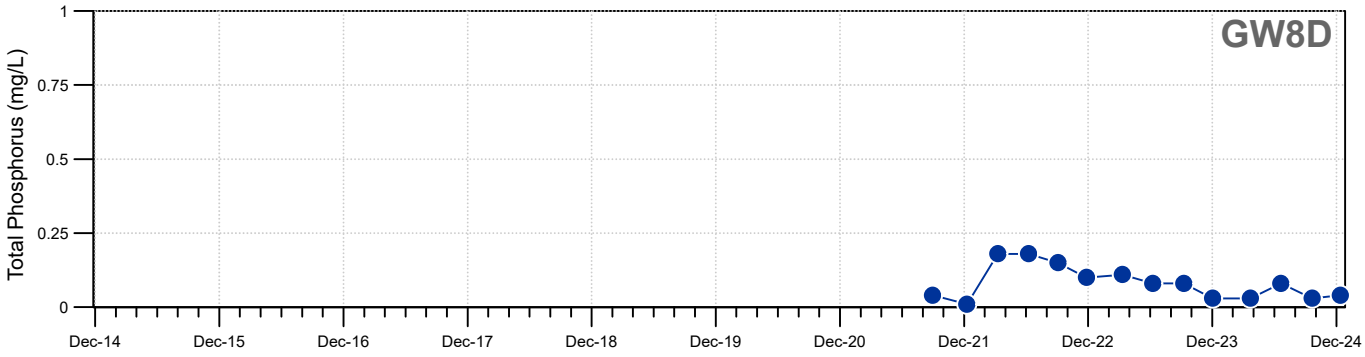
NOTES:
GW5D - dry for all events

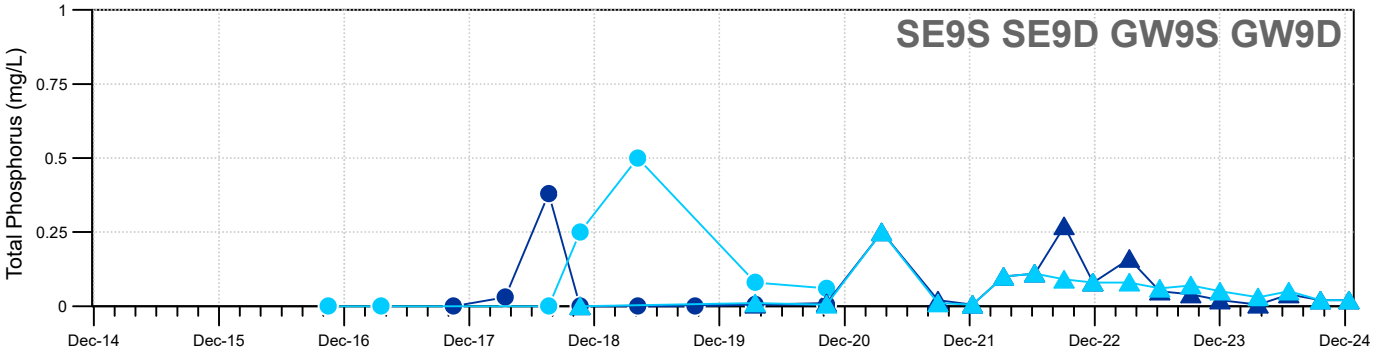
PROJECT No. J-G-AU0010

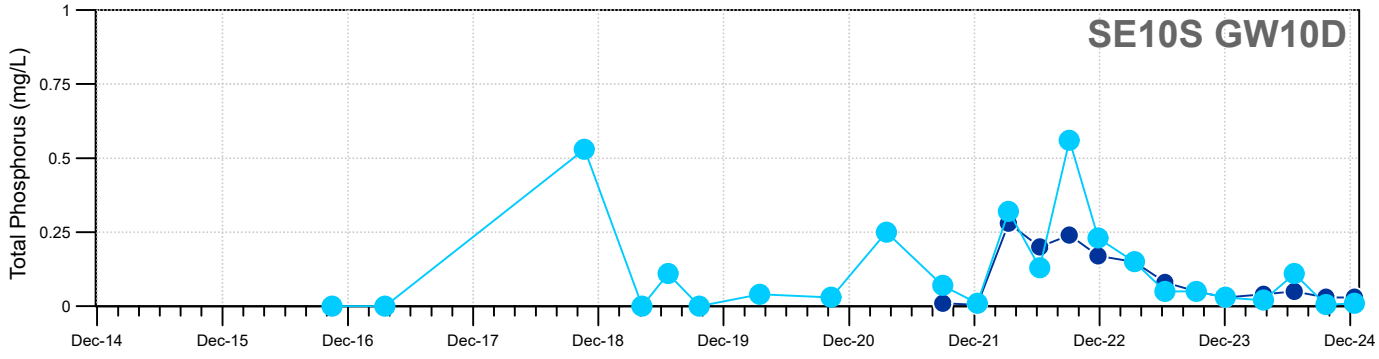
DATE 18/01/2025

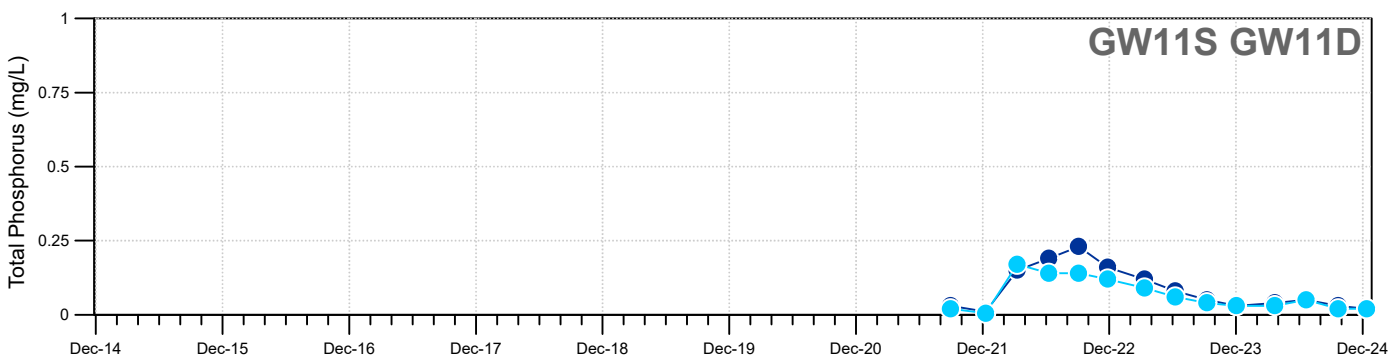
GEOCONTAM RISK MANAGEMENT











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PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
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PROJECT No. J-G-AU0010

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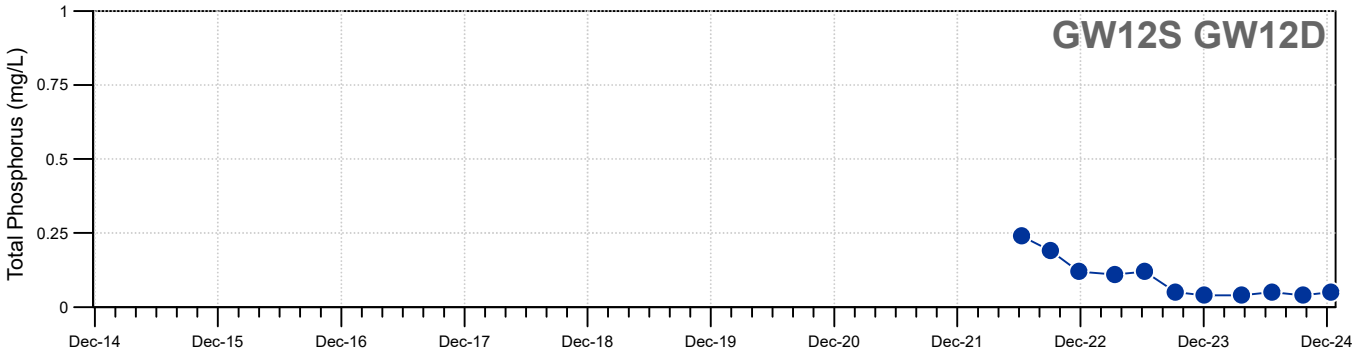

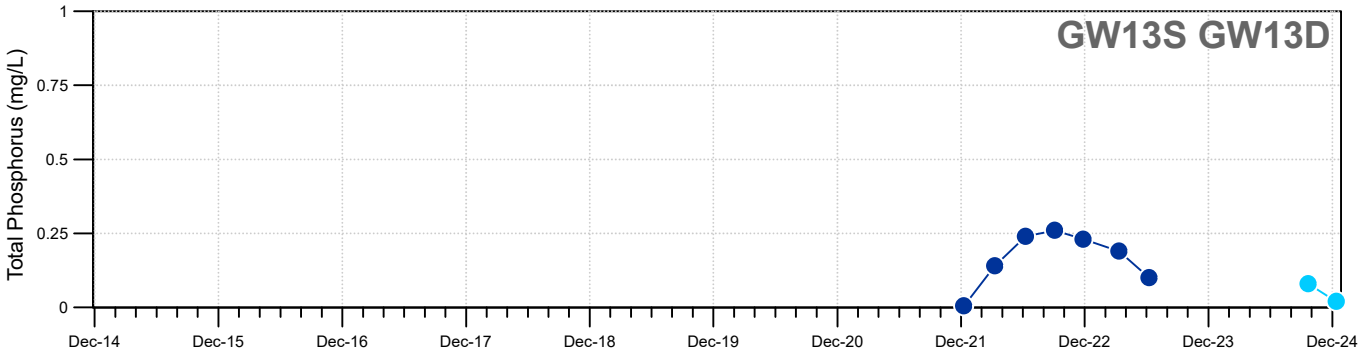

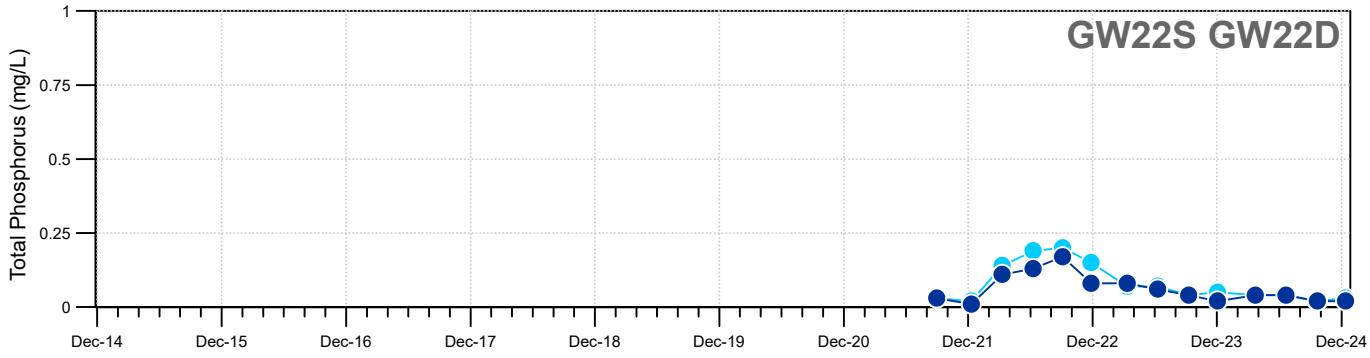

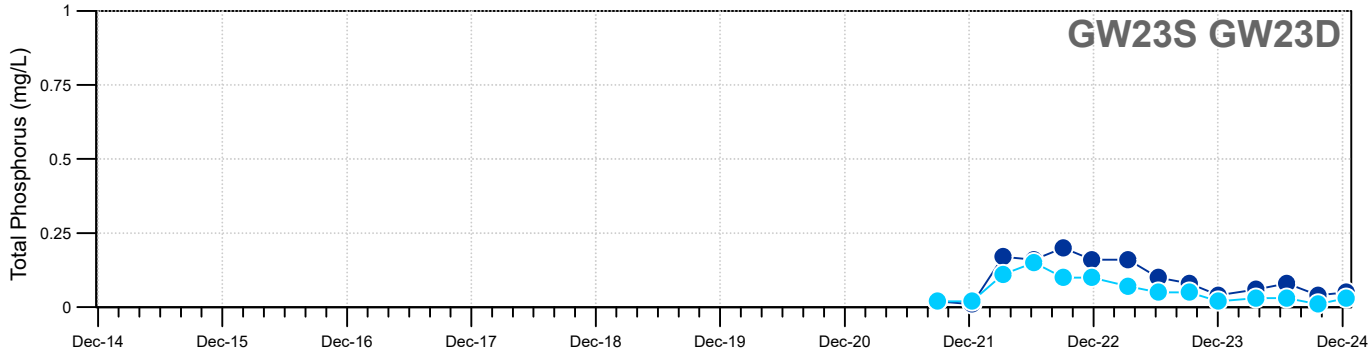

CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
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Legend

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NOTES:
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PROJECT No. J-G-AU0010

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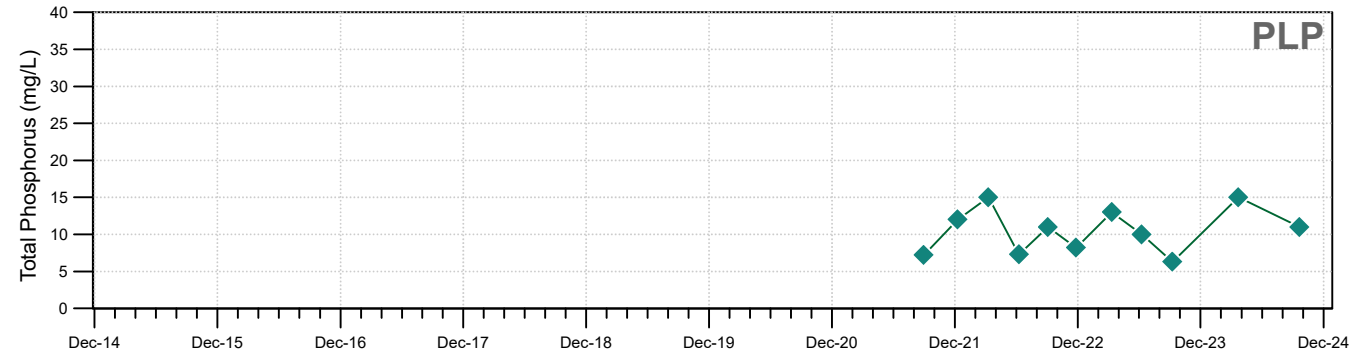
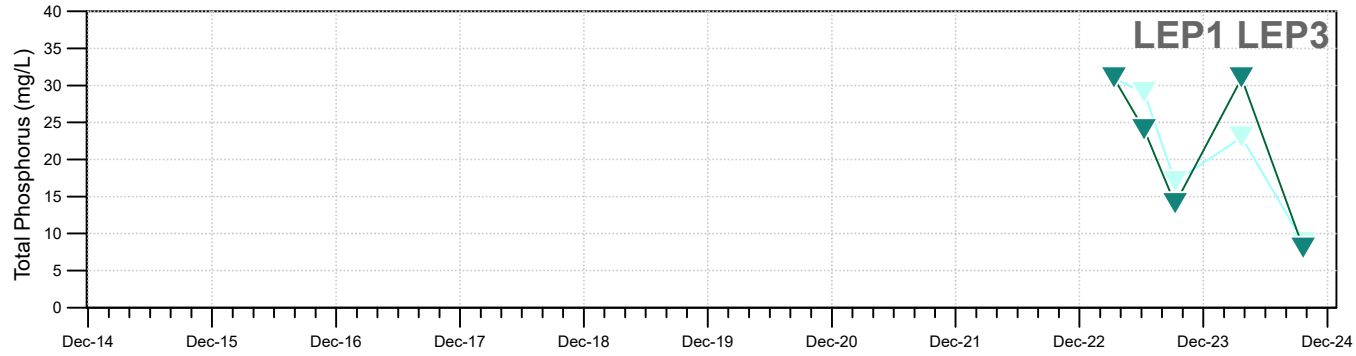
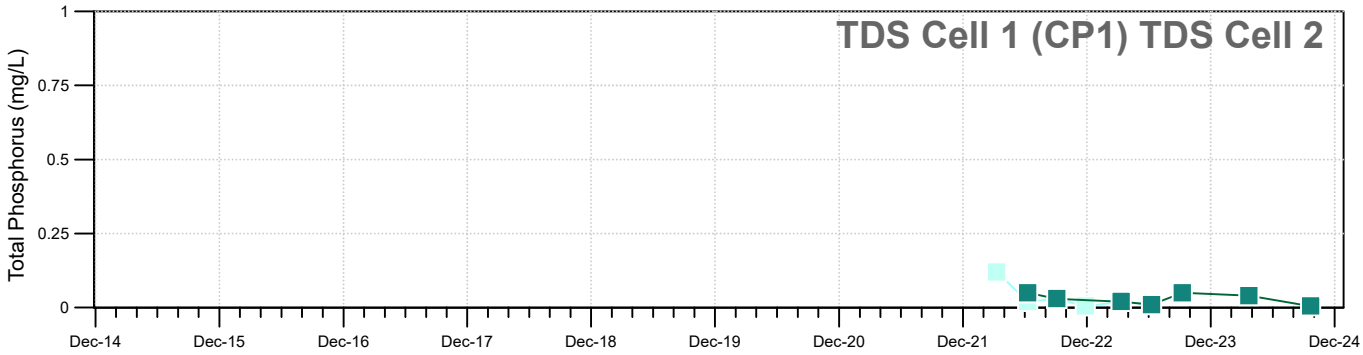
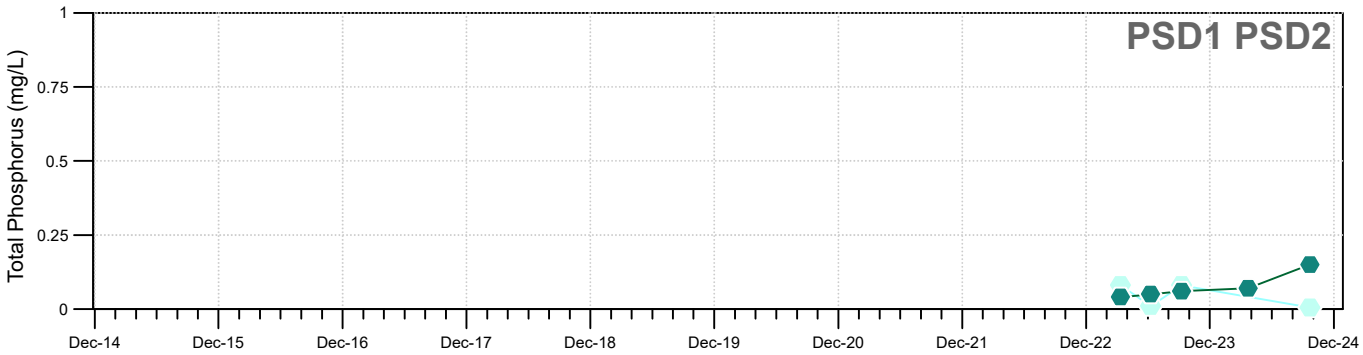
GEOCONTAM RISK MANAGEMENT









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Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

PSD1
PSD2
TDS Cell 1 (CP1)
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PLP
LEP1
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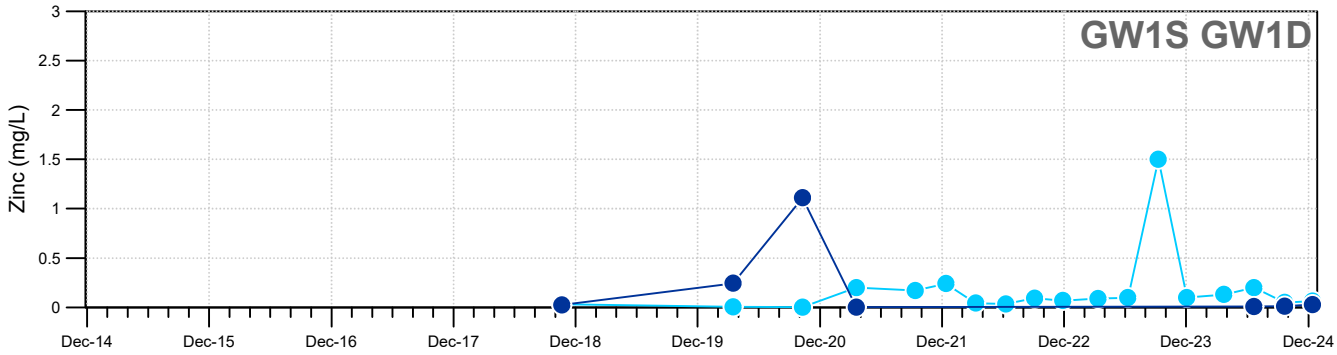
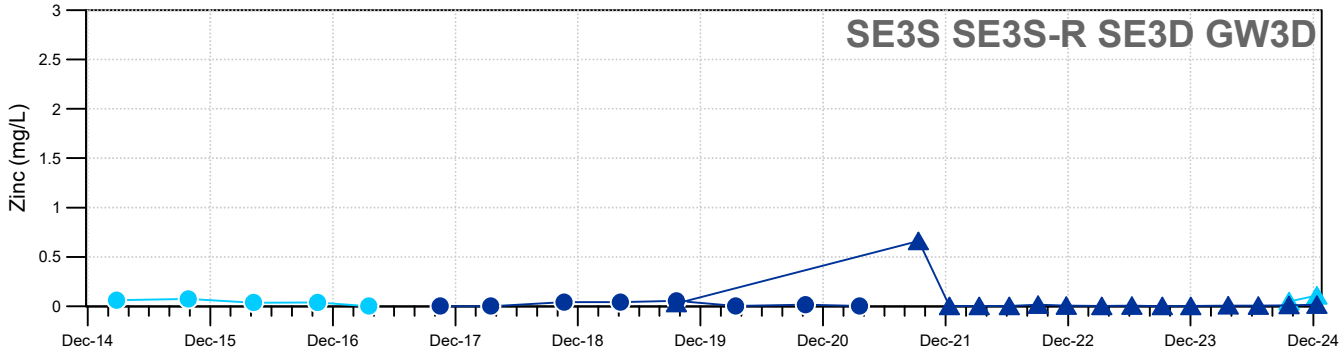
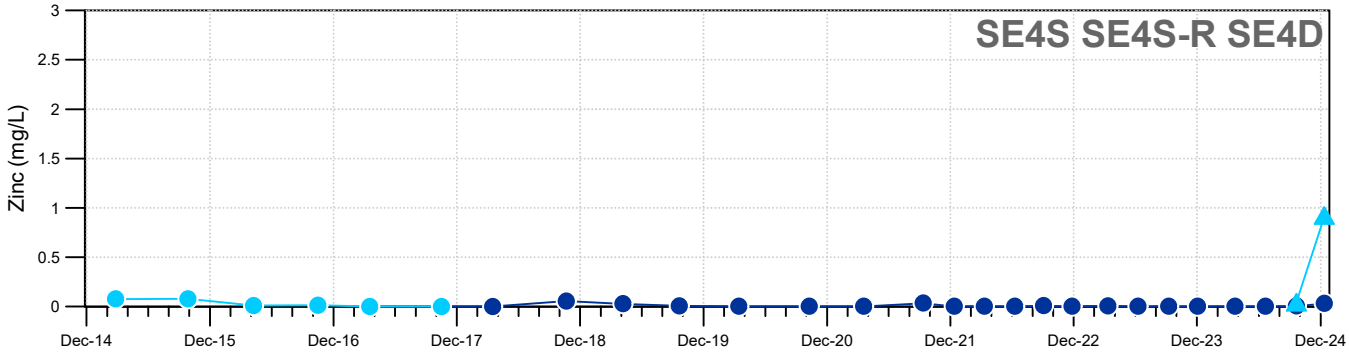
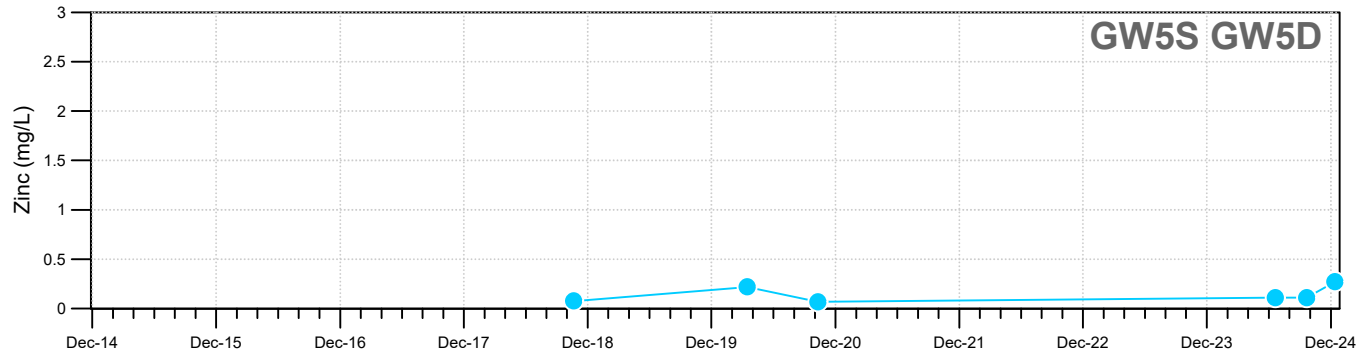
PROJECT No. J-G-AU0010
DATE 18/01/2025

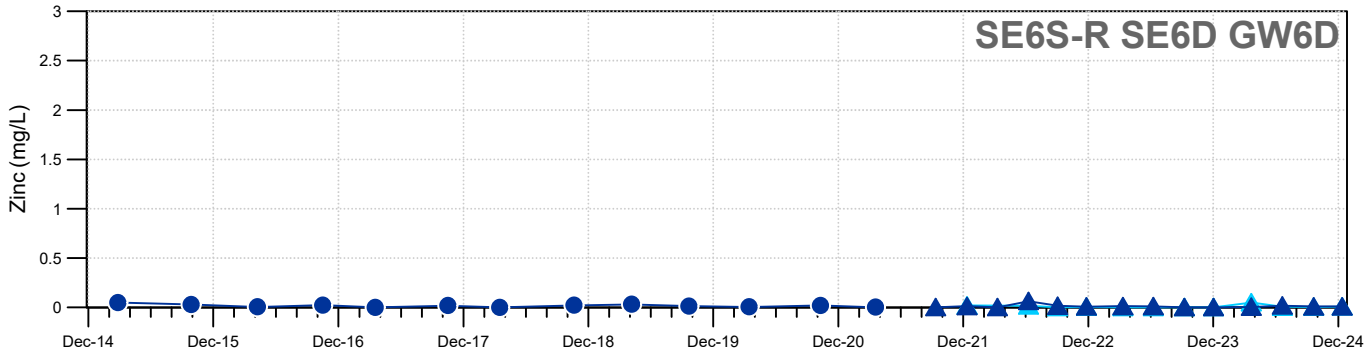
GEOCONTAM RISK MANAGEMENT











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Lot 2 Banksia Road, Crooked Brook, WA
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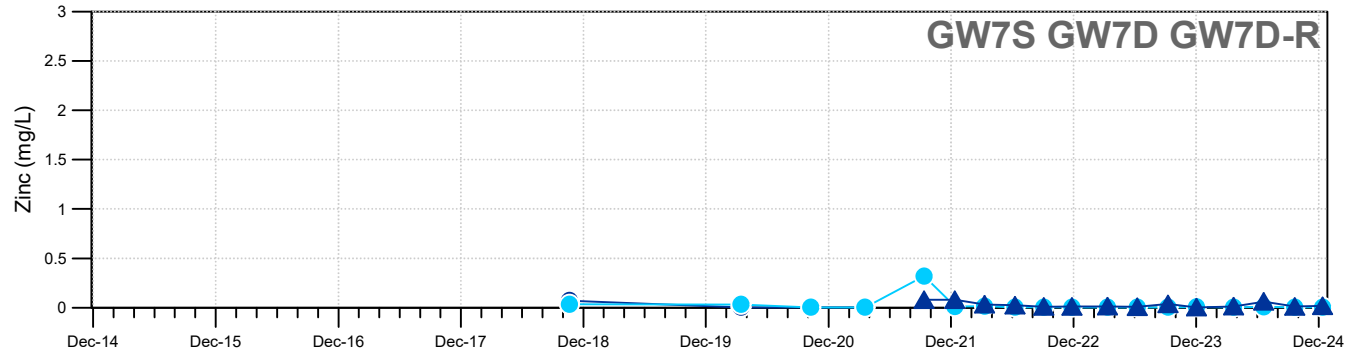
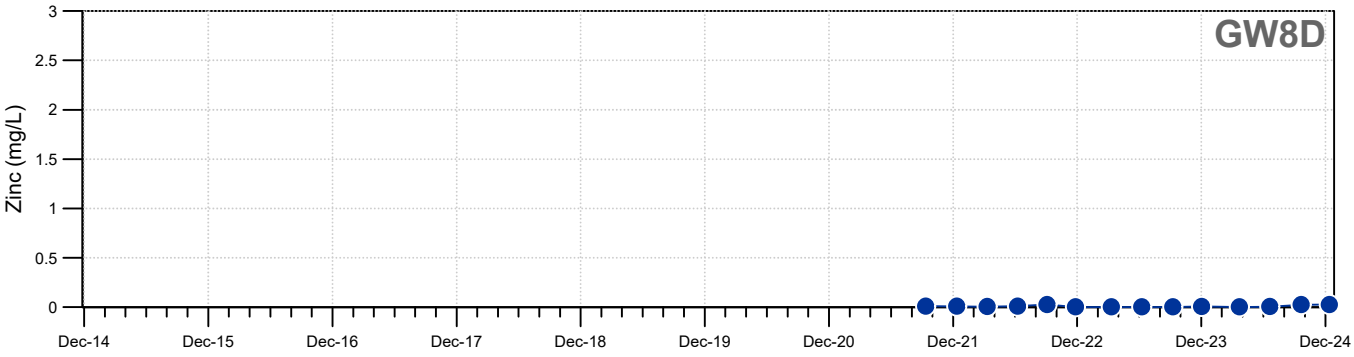
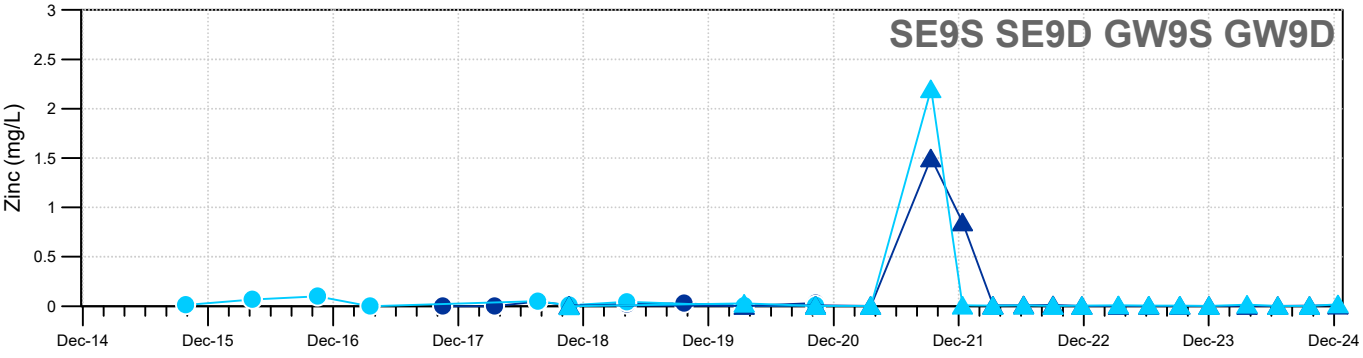
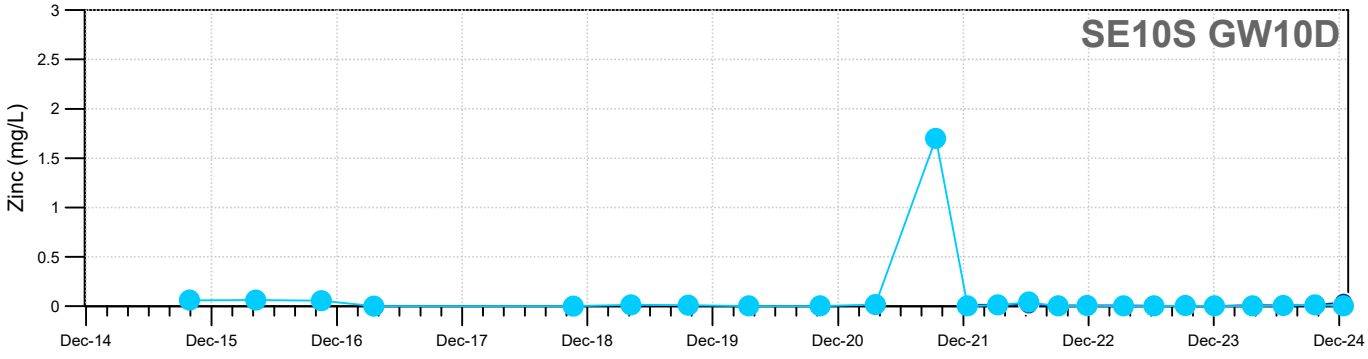
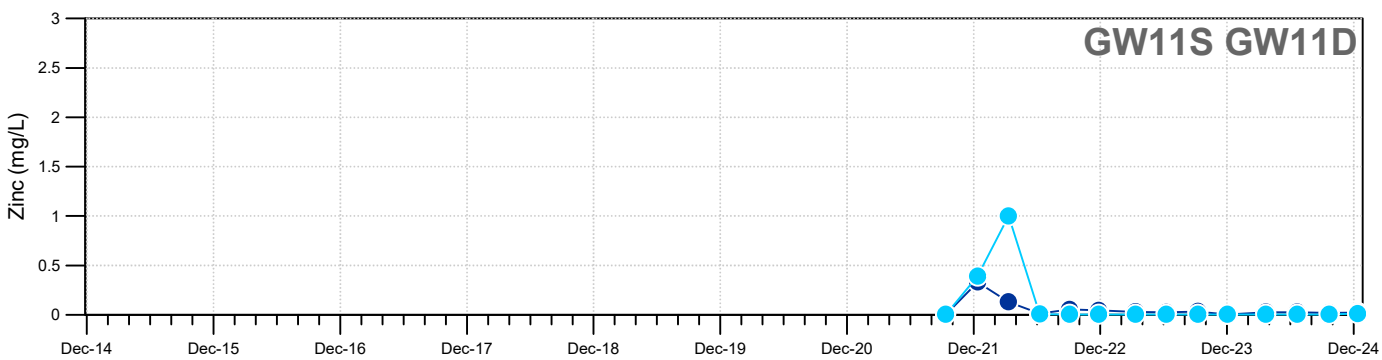
GEOCONTAM RISK MANAGEMENT











CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

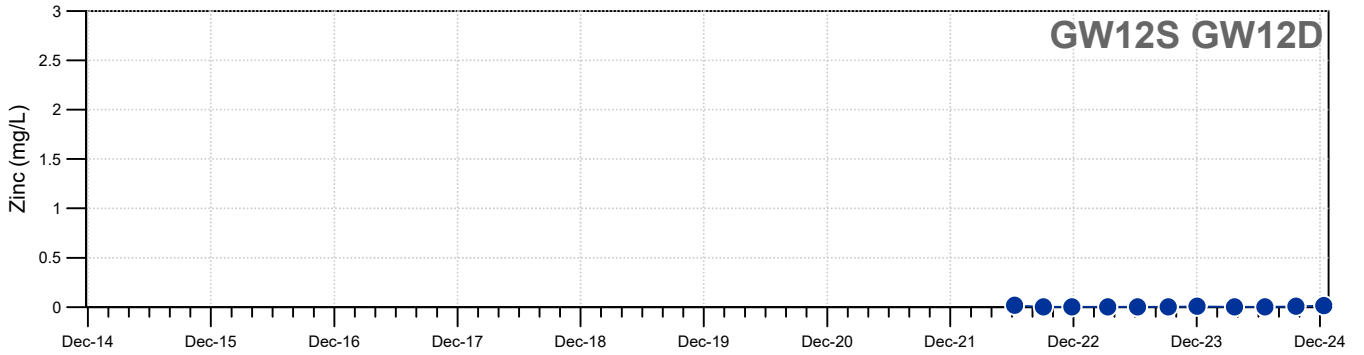
Legend

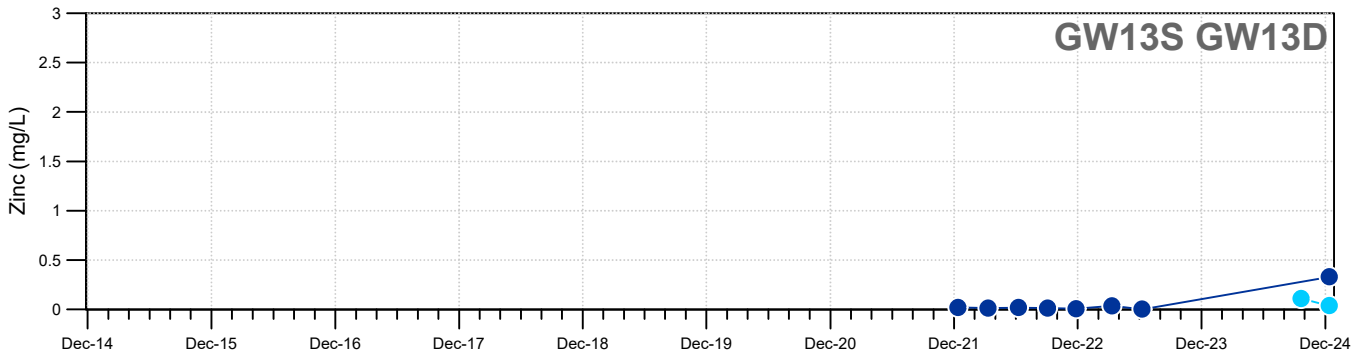
- Shallow Well
- Shallow Well Replacement
- Deep Well
- Deep Well Replacement

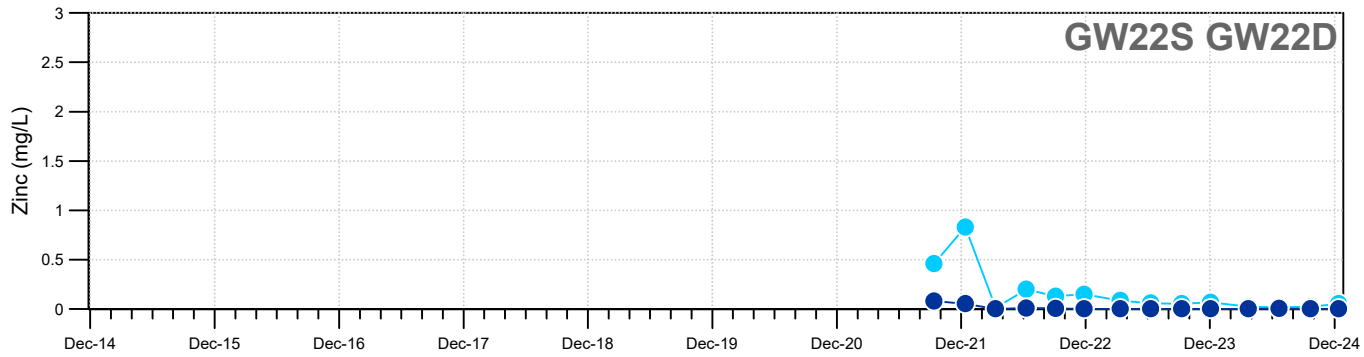
PROJECT No. J-G-AU0010

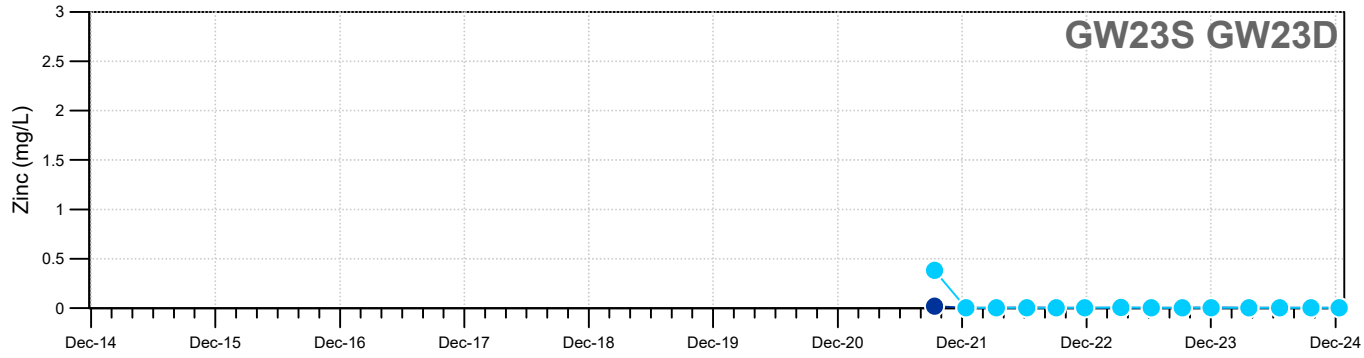
DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT









CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

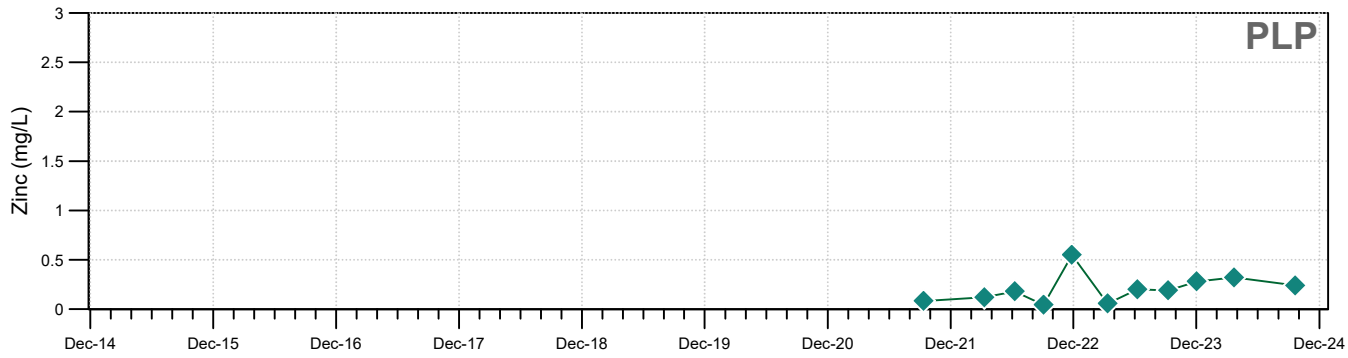
- Shallow Well
- Shallow Well Replacement
- Deep Well
- Deep Well Replacement

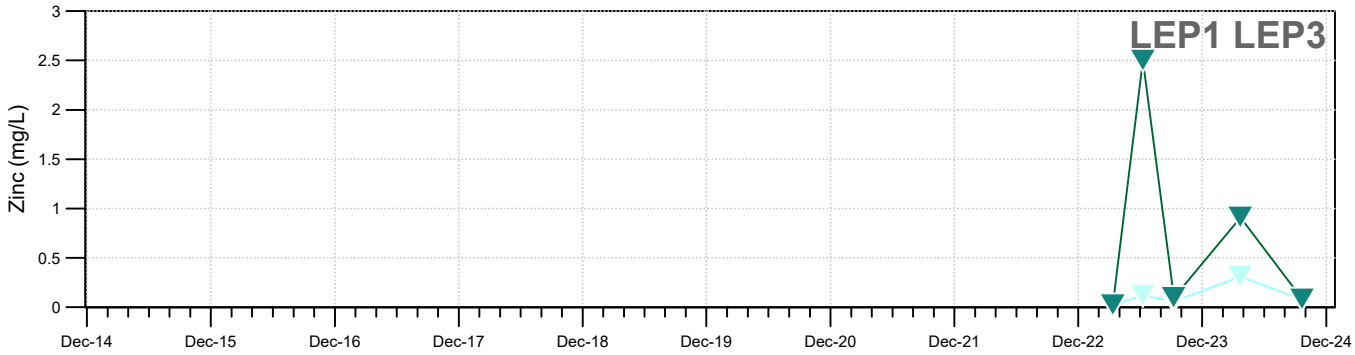
NOTES:
GW12S - dry for all events

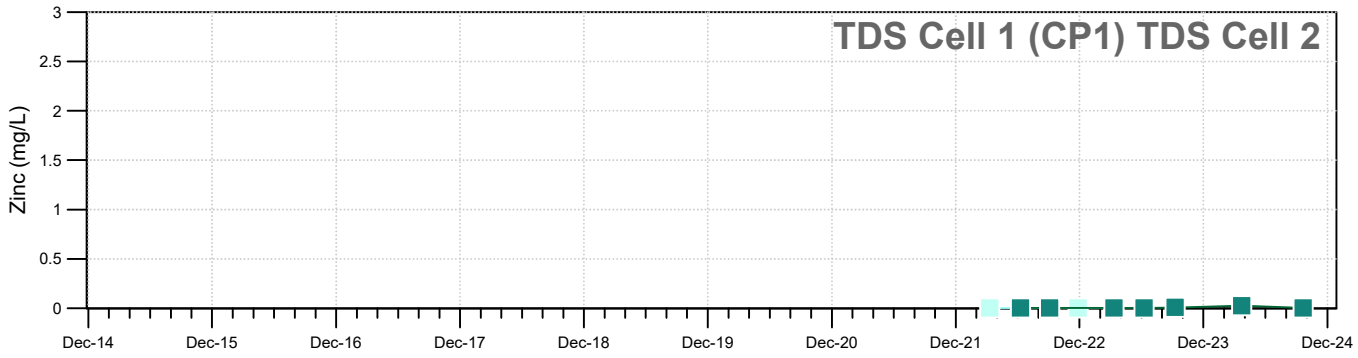
PROJECT No. J-G-AU0010

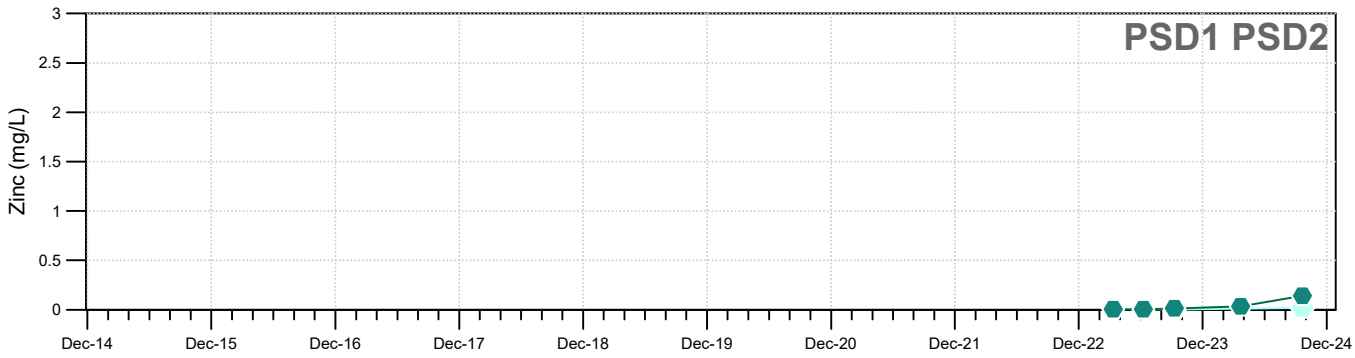
DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT









CLIENT
Cleanaway Waste Management Ltd

PROJECT
Lot 2 Banksia Road, Crooked Brook, WA
Licence L8904/2015/1
2024 Annual Groundwater Monitoring Report

Legend

PSD1
PSD2
TDS Cell 1 (CP1)
TDS Cell 2
PLP
LEP1
LEP3

PROJECT No. J-G-AU0010
DATE 18/01/2025

GEOCONTAM RISK MANAGEMENT

APPENDIX E FIELD DOCUMENTATION

360 environmental

PROJECT FIELD LOG (DAILY)

Date: 25/3 **Project Number:** 72519 **Project Name:** Bankas GME

Arrived: 9.10 am **Departed:** 5:15 pm **Weather:** Sunny

PM: PW

Field Personnel: PW + PD

Contractors:

Client Contact: Jemetle **Site Contact:** —

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☑ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Other (Specify):

Equipment Used:

YSI + Dipper + Bladder pump +

☑ Calibration Certificate Received : YES ☐ Calibration Undertaken:

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: Eurofins Secondary Lab: —

360 environmental

Description of Activities:

9.10 am arrived at Banksia Rd for Perth. Protocol talk Jeanette & inform her about GME

following samples collected.
GW7S, GW7DR, GW3D, SE4D, GW8D.
QC01 (taken for GW7DR)
SE4S, SE3S - DRY - SWL observed at top of dipper
RS01, FB01 collected.
Tailing samples collected in bucket, from four (ou) Tronox trucks. mixed the ~~samples and~~ the leachate tailing samples, and for Lab TS01 (3 sample jars collected).

Left site at 5.15pm

360 environmental

PROJECT FIELD LOG (DAILY)

Date: 26/03/24 **Project Number:** 2519 **Project Name:** Bunbury Marsh Court

Arrived: 7:30 Am **Departed:** 5:00 pm **Weather:** Sunny

PM: P. Wangdi

Field Personnel: PW + PD

Contractors: /

Client Contact: Barry **Site Contact:** Barry

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☑ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Other (Specify):

Equipment Used:

Bladder Pump, YSI, Dipper.

☐ Calibration Certificate Received :_____ ☑ Calibration Undertaken:_____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

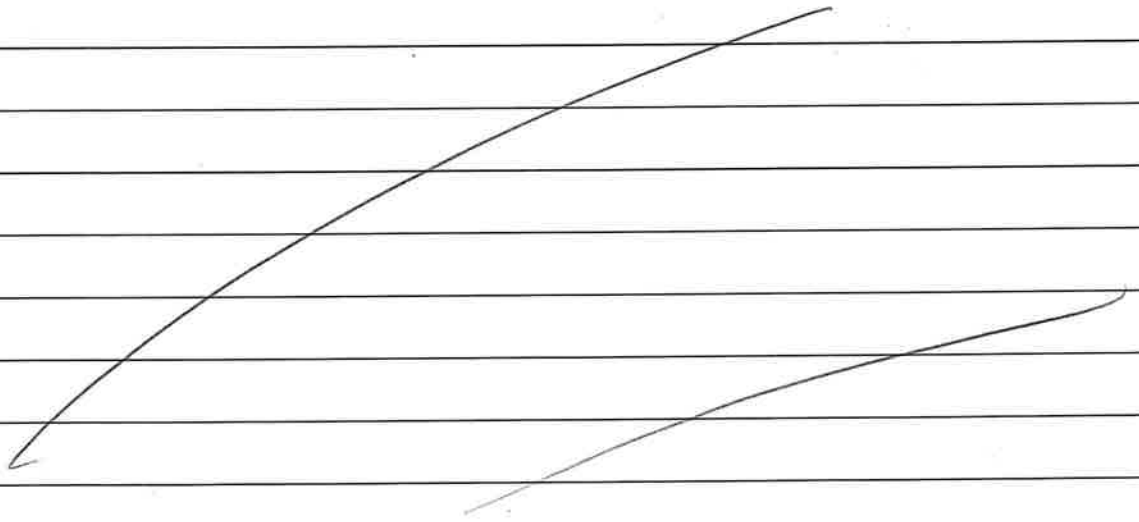
CoC Completed: ☑ Y ☐ N

Primary Lab: ARL Secondary Lab: /

360 environmental

Description of Activities:

7:30 AM — Arrived at the site
— Sign in at site office
— Sampled:
GW23D, GW23S, GW11S, GW11D, GW22S, GW22D, SEC1, GW1D. & GW2 taken from GW11S. RS02 and FB02 taken from GW23D.
Tailing sampled: TS02 ~~x 9~~ jars as per the procedures in 25/03/24.
5:00 pm — Departed from site to Cutral



360 environmental

PROJECT FIELD LOG (DAILY)

Date: 27/3 **Project Number:** 7209 **Project Name:** Barlow Court

Arrived: 7:30 am **Departed:** 5:00 pm **Weather:** Sun

PM: JW

Field Personnel: DD + JW

Contractors: -

Client Contact: Jeanette **Site Contact:**

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☐ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Other (Specify):

Equipment Used:

YSI + Bailer + Bladder + Dipper

☐ Calibration Certificate Received : ☐ Calibration Undertaken:

Sampling:

Sampling Conducted: ☐ Y ☐ N Matrix: ☐ Soil ☐ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: Eurofins Secondary Lab: ALS

360 environmental

Description of Activities:

7:30 am arrived onsite.
Signed onto register.
Sampling of following done.
PLP, LEP3, LEP1, GW1D, GW12D, GW10D, SE10S, TDS Leadvale Cell 1, GW9D/9S.
PSD1, GW55/D - Done on 28/3/24. GW55/D-DRY.
PSD2 - DRY. GW1D-DRY
~~PSt~~ GW13D/S - Borrowed wire to S.Stabilngalu.

Left site at 8pm

Groundwater Low Flow Purging: Water Quality Measurement Form

360

Client: Cleanaway Industrial Waste Pty Ltd
Project: Banksmeadow GME
360 Job No.: 72519
Location: Banksmeadow
360 Field Representative: PD + PW
Date: 27/9

Pump Type: —
Pump Intake (mbTOC): —
Total Volume purged: —

Monitoring Well ID: GW1D
Inner Diameter: 50mm
Depth to Water (mbTOC): —
Depth of Well (mbTOC): —
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	± between readings	Reading	± between readings	
Start:	Start:												
SAMPLING:													

Blocked @ 2.33 m

Looks like bailer or other object is stuck in the well. Have tried to unblock or knock it up but couldn't

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clean away & Hedworth plytol
Project: Banksec GML
360 Job No.: 72519
Location: Banksec
360 Field Representative: PD+PW
Date: 28/3

Monitoring Well ID: SE38
Inner Diameter: —
Depth to Water (mbTOC): —
Depth of Well (mbTOC): —
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: —
Total Volume purged:
Pump Intake (mbTOC): —

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
		DRY											@ 30.57mbTOC
													silt/Day at top of Dipper
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
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Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clean away & Shelworks pty ltd
Project: Bantons GMC
360 Job No.: 72519
Location: Bantons
360 Field Representative: PD+PW
Date: 25/7

Monitoring Well ID: SE4S
Inner Diameter: -
Depth to Water (mbTOC): -
Depth of Well (mbTOC): -
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground) -
Presence & thickness of LNAPL: -

Pump Type: -
Total Volume purged:
Pump Intake (mbTOC): -

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
			DRY								(2)		31.0m dey/silt at tip of dipper
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
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VOC samples must be collected first
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To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Clean away old waste plastic

Client: Bunlong GML

Project: 72519

360 Job No.:

Location: Banteay

360 Field Representative: PD+PW

Date: 22/3

Pump Type: — Total Volume purged: —

Pump Intake (mbTOC):

Monitoring Well ID: —

Inner Diameter: —

Depth to Water (mbTOC):

Depth of Well (mbTOC):

Top of Well Screen (mbTOC): —

Bottom of Well Screen (mbTOC): —

Height of Riser*(m above/below ground) —

Presence & thickness of LNAPL: —

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
GW5D	—	DRY					DRY						@ 60, 60 SWL at tip of dipper
GW5S	—	DRY					DRY						@
GW5S	Water Level - 49.38 m												
	Depth - 51.33 m						Well tubing is bend,						
SAMPLING:													

Bend Casing at 1.5m approx.

→ bailers can't go inside from this point

→ bladder pump (to send ~~be~~ inside is risky)

Notes:

[1] Readings to be collected every five minutes or greater.

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[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clearaway & Hedworth plc
Project: Bunting GML
360 Job No.: 72519
Location: Bankside
360 Field Representative: PD+PW
Date: 28/3

Pump Type: Bailer
Pump Intake (mbTOC):
Total Volume purged: —

Monitoring Well ID: —
Inner Diameter: —
Depth to Water (mbTOC): —
Depth of Well (mbTOC): —
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
PD1	—	—	20.7		6.74		643.0		7.37		-23.2		Light brown, odourless, mid turbidity
PSD2	—	—	DRY										
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
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To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

360 environment

Groundwater Low Flow Purging: Water Quality Measurement Form

Client: Clean away Hazardous Waste Ltd
Project: Bentonic GML
360 Job No.: 72519
Location: Banteses
360 Field Representative: PD + PW
Date: 27/7

Monitoring Well ID: surface water - ponds + leachate
Inner Diameter: —
Depth to Water (mbTOC): —
Depth of Well (mbTOC): —
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser* (m above/below ground): —
Presence & thickness of LNAPL: —

Pump Type: —
Total Volume purged: —
Pump Intake (mbTOC): —

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
TDS leachate Cell 1		—	24.9		-0.07		57769.0		7.13		23.0		O, C, C.
LEP3	—	—	29.6		0.06		168118.0		7.32	-43.0			Dark red, sulphur odour high turbid
LEP2	—	—	30.4		0.005		196239.0		6.43	-97.3			Dark red, iron odour / sulphur odour high turbid
PLP	—	—	27.3		-0.13		56526.0		7.90	-112.3			Black, sulphur odour, high turbidity
SAMPLING													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
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To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360

Client: Cleanaway & Sydney Petroleum
Project: Bulong GML
360 Job No.: 72519
Location: Bankcse
360 Field Representative: PD + PW
Date: 17/7

Monitoring Well ID: GWIS
Inner Diameter: 50m
Depth to Water (mbTOC): 36.39
Depth of Well (mbTOC): 39.57
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder
Total Volume purged: —
Pump Intake (mbTOC): 34.5

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
12:44	36.41	280 L/s	24.9		4.28		567.0		5.05	-	9.9		
12:49	36.40		22.3		4.15		562.0		4.83	-	2.9		Orange, light brown -
12:54	36.40		21.6		3.99		563.0		4.79	-	3.7		hazy mid turbidity
12:59			21.5		3.78		563.0		4.77	-	4.6		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Abandoned wells - SEID-DRIE 36.39 (silt at d (ppm)
SE IS - bladder (
30.32 m
Depth - 31.50 m

Groundwater Low Flow Purging: Water Quality Measurement Form

360 (environmental)

Client: Clearaway & Melwaste Pty Ltd
Project: Bayfarc GME
360 Job No.: 72519
Location: Banksea
360 Field Representative: PD+PW
Date: 25/3
Pump Type: Bladder Total Volume purged: —
Pump Intake (mbTOC): 30m

Monitoring Well ID: GW3D
Inner Diameter: —
Depth to Water (mbTOC): 37.74 m
Depth of Well (mbTOC): 51.62m
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
14:48	37.81	250	25.9		6.29		740.0		5.34		-2.4		
14:53	37.86		23.8		5.07		764.0		4.86		-11.5		
14:58	37.85		23.3		4.03		762.0		4.81		-15.0		D. C. C
15:03	37.86		23.5		4.46		760.0		4.91		-19.0		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clean away Bunlong GME
Project: 72519
360 Job No.:
Location: Banksea
360 Field Representative: PD+PW
Date: 23/3

Monitoring Well ID: SE4D
Inner Diameter: 50mm
Depth to Water (mbTOC): 37.46
Depth of Well (mbTOC): ~~47.79~~ >47.79
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder Total Volume purged:
Pump Intake (mbTOC):

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ± between readings	ORP (mV) Reading	ORP (mV) ±10 ± between readings	Comments
Start:	Start:												
16:06	37.47	200/1	24.9		6.02		358.9		4.36		29.0		
16:11	37.47	↓	22.9		5.49		351.3		4.25		10.3		
16:16	↓	↓	22.8		5.06		351.2		4.25		3.5		Orange
16:21	↓	↓	22.7		4.90		351.9		4.33		1.0		
													RB01, FB01 collected
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the lt has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clean away & Holdworth plytol
Project: Banksia GMC
360 Job No.: 72519
Location: Banksias
360 Field Representative: PD + PW
Date: 26/03/24

Monitoring Well ID: GW61
Inner Diameter:
Depth to Water (mbTOC): 30.39m
Depth of Well (mbTOC): 51.76m.
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: Bladder
Total Volume purged: 20/3
Pump Intake (mbTOC): 50m

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
8:36	30.97	20/3	19.9		5.19		484.0		5.23		0.1		
8:41	31.07		19.6		5.59		482.3		5.23		-15.2		
8:46	31.20		19.7		5.72		484.7		5.23		-17.3		O, C. C
8:51	31.21		20.2		5.25		487.5		5.22		-17.9		
8:56	31.23		20.1		5.68		488.4		5.22		-17.9		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clean away & Hedworth plyfd
Project: Banksia GMC
360 Job No.: 72519
Location: Banksias
360 Field Representative: PD+PW
Date: 26/3

Monitoring Well ID: SEBS
Inner Diameter: 50mm
Depth to Water (mbTOC): 29.31
Depth of Well (mbTOC): —
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder
Pump Intake (mbTOC): 40.0
Total Volume purged:

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
8.31	30.23	200/1	20.4		6.00		492.0		5.34		95.4		
8.36	30.24		20.1		5.49		437.0		5.37		88.0		
8.41	30.24		19.7		5.21		436.9		5.35		89.0		O, C, C
8.46	30.24		19.8		4.99		441.1		5.34		91.7		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
*. Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clean away asbestos ptyltd
Project: Banksia GME
360 Job No.: 72519
Location: Banksia
360 Field Representative: PD+PW
Date: 26/7

Monitoring Well ID: GW7D-R
Inner Diameter: 50mm
Depth to Water (mbTOC): 33.56
Depth of Well (mbTOC): 55.18
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder
Total Volume purged: —
Pump Intake (mbTOC): 55.0

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
9:56	33.60	28/3	25.8		4.59		296.0		4.74		4.4		
10:01	33.63	|	24.6		4.29		279.7		4.81		-9.7		
10:06	33.64	|	24.3		3.99		269.3		4.79		-11.3		
10:11	33.63	↓	23.9		3.85		268.7		4.78		-11.8		O, C, C
													QC01 collected
													here
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clearaway Scheduled Waste Pty Ltd
Project: Banksmeadow GWTS
360 Job No.: 72519
Location: Banksmeadow
360 Field Representative: PD+PW
Date: 25/7

Monitoring Well ID: GW7S
Inner Diameter: 50
Depth to Water (mbTOC): 32.71
Depth of Well (mbTOC): ~~32.95~~ 40.0
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: 40.0
Total Volume purged: —
Pump Intake (mbTOC): ↓

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
11.30	32.70	2L/3	21.9		10.33		268.4		4.52		3.3		
11.35	32.70	↓	22.3		9.11		267.7		4.53		6.3		
11.40	↓	↓	22.1		10.02		270.5		4.53		6.1		O.C.C
11.45	↓	↓	22.2		9.99		269.6		4.52		7.7		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Cleanaway Scheduled waste pty ltd
Project: Banksia GWTF
360 Job No.: 72519
Location: Banksia
360 Field Representative: PD+PW
Date: 25/3

Monitoring Well ID: GW8D
Inner Diameter: 5mm
Depth to Water (mbTOC): 34.10
Depth of Well (mbTOC): 47.43
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: 36.5
Total Volume purged:
Pump Intake (mbTOC): —

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
13.15	34.42	24/3	21.4		4.40		328.5		4.58		-8.7		1, c. c
13.20	34.42		21.4		4.07		317.9		4.60		-11.0		
13.25	↓		21.3		4.24		313.1		4.65		-12.2		
13.30	↓	↓	21.2		4.25		311.2		4.66		-11.2		
SAMPLING													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the It has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Cleanaway & Sludgeworks Pty Ltd
Project: Banksia GWL
360 Job No.: 72519
Location: Banksia
360 Field Representative: PD+PW
Date: 27/03/24

Monitoring Well ID: GW5D
Inner Diameter: 80mm
Depth to Water (mbTOC): 26.46m
Depth of Well (mbTOC): 48.51m
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground): –
Presence & thickness of LNAPL: –

Pump Type: Bladder
Total Volume purged: 25L/3
Pump Intake (mbTOC): 48.0m

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
8:36	26.48	250/3	23.0		6.94		316.6		4.85		4.7		O, C, C
8:41	26.48	|	21.7		6.86		311.0		4.78	–	6.9		
8:46	26.48	|	21.7		6.22		310.2		4.77	–	7.2		
8:51	26.48	|	21.8		5.89		310.2		4.75	–	7.1		
SAMPLING													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the It has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Cleanaway Sludge pty ltd
Project: Banksmeadow GME
360 Job No.: 72519
Location: Banksia
360 Field Representative: PD+PW
Date: 27/3

Monitoring Well ID: GW9S
Inner Diameter: 50mm
Depth to Water (mbTOC): 26.07
Depth of Well (mbTOC): 37.20
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground): –
Presence & thickness of LNAPL: –

Pump Type: Bladder
Total Volume purged: –
Pump Intake (mbTOC): 37.0

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
8.43	26.07	200	22.4		9.68		303.6		5.27		13.1		
✓ 8.48	26.07		22.5		7.75		300.7		5.31		47.5 ✓		
✓ 8.53			22.4		7.76		299.7		5.34		54.5 ✓		
8.57			22.5		7.79		299.1		5.29		58.0		D.C.C
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clean away & Hedworth plytech
Project: Bunlong GML
360 Job No.: 72519
Location: Banksec
360 Field Representative: PD+PW
Date: 27/03/19

Monitoring Well ID: GW101
Inner Diameter: 80mm
Depth to Water (mbTOC): 26.02m
Depth of Well (mbTOC): 52.35m
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground): -
Presence & thickness of LNAPL: -

Pump Type: Bladder
Total Volume purged: 2L0/3
Pump Intake (mbTOC): 51.5

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
10.12	26.22	200/3	22.2		3.28		319.7		4.76	-	8.5		
10.17	26.25		26.3		3.95		313.6		4.70	-	9.0		1, c, c,
10.22	26.31		26.1		4.28		312.9		4.72	-	6.2		
10.27	26.31		26.2		4.22		312.5		4.70	-	5.5		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 ENVIRONMENTAL

Client: Clean away & Holdworth plyfd
Project: Banbury GME
360 Job No.: 72519
Location: Banbury
360 Field Representative: PD + PW
Date: 27/7

Pump Type: Bladder Bailer
Pump Intake (mbTOC): —

Monitoring Well ID: STC5
Inner Diameter: 50.mm
Depth to Water (mbTOC): 25.57
Depth of Well (mbTOC): 30.07
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Total Volume purged: —

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
11.35	25.57	250	23.7		4.71		283.7		4.73		49.1		
11.40	25.57		25.5		4.30		295.9		4.73		59.6		
11.45			25.3		4.27		295.5		4.74		59.0		
11.54			25.7		4.26		294.3		4.74		59.0		
													d.c.c
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC = metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Cleanaway Schedwaste plytd
Project: Banksia GWL
360 Job No.: 72519
Location: Banksea
360 Field Representative: PD+PW
Date: 4/3

Monitoring Well ID: GW11S
Inner Diameter: mm
Depth to Water (mbTOC): 21.72
Depth of Well (mbTOC):
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground) -
Presence & thickness of LNAPL: -

Pump Type: Bladder
Total Volume purged:
Pump Intake (mbTOC): 23.5

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
13.00	21.77	2ml/s	24.9		6.20		179.8		4.90		26.3		
13.05	21.77		24.5		5.39		176.2		4.92		53.2		
13.10	↓		25.1		4.83		175.5		4.93		65.1		
13.15	↓		24.2		4.95		174.6		4.92		71.2		QC02
													taken here.
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 (environmental)

Client: Clean away asbestos pty ltd
Project: Bunbury GML
360 Job No.: 72519
Location: Banksea
360 Field Representative: PD+PW
Date:

Monitoring Well ID: GW12D
Inner Diameter: 50mm
Depth to Water (mbTOC): ~~25.60m~~
Depth of Well (mbTOC): 52.62m
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground): -
Presence & thickness of LNAPL: -

Pump Type: Bladder
Total Volume purged: 25L/3
Pump Intake (mbTOC): 51.0m

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
12:58	25.80	2L/3	30.4		6.10		256.1		5.59		-14.7		
13:03	25.87		27.7		8.35		253.8		5.64		-19.7		O, C, C
13:08	25.90		27.8		9.16		254.2		5.66		-20.2		
13:13	25.94		27.5		6.78		254.3		5.66		-19.6		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360

Client: Cleanaway & Sudworth plc
Project: Bantam GME
360 Job No.: 72519
Location: Bantams
360 Field Representative: PD+PW
Date: 27/3

Pump Type: 31c)
Pump Intake (mbTOC): 49.0
Total Volume purged: —

Monitoring Well ID: GW12D
Inner Diameter: 50m
Depth to Water (mbTOC): 43.62
Depth of Well (mbTOC): 53.0
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
14.07	43.66	2L/m	28.0		7.21		872.0		5.28		-2.5		
14.12	43.66		25.5		8.24		869.0		5.24		1.2		D. C. C.
14.17			24.1		8.31		825.0		5.23		4.4		
14.22			24.0		8.29		795.0		5.22		4.7		
SAMPLING													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

r3 (BH, 27/07/16)

Groundwater Low Flow Purging: Water Quality Measurement Form

360 Environmental

Client: Clean away & Shellworks ptyltd
Project: Bunbury GME
360 Job No.: 72519
Location: Banksec
360 Field Representative: PD+PW
Date: 26/3
Pump Type: Bladder
Pump Intake (mbTOC): 38.0

Monitoring Well ID: GW22D
Inner Diameter: 80~
Depth to Water (mbTOC): 24.46
Depth of Well (mbTOC): 49.90
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Total Volume purged:

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
10:14	24.67	254	24.7		6.23		2.7		5.60		166.3		
10:19	24.72		24.0		7.66		4.5		5.05		173.0		
10:24	24.77		23.6		6.75		3.6		5.13		170.5		
10:29	24.76		23.6		6.74		4.1		5.12		174.3		0.1 < LOR
SAMPLING													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clearaway & Hedworth ptyltd
Project: Bayfordbury GME
360 Job No.: 72519
Location: Bantsec
360 Field Representative: PD+PW
Date: 26/03/24

Monitoring Well ID: GW22S
Inner Diameter: 50mm
Depth to Water (mbTOC): 20.40m
Depth of Well (mbTOC): 35.63m
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground): –
Presence & thickness of LNAPL: –

Pump Type: Bladder
Total Volume purged: 280/3
Pump Intake (mbTOC): 34.0m

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
~~10:12~~ ~~20.50~~	20.50	280/3	23.9		7.48		200.2		5.06		-4.2		
10:17	20.57	|	22.3		7.35		199.4		4.88		-1.4		G, C, C
10:22	20.57	|	22.4		7.91		159.3		4.97		-5.4		
10:27	20.57	|	22.5		7.40		197.6		5.10		-8.3		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 (environmental)

Client: Clean away & Medwaste plyltd
Project: Banksia GME
360 Job No.: 72519
Location: Banksia
360 Field Representative: PD+PW
Date: 26/3

Monitoring Well ID: GW235
Inner Diameter: 2in
Depth to Water (mbTOC): 17.25
Depth of Well (mbTOC): 32.70
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder
Total Volume purged: —
Pump Intake (mbTOC): —

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
15.20	17.25	200/1	27.7		3.63		220.1		4.57		79.8		
15.25	17.25		25.4		4.32		362.2		4.57		84.8		
15.30			25.0		5.30		362.7		4.49		72.1		
15.35			25.2		5.34		360.6		4.46		79.7		D/CCC.
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the It has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

360 environmental

Client: Clean away & Hedworth plytol
Project: Bunlong GML
360 Job No.: 72519
Location: Banksea
360 Field Representative: PD+PW
Date:

Monitoring Well ID: GW230
Inner Diameter: 50mm
Depth to Water (mbTOC): 23.20m
Depth of Well (mbTOC): 49.42
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground) -
Presence & thickness of LNAPL: -

Pump Type: Bladder
Total Volume purged: 280L
Pump Intake (mbTOC): 49.0

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. 3% % between readings	pH (unit) Reading	pH ± 0.1 ±between readings	ORP (mV) Reading	ORP ±10 ±between readings	Comments
Start:	Start:												
15:19	23.34	280/3	27.1		6.23		373.5		5.58		-21.9		
15:24	23.36	|	26.3		6.91		367.7		5.97		-21.5		
15:29	23.32	|	26.4		7.58		361.6		5.95		-19.2		O.C.C.
15:34	23.35	|	25.7		8.81		355.6		5.92		-18.7		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

GK Environmental EQUIPMENT

Calibration Report

Multi-Parameter Water Quality Instrument

Customer: SLR
Contact: Pema

Manufacturer: YSI
Instrument: Professional Plus with Quatro cable
Serial #: 21G105322
Cable length: 1m 21F100351

Item	Test	Pass	Comments
Battery	2 x Alkaline C-cells	✓	Voltage reading above 2.9V
	Battery Saver	✓	Automatically turns off after 30 minutes if not used
Connections	Condition	✓	Good, clean
Cable	Condition	✓	Clean, no tears
Display	Operation	✓	
Firmware	Version	✓	0.0.78
Keypad	Operational	✓	
Display	Screen	✓	
Unit	Condition, seals and O-rings	✓	
Monitor housing	Condition	✓	
pH			
Condition		✓	Good, clean
pH millivolts for pH7 calibration range 0 mV ± 50 mV		✓	
pH 4 mV range + 165 to + 180 from 7 buffer mV value		✓	172.80 mV
pH slope		✓	55 to 60 mV/pH, ideal 59mV 57.89
Response time < 90 seconds		✓	
Calibrated and conforms to manufacturer's specifications		✓	
ORP			
Condition		✓	Good, clean
Response time < 90 seconds		✓	
within ± 80mv of reference Zobell Reading		✓	
Calibrated and conforms to manufacturer's specifications		✓	variance range ± 20mV 8 mV
Conductivity			
Condition		✓	Good, clean
Temperature		✓	°C
Conductivity cell constant 5.0 ± 1.0 in GLP file		✓	
Clean sensor reads less than 3 uS/cm in dry air		✓	
Calibrated and conforms to manufacturer's specifications		✓	µs/cm
Dissolved Oxygen			
Condition		✓	Good, clean
DO sensor in use		✓	Galvanic
1.25 mil PE membrane (yellow membrane):		✓	
DO Sensor Value		✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA
Calibrated and conforms to manufacturer's specifications		✓	ppm

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

						Instrument Readings		
Parameter	**Standards**	**Reference**	**Calibration Point**	**Span**	**Units**	**Before**	**After**	**Units**
Temperature	Check Temp NATA	Room Temp	23	-0.4	°C	NA	22.6	°C
pH (23J)	pH 7.00	392512	7.01	-8.00	mV	7.03	7.01	pH
pH (23J)	pH 4.00	394799	4.00	164.80	mV	4.07	4.00	pH
Conductivity (21G100029)	2764 µs/cm at 25°C	23/2308	2764	GLP	5.00	2590	2764	µs/cm
ORP (210715SIA605102)	Zobell A & B	23/3006	234	234	mV	251.8	226.5	mV
Zero DO (21G100131)	NaSO3 in distilled water	10175	0.0	NA	NA	-0.4	0.0	%
100% DO (21G100131)	100% Air Saturation	Air	100.0	5.9	uA	81.9	100.0	%

Calibrated by: Gaurav Kanwar

Calibration Date: 21-Mar-24
Next Due: 17-Sep-24

YSI S.No. 21G105322

YSI CALIBRATION LOG

INSTRUMENT:

☐ **YSI 1**
05H1970 AC (Data Logger)
05K1045 AA (Sonde)

☐ **YSI 2**
6050000 (Data Logger)
605790-1 (Sonde)

CALIBRATION DETAILS

Sensor	Calibration Standard	Temp/Press Correction (Y/N)	Compensated Value (If corrected)	Required Accuracy	Pass	Fail	Comments
pH	☐ pH 4.00	Y / N	pH _____	± 0.2	☑	☐	
	☐ pH 7.00	Y / N	pH _____	± 0.2	☐	☐	
	☐ pH 10.00	Y / N	pH _____	± 0.2	☐	☐	10.01
Conductivity	☐ 1413 uS/cm	Y / N	_____ uS/cm	± 1%	☐	☐	
	☐ 12.88 mS/cm	Y / N	_____ uS/cm	± 1%	☐	☐	
Salinity	☐ Auto calibrated using above EC values			-	☐	☐	
Dissolved Oxygen	☐ 100% Saturation	Y / N			☐	☐	
Redox	☐ Zorbels	Y	_____ mV	±20mV	☐	☐	
Temperature	☐ Factory calibrated	-	-	±0.15°C	☐	☐	—
Battery Level	☐ 0-25% ☐ 25-50% ☐ 50-75% ☐ 75%-100%				☐	☐	

This is to certify that this instrument has been calibrated in accordance with the manufacturer's calibration procedure as recommended in the instrument's service manual.

Signed: _____

Name: P. Wright

Date: 26/ /

Project: Bentley Creek

GK Environmental EQUIPMENT

Calibration Report

Multi-Parameter Water Quality Instrument

Customer: SLR
Contact: Pema

Manufacturer: YSI
Instrument: Professional Plus with Quatro cable
Serial #: 20D101953
Cable length: 1m 22H100437

Item	Test	Pass	Comments
Battery	2 x Alkaline C-cells	✓	Voltage reading above 2.9V
	Battery Saver	✓	Automatically turns off after 30 minutes if not used
Connections	Condition	✓	Good, clean
Cable	Condition	✓	Clean, no tears
Display	Operation	✓	
Firmware	Version	✓	4.0.0
Keypad	Operational	✓	
Display	Screen	✓	
Unit	Condition, seals and O-rings	✓	
Monitor housing	Condition	✓	
pH			
Condition		✓	Good, clean
pH millivolts for pH7 calibration range 0 mV ± 50 mV		✓	
pH 4 mV range + 165 to + 180 from 7 buffer mV value		✓	173.60 mV
pH slope		✓	55 to 60 mV/pH, ideal 59mV 58.19
Response time < 90 seconds		✓	
Calibrated and conforms to manufacturer's specifications		✓	
ORP			
Condition		✓	Good, clean
Response time < 90 seconds		✓	
within ± 80mv of reference Zobell Reading		✓	
Calibrated and conforms to manufacturer's specifications		✓	variance range ± 20mV 0 mV
Conductivity			
Condition		✓	Good, clean
Temperature		✓	°C
Conductivity cell constant 5.0 ± 1.0 in GLP file		✓	
Clean sensor reads less than 3 uS/cm in dry air		✓	
Calibrated and conforms to manufacturer's specifications		✓	µs/cm
Dissolved Oxygen			
Condition		✓	Good, clean
DO sensor in use		✓	Galvanic
1.25 mil PE membrane (yellow membrane):		✓	
DO Sensor Value		✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA
Calibrated and conforms to manufacturer's specifications		✓	ppm

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

						Instrument Readings		
Parameter	**Standards**	**Reference**	**Calibration Point**	**Span**	**Units**	**Before**	**After**	**Units**
Temperature (20A100065)	Check Temp NATA	Room Temp	23	-0.8	°C	NA	22.2	°C
pH (23C)	pH 7.00	392512	7.01	-12.80	mV	7	7.01	pH
pH (23C)	pH 4.00	394799	4.00	160.80	mV	4.02	4.00	pH
Conductivity (20A100065)	2764 µs/cm at 25°C	23/2308	2764	GLP	4.94	2795	2764	µs/cm
ORP (200408SIA605101)	Zobell A & B	23/3006	235	235	mV	232.2	235.6	mV
Zero DO (20B140284)	NaSO3 in distilled water	10175	0.0	NA	NA	-0.3	0.0	%
100% DO (20B140284)	100% Air Saturation	Air	100.0	5.3	uA	80	100.0	%

Calibrated by: Gaurav Kanwar

Calibration Date: 21-Mar-24
Next Due: 17-Sep-24

PROJECT FIELD LOG (DAILY)

Date: 24/06/24 **Project Number:** 72515 **Project Name:** Banksia Dune Gate

Arrived: 9:15 Am **Departed:** 5:15 pm **Weather:** Sunny

PM: Phumeho Wangdi

Field Personnel: Pema Dorji + Kaymdi Sherbandi

Contractors: ✓

Client Contact: Barry / Willy **Site Contact:** Barry / Willy

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☑ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify):

Equipment Used:

Bladder Pump, YSI, Dipper,

☑ Calibration Certificate Received : _____ ☐ Calibration Undertaken: _____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☑ Y ☐ N

Primary Lab: Eurofins Secondary Lab: ALS

SLR

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC01	Duplicate	24/06/24	GW20-R	Water
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS01	Dipper	SE4D	24/06/24	
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB 01	24/06/24	SE4D	
FB			
FB			
FB			
FB			

PROJECT FIELD LOG (DAILY)

Date: 25/06/24 **Project Number:** 72519 **Project Name:** Banksia June LNG

Arrived: 7-30 approx **Departed:** 4.30 **Weather:** Sunny

PM: Phuntsho Wangdi

Field Personnel: Pema Dorji + Kaundi Sahebandu

Contractors: —

Client Contact: Barry / Willi **Site Contact:** Barry / Willi

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☑ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify):

Equipment Used:

Bladder Pump, YSI, Dipper

☐ Calibration Certificate Received : _____ ☑ Calibration Undertaken: _____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☑ Y ☐ N

Primary Lab: Eurofins Secondary Lab: _____

SLR

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC 02	Triplicate	25/06/24	GW11 S	Water
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS				
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB			
FB			
FB			
FB			
FB			

PROJECT FIELD LOG (DAILY)

Date: 26/06/24 **Project Number:** 72519 **Project Name:** Banksia June GME

Arrived: 7.30 **Departed:** 5.30 **Weather:** Rainy

PM: Phuntsho Wangdi

Field Personnel: Pema Dorji + Kavindi Silvaland

Contractors: –

Client Contact: Barry / Will **Site Contact:** Barry / Will

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☑ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify):

Equipment Used:

Bladder Pump, YSI, Dipper

☐ Calibration Certificate Received :_____ ☑ Calibration Undertaken:_____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☑ Y ☐ N

Primary Lab: _____ Secondary Lab: _____

SLR

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS 02	HWQD	/ Dipper	26/06/24	
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB 02	~~HWQD~~ 26/06/24	HWQD	
FB			
FB			
FB			
FB			

PROJECT FIELD LOG (DAILY)

Date: 27/06/24 **Project Number:** 72519 **Project Name:** Bankfull June GME

Arrived: 8.30 **Departed:** 11.00 **Weather:** Cloudy

PM: Phuntsho Wangdi

Field Personnel: Pema Dorji + Kamal Sahabandu

Contractors: -

Client Contact: Barry / Will **Site Contact:** Barry / Will

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☑ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify):

Equipment Used:

Bladder Pump, Dipper, YSI

☐ Calibration Certificate Received :_____ ☑ Calibration Undertaken:_____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☑ Y ☐ N

Primary Lab: Eurofins Secondary Lab: _____

SLR

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS				
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB			
FB			
FB			
FB			
FB			

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	GW1S
Project:	June GME 2024	**Inner Diameter:**	–
Job No.:	72519	**Depth to Water (mbTOC):**	36.54m
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	39.46m
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	–
Date:	26 /06/2024	**Bottom of Well Screen (mbTOC):**	–
		Height of Riser*(m above/below ground)	–
Pump Type:	Bladder Pump	**Presence & thickness of LNAPL:**	–
Total Volume purged:	20L/s		
Pump Intake (mbTOC):	38.5m		

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
10:53	36.58	450/s	19.7		9.05		369.2		5.94		70.1		Light brown, odourless, high turbidity.
10:58	36.56	|	20.1		9.10		372.3		5.86		89.9		
11:03	36.52	|	20.0		8.75		370.1		6.08		81.2		
11:08	36.46	|	19.5		8.90		375.2		6.18		86.5		Lab filter required
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0 5 mg/L; if three DO values are less that 0 5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C: Cleanaway Pty Ltd
Project: June GME 2024
Job No.: 72519
Location: Banksia Road, Crooked Broke,WA
Field Representative: PD/KS
Date: 26 /06/2024

Monitoring Well ID: GW1D
Inner Diameter: /
Depth to Water (mbTOC): 36.02m
Depth of Well (mbTOC): 45.73m
Top of Well Screen (mbTOC): /
Bottom of Well Screen (mbTOC): /
Height of Riser*(m above/below ground): /
Presence & thickness of LNAPL: /

Pump Type: Bladder Pump
Total Volume purged: 25L/
Pump Intake (mbTOC): 48.0m

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
11:59	36.09	250L/	19.9		4.13		767.0		6.01		101.8		
12:04	36.09		20.1		4.40		1654.0		4.72		180.7		
12:09			20.1		4.53		1515.0		5.22		163.2		O.C.C.
12:14			20.1		5.33		1477.0		5.27		153.2		
12:09			20.1		5.51		1491.0		5.23		153.0		
12:14			20.1		5.67		1500.0		5.21		152.6		
12:19			20.1		5.31		1508.0		5.15		152.7		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C: Cleanaway Pty Ltd
Project: June GME 2024
Job No.: 72519
Location: Banksia Road, Crooked Broke,WA
Field Representative: PD/KS
Date: 24 /06/2024

Monitoring Well ID: SE3s
Inner Diameter: /
Depth to Water (mbTOC): Dry @ 29.94
Depth of Well (mbTOC): /
Top of Well Screen (mbTOC): /
Bottom of Well Screen (mbTOC): /
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL: /

Pump Type: Bladder Pump
Total Volume purged: /
Pump Intake (mbTOC): /

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
SAMPLING:													

Dry @ 29.94m

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	GW3D
Project:	June GME 2024	**Inner Diameter:**	—
Job No.:	72519	**Depth to Water (mbTOC):**	32.78 m
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	51.52m
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	
Date:	24 /06/2024	**Bottom of Well Screen (mbTOC):**	
Pump Type:	Bladder Pump	**Height of Riser*(m above/below ground)**	
Pump Intake (mbTOC):	50m.	**Total Volume purged:**	240/3
		Presence & thickness of LNAPL:	

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
14:49	37.85	240/3	18.4		5.50		814.0		5.23		148.2		
14:54	37.87		18.4		3.42		807.0		4.50		143.3		O, C, C.
14:59	37.88		18.6		3.68		810.0		4.86		141.3		
15:04	37.82		19.4		3.64		805.0		4.84		142.2		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	SE45
Project:	June GME 2024	**Inner Diameter:**	–
Job No.:	72519	**Depth to Water (mbTOC):**	-Dry-
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	39.09m
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	–
Date:	24 /06/2024	**Bottom of Well Screen (mbTOC):**	–
		Height of Riser*(m above/below ground)	–
Pump Type:	Bladder Pump	**Presence & thickness of LNAPL:**	–
Pump Intake (mbTOC):	–	**Total Volume purged:**	–

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	**Depth to groundwater (mbTOC)[2]**	**Purge rate (mL/min)[3]**	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	**Comments**
Start:	Start:												
SAMPLING:													

DRY @ 39.09m

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	SE4D
Project:	June GME 2024	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	37.44m
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	54.80m
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	24 /06/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder Pump	Total Volume purged:	250/3
Pump Intake (mbTOC):	~~53.0~~ 53.0	Presence & thickness of LNAPL:	

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
15:46	37.50	250/3	17.5		4.02		435.7		3.75		200.1		Light brown, odourless, high turbidity.
15:51	37.45	↓	18.0		4.13		425.9		4.34		182		
15:56	37.45		18.0		4.45		426.9		4.34		174.1		
16:01	37.45		18.1		4.65		425.0		4.35		170.7		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: {(R2-R1)/((R2+R1)/2)}*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	GW55
Project:	June GME 2024	**Inner Diameter:**	–
Job No.:	72519	**Depth to Water (mbTOC):**	49.31
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	51.70
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	–
Date:	27 /06/2024	**Bottom of Well Screen (mbTOC):**	–
		Height of Riser*(m above/below ground)	–
Pump Type:	Bailer ~~Bladder Pump~~ **Total Volume purged:**	**Presence & thickness of LNAPL:**	–
Pump Intake (mbTOC):			

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
			16.8		4.12		2228		4.02		162.6		Brown, no odour,
													High turbid
													Lab filter required
													dissolved metals
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	~~D~~ GWSD
Project:	June GME 2024	**Inner Diameter:**	
Job No.:	72519	**Depth to Water (mbTOC):**	
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	
Date:	27/06/2024	**Bottom of Well Screen (mbTOC):**	
		Height of Riser*(m above/below ground)	
Pump Type:	Bladder Pump	**Total Volume purged:**	
Pump Intake (mbTOC):		**Presence & thickness of LNAPL:**	

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	**Depth to groundwater (mbTOC)[2]**	**Purge rate (mL/min)[3]**	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	**Comments**
Start:	Start:												
				Dry @ 60.41 m									
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	SE6S
Project:	June GME 2024	Inner Diameter:	-
Job No.:	72519	Depth to Water (mbTOC):	30.09
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	41.13
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	26 /06/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder Pump	Total Volume purged:	250/3
Pump Intake (mbTOC):	40m	Presence & thickness of LNAPL:	-

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
13.55	30.42	250/3	19.3		4.33		457.0		5.16		207.2		colourless, no odour
14.00	30.41	↓	19.3		5.3		465.2		5.40		154.1		med Turbid.
14.05	30.43		18.8		6.55		459.3		5.34		155.8		
14.10	30.44		18.9		7.76		457.5		5.32		155.8		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	GW6D
Project:	June GME 2024	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	30.68
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	51.94
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	
Date:	26 /06/2024	Bottom of Well Screen (mbTOC):	
		Height of Riser*(m above/below ground)	
Pump Type:	Bladder Pump	Total Volume purged:	2L0/s
Pump Intake (mbTOC):	50.5m	Presence & thickness of LNAPL:	

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
13.01	30.78	200/s	18.7		4.65		527.7		5.18		141.5		
13.06	31.03		18.5		2.65		527.7		5.18		82.4	✓	no odour no odour,
13:11	31.16		18.5		4.47		524.6		5.15		92.1	✓	high turbidity
13.16	31.15		18.6		4.06		526.5		5.20		78.3	✓	
13.21	31.15		18.4		4.05		527.0		5.20		74.9	✓	lab filter required
													dissolved metals
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	GW75
Project:	June GME 2024	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	32.99
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	39.69
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	—
Date:	24 /06/2024	Bottom of Well Screen (mbTOC):	—
Pump Type:	Bladder Pump	Height of Riser*(m above/below ground)	—
Pump Intake (mbTOC):	38.5m	Total Volume purged:	25L/3
		Presence & thickness of LNAPL:	—

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
12:58	32.95	200/3	19.2		5.31		308.7		4.65		164	7 ✓	
13:03	32.97		15.2		5.06		313.3		4.64		162.5 ✓		
13:08	32.97		19.1		5.40		314.0		4.63		162.5 ✓		O, C, C
13:13	32.97		15.1		5.08		313.6		4.61		162.2 ✓		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	GW7D-R
Project:	June GME 2024	**Inner Diameter:**	
Job No.:	72519	**Depth to Water (mbTOC):**	33.56 m
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	55.91m
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	–
Date:	24 /06/2024	**Bottom of Well Screen (mbTOC):**	–
		Height of Riser*(m above/below ground)	–
Pump Type:	Bladder Pump	**Total Volume purged:**	25 0/3
Pump Intake (mbTOC):	54.0	**Presence & thickness of LNAPL:**	–

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
11:38	33.59	250/3	19.2		4.89		327.7		4.73		180.2		
11:43	33.59	|	20.0		7.56		313.8		4.80		170.4		O, C + G,
11:48	33.59	|	20.2		6.45		310.2		4.86		170.5		
11:53	33.59	|	19.5		4.75		309.9		4.81		167.1		Real take from here.
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: {(R2-R1)/((R2+R1)/2)}*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	GW8D
Project:	June GME 2024	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	32.54
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	47.26
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	—
Date:	24 /06/2024	Bottom of Well Screen (mbTOC):	—
		Height of Riser*(m above/below ground)	—
Pump Type:	Bladder Pump	Total Volume purged:	20l/3
Pump Intake (mbTOC):	46.0m	Presence & thickness of LNAPL:	—

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
13:54	32.72	20l/3	19.1		8.44		342.8		4.60		160.9		
13:59	32.80	|	19.6		4.20		344.0		4.57		163.1		O, C, C.
14:04	32.84	|	19.5		4.98		352.0		4.69		157.6		
14:09	32.85	|	19.5		5.23		349.9		4.66		157.2		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	GWQS
Project:	June GME 2024	**Inner Diameter:**	–
Job No.:	72519	**Depth to Water (mbTOC):**	26.28
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	38.67
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	–
Date:	26 /06/2024	**Bottom of Well Screen (mbTOC):**	–
		Height of Riser*(m above/below ground)	–
Pump Type:	Bladder Pump	**Total Volume purged:**	250/3
Pump Intake (mbTOC):	37.5m	**Presence & thickness of LNAPL:**	–

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	**Depth to groundwater (mbTOC)[2]**	**Purge rate (mL/min)[3]**	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	**Comments**
Start:	Start:												
15.15	26.19	250/3	19.5		5.71		333.0		4.77		181		0.4C
15.20	26.23	"	19.1		7.01		330.2		4.64		192.1		
15.25	26.24	"	19.3		7.74		329.3		4.65		189.6		
15.30	26.26	"	19.4		8.14		328.1		4.65		186.2		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C: Cleanaway Pty Ltd
Project: June GME 2024
Job No.: 72519
Location: Banksia Road, Crooked Broke,WA
Field Representative: PD/KS
Date: 26 /06/2024

Monitoring Well ID: GW9D
Inner Diameter: -
Depth to Water (mbTOC): 26.46
Depth of Well (mbTOC): 48.20
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground) -
Presence & thickness of LNAPL: -

Pump Type: Bladder Pump
Total Volume purged: 2L/3
Pump Intake (mbTOC): 47m

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
15.53	26.51	2L/3	17.1		10.35		361.9		5.09		168.9		O, C, C
15.58	26.49		18.0		4.20		363.0		5.05		159.0		
16.03	26.53		18.0		4.07		362.3		5.05		153.3		RSO2 + FBO2 taken
16.08	26.52		18.0		4.30		362.4		5.04		52.0		
16.13	26.52		18.1		4.12		361.7		5.05		149.9		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	SE 105
Project:	June GME 2024	**Inner Diameter:**	
Job No.:	72519	**Depth to Water (mbTOC):**	~~25~~ 25.81
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	29.76
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	
Date:	25 /06/2024	**Bottom of Well Screen (mbTOC):**	
Pump Type:	Bailer ~~Bladder Pump~~	**Height of Riser*(m above/below ground)**	
Total Volume purged:		**Presence & thickness of LNAPL:**	
Pump Intake (mbTOC):			

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	**Depth to groundwater (mbTOC)[2]**	**Purge rate (mL/min)[3]**	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	**Comments**
Start:	Start:												
			18.8		3.85		199.5		4.71		238	-6	light brown, no odour high turb
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C: Cleanaway Pty Ltd
Project: June GME 2024
Job No.: 72519
Location: Banksia Road, Crooked Broke,WA
Field Representative: PD/KS
Date: 25 /06/2024

Monitoring Well ID: GW10D
Inner Diameter: -
Depth to Water (mbTOC): 25.70
Depth of Well (mbTOC): 52.17
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground) -
Presence & thickness of LNAPL: -

Pump Type: Bladder Pump
Total Volume purged: 250 l
Pump Intake (mbTOC): 51m

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
13.12	25.97		17.0		4.83		343.2		4.66		259.2		
13.17	26.05		17.5		4.49		340.3		4.69		257.2		D, C.C
13.22	25.82		18.3		11.57		~~17~~ 324.2		5.53		253.3		
13.27	26.00		18.0		10.73		303.2		5.37		257.3		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	GW11S
Project:	June GME 2024	Inner Diameter:	-
Job No.:	72519	Depth to Water (mbTOC):	22.07
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	37.35
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	25 /06/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder Pump	Presence & thickness of LNAPL:	-
Pump Intake (mbTOC):	36.0	Total Volume purged:	25013

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:	7											
10.04	22.10	250/3	16.6		8.43		207.8		4.82		220.6		
10.09	22.17		17.6		7.50		202.6		4.94		217.8		
10.14	22.17		17.7		7.73		203.4		4.93		218.6		O, c.c
10.19	22.17		17.8		7.65		202.9		4.92		220.3		
													Oco2 taken from here
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	GW11D
Project:	June GME 2024	Inner Diameter:	-
Job No.:	72519	Depth to Water (mbTOC):	25.47
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	52.55
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	25 /06/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder Pump	Total Volume purged:	250/3
Pump Intake (mbTOC):	51 m	Presence & thickness of LNAPL:	-

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
10.48	25.73	250/3	16.8		6.21		274.9		5.54		214.0		
10.53	25.78		16.5		9.45		273.9		5.60		210.8		O, C. C
10.58	25.81		16.5		11.2		271.9		5.6		210.2		
11.03	25.82		16.6		11.72		274.2		5.61		205.5		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	GW12D
Project:	June GME 2024	Inner Diameter:	-
Job No.:	72519	Depth to Water (mbTOC):	43.80
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	52.84
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	25 /06/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder Pump	Presence & thickness of LNAPL:	-
Pump Intake (mbTOC):	50.0	Total Volume purged:	25 0/3

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
14:53	43.82	250/3	19.1		4.63		851.0		5.23		260.1		
14:58	43.85	|	19.4		3.59		882		5.24		253.1		0, c c
15:03	43.84	|	19.6		3.45		905		5.23		250.1		
15:08	43.84	|	19.6		3.54		926		5.22		248.2		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	GWN22S
Project:	June GME 2024	**Inner Diameter:**	-
Job No.:	72519	**Depth to Water (mbTOC):**	20.78
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	36.16
Fleld Representative:	PD/KS	**Top of Well Screen (mbTOC):**	-
Date:	25 /06/2024	**Bottom of Well Screen (mbTOC):**	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder Pump	**Total Volume purged:**	
Pump Intake (mbTOC):	35.0	**Presence & thickness of LNAPL:**	-

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
08.55	20.91		15.7		5.47		233.5		4.00		164.3		
09.00	20.86		17.2		4.73		235.7		4.89		163.0		7.CC
09.05	20.86		17.3		4.67		235.5		4.90		159.4		
09.10	20.86		17.4		4.61		235.8		4.89		158.4		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C: Cleanaway Pty Ltd
Project: June GME 2024
Job No.: 72519
Location: Banksia Road, Crooked Broke,WA
Field Representative: PD/KS
Date: 25 /06/2024

Monitoring Well ID: GW22D
Inner Diameter: —
Depth to Water (mbTOC): 24.29
Depth of Well (mbTOC): 49.54
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder Pump
Total Volume purged: 25L/3
Pump Intake (mbTOC): 48.0

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
8.24	24.60	250L/3	13.0		6.57		278.4		4.81		151.7		
8.29	24.63		15.0		5.51		277.6		4.81		160.4		
8.34	24.64		15.0		6.47		274		4.77		176.7		Orange
8.39			14.4		9.60		268.1		4.77		187.6		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	Monitoring Well ID:	GW23s
Project:	June GME 2024	Inner Diameter:	—
Job No.:	72519	Depth to Water (mbTOC):	17.61
Location:	Banksia Road, Crooked Broke,WA	Depth of Well (mbTOC):	32.14
Field Representative:	PD/KS	Top of Well Screen (mbTOC):	—
Date:	25 /06/2024	Bottom of Well Screen (mbTOC):	—
		Height of Riser*(m above/below ground)	—
Pump Type:	Bladder Pump	Presence & thickness of LNAPL:	—
Pump Intake (mbTOC):	31.0m	Total Volume purged:	250L

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
12:13	17.58	250L	19.1		5.46		366.2		4.72		210.5		
12.18	17.57		19.1		4.83		~~384.4~~ 364.9		4.64		220.9		O.C.C
12.23	17.58		18.7		6.33		366.1		4.60		226.4		
12.28	17.63		18.8		6.69		365.8		4.62		228.5		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C	Cleanaway Pty Ltd	**Monitoring Well ID:**	GW 23D
Project:	June GME 2024	**Inner Diameter:**	-
Job No.:	72519	**Depth to Water (mbTOC):**	22.73
Location:	Banksia Road, Crooked Broke,WA	**Depth of Well (mbTOC):**	49.37
Field Representative:	PD/KS	**Top of Well Screen (mbTOC):**	-
Date:	25 /06/2024	**Bottom of Well Screen (mbTOC):**	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder Pump	**Presence & thickness of LNAPL:**	-
Pump Intake (mbTOC):	[illegible] m	**Total Volume purged:**	250/3

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	**Depth to groundwater (mbTOC)[2]**	**Purge rate (mL/min)[3]**	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	**Comments**
Start:	Start:												
11.45	22.90	250/3	18.8		4.88		358.1		5.65		210.3		
11.50	22.88		19.0		4.77		340.4		5.48		209.7		O/C.C
11.55	22.90		19.1		4.64		333.4		5.44		210.3		
12.00	22.88		19.1		4.36		332.7		5.43		210.5		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:C: Cleanaway Pty Ltd
Project: June GME 2024
Job No.: 72519
Location: Banksia Road, Crooked Broke,WA
Field Representative: PD/KS
Date: 26 /06/2024
Pump Type: ~~Bladder Pump~~ Bailer / Reach Pole. Total Volume purged:
Pump Intake (mbTOC):

Monitoring Well ID: Surface water / ~~PSD1~~ Leachate Ponds
Inner Diameter:
Depth to Water (mbTOC):
Depth of Well (mbTOC):
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
PSD1			11.8		7.5		553.2		8.02		68.3		Brown, no odour, high turb, Lab filter (DM)
PSD2			12.5		7.52		396.6		8.05		58.1		no colour, no odour, med Turb dark brown
PLP			12.3		1.98		21109.0		8.13		6.4		~~Black~~ ^, no odour, high turb (Lab filter DM)
LEP3			11.5		4.11		61620.0		7.15		69.7		dark brown no odour, high turb (Lab filter DM)
LEP1			11.4		4.62		64885.0		7.01		64.8		dark brown, no odour, high Turb (Lab filter DM)
SAMPLING>	TDS leachate												
	all 2		12.5		7.85		32713.0		6.47		130.9		

Legend: O, C. C
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

GK Environmental EQUIPMENT

Calibration Report

Multi-Parameter Water Quality Instrument

Customer:
Contact:

Manufacturer: YSI
Instrument: Professional Plus with Quatro cable
Serial #: 19L102400
Cable length: 1m 19H100045

Item	Test	Pass	Comments
Battery	2 x Alkaline C-cells	✓	Voltage reading above 2.9V
	Battery Saver	✓	Automatically turns off after 30 minutes if not used
Connections	Condition	✓	Good, clean
Cable	Condition	✓	Clean, no tears
Display	Operation	✓	
Firmware	Version	✓	4.0.0
Keypad	Operational	✓	
Display	Screen	✓	
Unit	Condition, seals and O-rings	✓	
Monitor housing	Condition	✓	
pH			
Condition		✓	Good, clean
pH millivolts for pH7 calibration range 0 mV ± 50 mV		✓	
pH 4 mV range + 165 to + 180 from 7 buffer mV value		✓	174.70 mV
pH slope		✓	55 to 60 mV/pH, ideal 59mV 58.76
Response time < 90 seconds		✓	
Calibrated and conforms to manufacturer's specifications		✓	
ORP			
Condition		✓	Good, clean
Response time < 90 seconds		✓	
within ± 80mv of reference Zobell Reading		✓	
Calibrated and conforms to manufacturer's specifications		✓	variance range ± 20mV 1 mV
Conductivity			
Condition		✓	Good, clean
Temperature		✓	°C
Conductivity cell constant 5.0 ± 1.0 in GLP file		✓	
Clean sensor reads less than 3 uS/cm in dry air		✓	
Calibrated and conforms to manufacturer's specifications		✓	µs/cm
Dissolved Oxygen			
Condition		✓	Good, clean
DO sensor in use		✓	Galvanic
1.25 mil PE membrane (yellow membrane):		✓	
DO Sensor Value		✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA
Calibrated and conforms to manufacturer's specifications		✓	ppm

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

						Instrument Readings		
Parameter	**Standards**	**Reference**	**Calibration Point**	**Span**	**Units**	**Before**	**After**	**Units**
Temperature (21A100491)	Check Temp NATA	Room Temp	20.6	-0.2	°C	NA	20.4	°C
pH (22F)	pH 7.00	392512	7.01	-28.00	mV	7.01	7.01	pH
pH (22F)	pH 4.00	394799	4.00	146.70	mV	3.97	4.00	pH
Conductivity (21A100491)	2764 µs/cm at 25°C	24/0602	2764	GLP	4.76	2684	2764	µs/cm
ORP (200124SEN605102)	Zobell A & B	23/3006	239	239	mV	238.6	238	mV
Zero DO (21K100090)	NaSO3 in distilled water	10175	0.0	NA	NA	-1.3	0.0	%
100% DO (21K100090)	100% Air Saturation	Air	100.0	6.15	%	95.5	100.0	%

Calibrated by: Gaurav Kanwar

Calibration Date: 04-Jun-24
Next Due: 01-Dec-24

19K102536

GK Environmental EQUIPMENT

Calibration Report

Multi-Parameter Water Quality Instrument

Customer:
Contact:

Manufacturer: YSI
Instrument: Professional Plus with Quatro cable
Serial #: 19K102536
Cable length: 1m 18K100836

Item	Test	Pass	Comments
Battery	2 x Alkaline C-cells	✓	Voltage reading above 2.9V
	Battery Saver	✓	Automatically turns off after 30 minutes if not used
Connections	Condition	✓	Good, clean
Cable	Condition	✓	Clean, no tears
Display	Operation	✓	
Firmware	Version	✓	4.0.0
Keypad	Operational	✓	
Display	Screen	✓	
Unit	Condition, seals and O-rings	✓	
Monitor housing	Condition	✓	
pH			
Condition		✓	Good, clean
pH millivolts for pH7 calibration range 0 mV ± 50 mV		✓	
pH 4 mV range + 165 to + 180 from 7 buffer mV value		✓	173.30 mV
pH slope		✓	55 to 60 mV/pH, ideal 59mV 58.57
Response time < 90 seconds		✓	
Calibrated and conforms to manufacturer's specifications		✓	
ORP			
Condition		✓	Good, clean
Response time < 90 seconds		✓	
within ± 80mv of reference Zobell Reading		✓	
Calibrated and conforms to manufacturer's specifications		✓	variance range ± 20mV 3 mV
Conductivity			
Condition		✓	Good, clean
Temperature		✓	°C
Conductivity cell constant 5.0 ± 1.0 in GLP file		✓	
Clean sensor reads less than 3 uS/cm in dry air		✓	
Calibrated and conforms to manufacturer's specifications		✓	µs/cm
Dissolved Oxygen			
Condition		✓	Good, clean
DO sensor in use		✓	Galvanic
1.25 mil PE membrane (yellow membrane):		✓	
DO Sensor Value		✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA
Calibrated and conforms to manufacturer's specifications		✓	ppm

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

						Instrument Readings		
Parameter	**Standards**	**Reference**	**Calibration Point**	**Span**	**Units**	**Before**	**After**	**Units**
Temperature (19G100450)	Check Temp NATA	Room Temp	18.7	-0.1	°C	NA	18.6	°C
pH (21D)	pH 7.00	392512	7.01	-29.00	mV	7.02	7.01	pH
pH (21D)	pH 4.00	394799	4.00	144.30	mV	3.99	4.00	pH
Conductivity (19G100450)	2764 µs/cm at 25°C	24/0602	2764	GLP	5.02	2751	2764	µs/cm
ORP (20012SEN605102)	Zobell A & B	23/3006	243	243	mV	244.1	240.3	mV
Zero DO (19L100728)	NaSO3 in distilled water	10175	0.0	NA	NA	0.5	0.0	%
100% DO (19L100728)	100% Air Saturation	Air	100.0	5.13	uA	98.7	100.0	%

Calibrated by: Gaurav Kanwar

Calibration Date: 14-Jun-24
Next Due: 11-Dec-24

YSI CALIBRATION LOG

INSTRUMENT Serial Number: 19L102400

CALIBRATION DETAILS

Sensor	Calibration Standard	Temp/Press Correction (Y/N)	Compensated Value (If corrected)	Required Accuracy	Pass	Fail	Comment/s
pH	☐ pH 4.00	Y / N	pH _____	± 0.2	☐	☐	
	☐ pH 7.00	Y / N	pH _____	± 0.2	☑	☐	7.02
	☐ pH 10.00	Y / N	pH _____	± 0.2	☑	☐	
Conductivity	☐ 1413 uS/cm	Y / N	_____uS/cm	± 1%	☑	☐	
	☐ 12.88 mS/cm	Y / N	_____uS/cm	± 1%	☐	☐	
Salinity	☐ Auto calibrated using above EC values			-	☐	☐	
Dissolved Oxygen	☐ 100% Saturation	Y / N			☐	☐	
Redox	☐ Zorbels	Y	_____ mV	±20mV	☐	☐	
Temperature	☐ Factory calibrated	-	-	±0.15°C	☐	☐	
Battery Level	☐ 0-25% ☐ 25-50% ☐ 50-75% ☑ 75%-100%				☐	☐	

This is to certify that this instrument has been calibrated in accordance with the manufacturer's calibration procedure as recommended in the instrument's service manual.

Signed: KV

Name: Kaundi S.

Date: 25/06/24

Project: 72519

YSI CALIBRATION LOG

INSTRUMENT Serial Number: 19K102536

CALIBRATION DETAILS

Sensor	Calibration Standard	Temp/Press Correction (Y/N)	Compensated Value (If corrected)	Required Accuracy	Pass	Fail	Comment/s
pH	☐ pH 4.00	Y / N	pH _____	± 0.2	☐	☐	
	☐ pH 7.00	Y / N	pH _____	± 0.2	☑	☐	7.01
	☐ pH 10.00	Y / N	pH _____	± 0.2	☑	☐	10.01
Conductivity	☐ 1413 uS/cm	Y / N	_____ uS/cm	± 1%	☑	☐	
	☐ 12.88 mS/cm	Y / N	_____ uS/cm	± 1%	☐	☐	
Salinity	☐ Auto calibrated using above EC values			-	☐	☐	
Dissolved Oxygen	☐ 100% Saturation	Y / N			☐	☐	
Redox	☐ Zorbels	Y	_____ mV	±20mV	☐	☐	
Temperature	☐ Factory calibrated	-	-	±0.15°C	☑	☐	
Battery Level	☐ 0-25% ☐ 25-50% ☐ 50-75% ☑ 75%-100%				☐	☐	

This is to certify that this instrument has been calibrated in accordance with the manufacturer's calibration procedure as recommended in the instrument's service manual.

Signed: KS

Name: Kavindu Sabaranga

Date: 25 / 06 / 24

Project: 72519

YSI CALIBRATION LOG

INSTRUMENT Serial Number: 19L102400

CALIBRATION DETAILS

Sensor	Calibration Standard	Temp/Press Correction (Y/N)	Compensated Value (If corrected)	Required Accuracy	Pass	Fail	Comment/s
pH	☐ pH 4.00	Y / N	pH _____	± 0.2	☐	☐	
	☐ pH 7.00	Y / N	pH _____	± 0.2	☑	☐	
	☐ pH 10.00	Y / N	pH _____	± 0.2	☑	☐	10.02
Conductivity	☐ 1413 uS/cm	Y / N	_____ uS/cm	± 1%	☐	☐	
	☐ 12.88 mS/cm	Y / N	_____ uS/cm	± 1%	☐	☐	
Salinity	☐ Auto calibrated using above EC values			-	☐	☐	
Dissolved Oxygen	☐ 100% Saturation	Y / N			☐	☐	
Redox	☐ Zorbels	Y	_____ mV	±20mV	☐	☐	
Temperature	☐ Factory calibrated	-	-	±0.15°C	☐	☐	
Battery Level	☐ 0-25% ☐ 25-50% ☐ 50-75% ☑ 75%-100%				☐	☐	

This is to certify that this instrument has been calibrated in accordance with the manufacturer's calibration procedure as recommended in the instrument's service manual.

Signed: KL

Name: Kavindi S.

Date: 26/06/24

Project: 72519

YSI CALIBRATION LOG

INSTRUMENT Serial Number: 19K102536

CALIBRATION DETAILS

Sensor	Calibration Standard	Temp/Press Correction (Y/N)	Compensated Value (If corrected)	Required Accuracy	Pass	Fail	Comment/s
pH	☐ pH 4.00	Y / N	pH _____	± 0.2	☐	☐	_____
	☐ pH 7.00	Y / N	pH _____	± 0.2	☑	☐	_____
	☐ pH 10.00	Y / N	pH _____	± 0.2	☑	☐	_____
Conductivity	☐ 1413 uS/cm	Y / N	_____uS/cm	± 1%	☑	☐	_____
	☐ 12.88 mS/cm	Y / N	_____uS/cm	± 1%	☐	☐	_____
Salinity	☐ Auto calibrated using above EC values			-	☐	☐	_____
Dissolved Oxygen	☐ 100% Saturation	Y / N			☐	☐	_____
Redox	☐ Zorbels	Y	_____ mV	±20mV	☐	☐	_____
Temperature	☐ Factory calibrated	-	-	±0.15°C	☐	☐	_____
Battery Level	☐ 0-25% ☐ 25-50%	☑ 50-75% ☐ 75%-100%			☐	☐	_____

This is to certify that this instrument has been calibrated in accordance with the manufacturer's calibration procedure as recommended in the instrument's service manual.

Signed: KA

Name: Kaundi S.

Date: 26/06/24

Project: 72519

SLR

PROJECT FIELD LOG (DAILY)

Date: 24/09/24 **Project Number:** 72519 **Project Name:** Banksia September GME

Arrived: 08.30 am **Departed:** 5.30 pm **Weather:** Sunny

PM: Phuntsho Wangdi

Field Personnel: Pema Dorji + Kavindi Sahabandu

Contractors: –

Client Contact: Barry **Site Contact:** Barry

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☒ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Other (Specify):

Equipment Used:

Bladder Pump, YSI, Dipper, Bailer

☑ Calibration Certificate Received : ☐ Calibration Undertaken:

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: Eurofins Secondary Lab: ALS

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC 01	Duplicate	24/09/24	GW7D-R	W
QC 02	Triplicate			
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS 01	Dipper	SE3S-R	24/09/24	
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB ~~01~~		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB 01	24/09/24	SE3S-R	
FB			
FB			
FB			
FB			

SLR

Description of Activities:

@8.30 am - Arrived on site

Met Barry

Completed monitoring and sampling for the wells

SE4D, ~~SE4S-R~~, GW7S, GW7D-R, GW8D, ~~GW8S~~, SE3S-R, GW3D,

Completed QCO1 + QCO2 (GW7D-R)

Compled FBO1 + RSO1 (GW3D/SE3S-R)

5.30pm - Left th site

Groundwater Monitoring (Synoptic Water Level Measurements)

Time Started: _____ Time Finished: _____

Monitoring Well ID	DTW (mBTOC)	DTB (mBTOC)	Construction (Gatic/Riser)	Casing height* (m above/below ground)	Condition
MW					
MW					
MW					
MW					
MW					
MW					
MW					
MW					
MW					
MW					
MW					
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MW					
MW					
MW					

* Gatic cover (also referred to as flush mount) riser height should be a negative value

NAPL Detected: _____
Location: _____
Thickness: _____

SLR

PROJECT FIELD LOG (DAILY)

Date: 25/09/24 **Project Number:** 72519 **Project Name:** Banksia September GME

Arrived: 7.45am **Departed:** 5.30pm **Weather:** Sunny

PM: Phuntsho Wangdi

Field Personnel: Pema Dorji + Kavindi Sahabandu

Contractors: —

Client Contact: Barry **Site Contact:** Barry

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☒ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Other (Specify):

Equipment Used:

Bladder Pump, YSI, Dipper, Bailer

☐ Calibration Certificate Received :_____ ☐ Calibration Undertaken:_____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: Eurofins Secondary Lab: ALS

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC 03	Duplicate	25/09/24	GW115	W
QC 04	Triplicate			
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS 03	Dipper	~~SG35R~~ GW135	25/09/24	
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB 04	25/09/24	GW135	
FB			
FB			
FB			
FB			

SLR

Description of Activities:

7.[illegible]am - Arrived on site

Completed monitoring and sampling of below wells

~~SG3S~~, ~~GW3D~~, SG6S, GW6D, GW9S, ~~GW9D~~, GW9D, GW11S, GW11D, GW13S, GW13D, GW22S, GW22D, GW23S, GW23D

Completed ΦCO3 + ΦCO4 (GW11S)

Completed RSO2 + FBO2 (GW13S)

5.30pm - left the site

Groundwater Monitoring (Synoptic Water Level Measurements)

Time Started: _____ Time Finished:_____

Monitoring Well ID	DTW (mBTOC)	DTB (mBTOC)	Construction (Gatic/Riser)	Casing height* (m above/below ground)	Condition
MW					
MW					
MW					
MW					
MW					
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MW					
MW					
MW					

* Gatic cover (also referred to as flush mount) riser height should be a negative value

NAPL Detected:_____
Location:_____
Thickness:_____

SLR

PROJECT FIELD LOG (DAILY)

Date: 26/09/24 **Project Number:** 72519 **Project Name:** Banksia September GME

Arrived: 7.45am **Departed:** _____ **Weather:** Sunny

PM: Phuntsho Wangdi

Field Personnel: Pema Dorji + Kavindi Sahabandu

Contractors: –

Client Contact: Berry **Site Contact:** Berry

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☒ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Other (Specify):

Equipment Used:

Bladder Pump, YSI, Dipper, Bailer

☑ Calibration Certificate Received : _____ ☐ Calibration Undertaken: _____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: Eurofins Secondary Lab: ALS

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS				
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB			
FB			
FB			
FB			
FB			

SLR

Description of Activities:

7.45 am - arrived on site

Completed monitoring and sampling of below wells

GW1S, GW1D, SE10S, GW10D, GW12S, GW12D, GW5D and PD5

Leachate cell 1 PLP1, PSD1, PSD2, LEP1, LEP2.

Collected Tailings samples.

Completed RSO3 + FBO3 (GW5D)

5.30 pm - Left the site.

Groundwater Monitoring (Synoptic Water Level Measurements)

Time Started: _____ Time Finished:_____

Monitoring Well ID	DTW (mBTOC)	DTB (mBTOC)	Construction (Gatic/Riser)	Casing height* (m above/below ground)	Condition
MW					
MW					
MW					
MW					
MW					
MW					
MW					
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MW					
MW					
MW					

* Gatic cover (also referred to as flush mount) riser height should be a negative value

NAPL Detected:_____
Location:_____
Thickness:_____

PROJECT FIELD LOG (DAILY)

Date: 27/09 **Project Number:** 725.19 **Project Name:** Bankize September GMC

Arrived: 8 am **Departed:** 11 am **Weather:** Rainy

PM: Phuntsho Wangdi

Field Personnel: Kavindi S. / Pema D.

Contractors: -

Client Contact: Berry **Site Contact:** Berry

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☒ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify):

Equipment Used:

Dipper, YSI, Bailer, Bladder

☐ Calibration Certificate Received :_____ ☐ Calibration Undertaken:_____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☑ Y ☐ N

Primary Lab: Eurofins Secondary Lab: ALS

SLR

Description of Activities:

8am - Arrived on site

Conducted monitoring / samplings of SE49-R and GW55 by using bailer

Couldn't get enough water to complete Sampling of SE45-R.

11 am - Left the site

SLR

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS				
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB			
FB			
FB			
FB			
FB			

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 26 /09/2024

Monitoring Well ID: GW2S
Inner Diameter: —
Depth to Water (mbTOC): 36.52m
Depth of Well (mbTOC): 39.86m
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder pump
Total Volume purged: 25L/3
Pump Intake (mbTOC): 38.0m

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
9:50	36.53	250/3	20.5		4.68		658.0		4.78	∞	20.1		
9:55	36.54		20.4		4.47		660.0		4.75		62.9		colourless, odourless, light turbidity
10:00	36.44		20.4		4.42		659.0		4.72		78.1		
10:05	36.54		20.3		4.17		656.0		4.67		92.6		
10:10	36.54		20.3		4.25		655.0		4.65		99.0		
10:15	36.54		20.3		4.17		653.0		4.64		102.3		
10:20	36.54		20.3		4.30		652.0		4.65		106.3		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GWID
Project:	September GME 2024	Inner Diameter:	-
360 Job No.:	72519	Depth to Water (mbTOC):	35.86
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	49.15
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	26/09/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder pump	Total Volume purged:	
Pump Intake (mbTOC):	48m	Presence & thickness of LNAPL:	-

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
09.46	35.55	2L/3	20.6		9.65		1002		6.82		123.5		
09.51	35.75	↓	20.3		9.48		973		6.71		125.9		O, C, C
09.56	35.91		20.5		9.44		1230		6.51		128.7		
10.01	35.90		20.5		9.17		1000		6.41		139.6		
10.05	35.89		20.5		9.10		1035		6.42		140.1		
10.10	35.90	↓	20.5		9.10		1045		6.41		141.3		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	SE35-R
Project:	September GME 2024	Inner Diameter:	
360 Job No.:	72519	Depth to Water (mbTOC):	37.55
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	41.39
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	24/09/2024	Bottom of Well Screen (mbTOC):	-
Pump Type:	Bailer Bladder pump	Total Volume purged:	
Pump Intake (mbTOC):		Height of Riser*(m above/below ground)	-
		Presence & thickness of LNAPL:	-

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
16.44			19.4		1.66		1237		5.54		113.3		Sampled using bailer due to low recharge
													High turbid
													no colour
													sulfur odour
													* Lab filter
SAMPLING:													RSO1 + FB-01

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 24 /09/2024

Monitoring Well ID: GW31
Inner Diameter: -
Depth to Water (mbTOC): 37.43
Depth of Well (mbTOC): 51.40
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground) -
Presence & thickness of LNAPL: -

Pump Type: Bladder pump
Total Volume purged: 2L0/3
Pump Intake (mbTOC):

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
16:37	37.63	250/3	19.6		4.67		853.0		5.01		194.1		2, C. C.
16:42	37.67	|	19.5		4.28		851.2		5.01		191.5		
16:47	37.67	|	19.4		3.91		854.0		4.90		185.2		
16:52		|	19.4		4.99		854.2		4.90		189.9		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 24 /09/2024

Monitoring Well ID: @ SE4SR
Inner Diameter: —
Depth to Water (mbTOC): 37.05 (24th) 37.38 (26th)
Depth of Well (mbTOC): 39.57 (24th) 39.30 (26th)
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder pump
Total Volume purged: 2L
Pump Intake (mbTOC): 38.0

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp 3% % between readings	D.O[4] (mg/L) Reading	D.O 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. 3% % between readings	pH (unit) Reading	pH ± 0.1 ±between readings	ORP (mV) Reading	ORP ±10 ±between readings	Comments
Start:	Start:												
14:11	37.72	250	23.5		4.10		1523.0		6.15	—	35.0		sulphur odour, colourless, high turbidity
14:16	37.86	|	22.1		4.18		1515.0		6.21	—	36.0		
14:21	37.90	|	21.3		4.25		1422.0		6.22	—	36.5		
14:26	38.61	|	21.1		4.41		1421.0		6.22	—	36.7		* Low recharge of the water * Took plenty of time to fill ~~a~~ half a bottle. water to * Not enough sample * Tried with bailer — no water in the well
	—	SAMPLE NOT ENOUGH											
		DUE TO LOW RECHARGE											
SAMPLING:													

* filled half of 1 litre bottle.

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

27/09/24
* ~~could~~ not fully sampled
* Lab filter required

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 24 /09/2024

Monitoring Well ID: SE4D
Inner Diameter: -
Depth to Water (mbTOC): 37.22
Depth of Well (mbTOC): 53.68
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground) -
Presence & thickness of LNAPL: -

Pump Type: Bladder pump
Total Volume purged:
Pump Intake (mbTOC): 38 m

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
14.35	37.20	200/3	22.6		9.47		527		4.34		237.2		O/C/O
14.40	37.22	↓	22.0		7.31		526		4.40		226.3		
14.45	37.22	↓	22.1		7.17		523		4.41		224.6		
14.50	↓	↓	19.9		7.32		526		4.40		226.7		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 26 /09/2024

Pump Type: Bailer ~~Bladder pump~~ Total Volume purged:
Pump Intake (mbTOC):

Monitoring Well ID: GW55
Inner Diameter: –
Depth to Water (mbTOC): 49.38
Depth of Well (mbTOC): 51.84
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground) –
Presence & thickness of LNAPL: –

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
			22.4		2.46		2139		4.17		129.4		no enough water to
													pump. / low recharge
													light brown
													no odour
													* Sampling completed
													on 27/09/24
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 26/09/2024

Monitoring Well ID: GWSD
Inner Diameter:
Depth to Water (mbTOC): –
Depth of Well (mbTOC): 60.71 m
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: Bladder pump
Total Volume purged:
Pump Intake (mbTOC):

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
					Dry	@		60.71m					
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	SG6 S
Project:	September GME 2024	Inner Diameter:	-
360 Job No.:	72519	Depth to Water (mbTOC):	29.96
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	41.05
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	25/09/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder pump	Presence & thickness of LNAPL:	-
Pump Intake (mbTOC):	~~39~~ 40 m	Total Volume purged:	

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
08.23	30.30	200/3	16.6		4.82		523		5.11		237.4		O, C, C
08.28	30.27	↓	17.9		3.15		523		5.48		77.7		
08.33	30.28		17.9		3.33		518		5.40		84.5		
08.38			18.1		3.43		514		5.35		95.9		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 25/09/2024

Monitoring Well ID: GW61
Inner Diameter: —
Depth to Water (mbTOC): 30.30m
Depth of Well (mbTOC): 51.61m
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder pump
Total Volume purged: 25L/3
Pump Intake (mbTOC): 50.0

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
8:12	30.80	250/3	16.2		4.84		486.0		5.22		20.1		
8:17	31.10		17.3		4.18		483.0		5.19		45.9		O, C, C
8:22	31.18		17.4		4.37		483.0		5.19		53.9		
8:27	31.23		17.3		4.14		483.0		5.19		58.0		
8:32	31.32		17.4		4.05		482.0		5.18		62.2		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 24/09/2024

Monitoring Well ID: GW75
Inner Diameter: —
Depth to Water (mbTOC): 32.78
Depth of Well (mbTOC): 39.17
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

Pump Type: Bladder pump
Total Volume purged: 2L0/3
Pump Intake (mbTOC): 38.0

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
11.05	32.78	2L0/3	20.3		5.71		349.0		4.51		205.6		
11.10	32.79	↓	20.7		5.30		344.7		4.56		211.7		O, C, C
11.15	32.79	↓	20.8		5.24		342.7		4.59		216.8		
11-20	↓	↓	20.9		5.17		342.1		4.57		218.4		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GW73-R
Project:	September GME 2024	Inner Diameter:	-
360 Job No.:	72519	Depth to Water (mbTOC):	33.23
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	56.27
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	24/09/2024	Bottom of Well Screen (mbTOC):	-
Pump Type:	Bladder pump	Height of Riser*(m above/below ground)	-
Total Volume purged:	25L/3	Presence & thickness of LNAPL:	-
Pump Intake (mbTOC):			

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
09.00	33.32	240L/3	18.4		5.16		363.9		4.84		228.9		
9:05	33.32	|	19.0		4.64		337.3		4.84		226.4		QCC
9:10	33.32	|	19.3		3.50		336.6		4.82		228.6		
9:15	33.32	|	19.5		3.68		334.6		4.81		232.3		QC01 + QC02
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GW 8D
Project:	September GME 2024	Inner Diameter:	-
360 Job No.:	72519	Depth to Water (mbTOC):	32.29
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	46.56
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	24 /09/2024	Bottom of Well Screen (mbTOC):	-
Pump Type:	Bladder pump	Height of Riser*(m above/below ground)	-
Pump Intake (mbTOC):	45m	Presence & thickness of LNAPL:	-
Total Volume purged:	2m³/3		

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
12.31	32.56	2m³/3	20.6		5.46		386.1		4.81		201.4		
12.36	32.56	↓	20.0		4.20		381.7		4.81		200.9		O/C.C
12.41	↓	↓	20.0		4.27		380.4		4.84		201.0		
12.46	↓	↓	20.4		4.03		379.0		4.84		206.3		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GW9 S
Project:	September GME 2024	Inner Diameter:	–
360 Job No.:	72519	Depth to Water (mbTOC):	25.96
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	36.45
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	–
Date:	25/09/2024	Bottom of Well Screen (mbTOC):	–
		Height of Riser*(m above/below ground)	–
Pump Type:	Bladder pump	Presence & thickness of LNAPL:	–
Pump Intake (mbTOC):	35.5	Total Volume purged:	

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
14.09	25.96	200/3	21.7		5.50		371.2		4.68		236.3		
14.14	25.94	↓	21.1		7.23		367.3		4.69		229.5		O, C, C
14.19	25.91		21.1		6.68		366.9		4.72		238.4		
14.24	25.90		20.9		6.92		367.5		4.83		217.6		
14.29	25.90		20.7		6.64		371.0		5.04		209.6		
14.34	↓	↓	20.6		5.88		377.6		5.03		202.8		
14.39	↓	↓	20.7		6.08		374.6		5.02		200.2		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GWSD
Project:	September GME 2024	Inner Diameter:	—
360 Job No.:	72519	Depth to Water (mbTOC):	24.18
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	48.37
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	—
Date:	25/09/2024	Bottom of Well Screen (mbTOC):	—
		Height of Riser*(m above/below ground)	—
Pump Type:	Bladder pump	Presence & thickness of LNAPL:	/
Pump Intake (mbTOC):	47.0	Total Volume purged:	20/3

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
14:03	26.26	250/3	22.1		5.39		321.3		4.96		15.5		Light brown, odourless, high turbidity
14:08	26.02		21.4		5.61		320.7		4.94		53.4		
14:13	26.20		19.8		5.62		318.1		5.54		68.2		
14:18	26.28		19.4		5.72		305.3		5.71		70.0		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 26/09/2024

Pump Type: Bailer ~~Bladder pump~~ Total Volume purged:
Pump Intake (mbTOC):

Monitoring Well ID: SE10S
Inner Diameter: –
Depth to Water (mbTOC): 25.43
Depth of Well (mbTOC): 29.39
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground) –
Presence & thickness of LNAPL: –

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
08.50			16.5		4.89		535		5.33		175.2		light brown
													no order
													~~pm~~ ed T
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GW10D
Project:	September GME 2024	Inner Diameter:	—
360 Job No.:	72519	Depth to Water (mbTOC):	24.86
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	52.22m
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	/
Date:	26 /09/2024	Bottom of Well Screen (mbTOC):	—
		Height of Riser*(m above/below ground)	—
Pump Type:	Bladder pump	Presence & thickness of LNAPL:	/
Pump Intake (mbTOC):	47.0	Total Volume purged:	2L0/3

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
8:26	25.12	200/3	18.1		6.75		329.3		5.21		14.1		
8:31	25.03		17.7		4.73		319.6		4.82		42.9		
8:36	24.93		17.5		4.03		319.8		4.77		55.5		
8:41	25.98		18.5		6.51		208.[illegible]		5.23		73.5		O.C.C.
8:46	25.58		18.4		7.38		312.0		5.26		80.9		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
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In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
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Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 25/09/2024

Monitoring Well ID: GW11S
Inner Diameter:
Depth to Water (mbTOC): 21.34
Depth of Well (mbTOC): 36.75
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: Bladder pump
Total Volume purged:
Pump Intake (mbTOC): 35.5

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
10.38	21.39	200/3	19.3		6.30		247.8		4.98		194.6		qCO3 + qCO4
10.43	21.37	↓	19.4		5.31		251.4		4.98		204.8		
10.48	21.39	↓	19.4		4.51		250.5		4.96		213.2		O, C, C
10.53		↓	19.4		4.96		249.7		4.94		216.8		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
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A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 25/09/2024

Monitoring Well ID: GW11D
Inner Diameter: —
Depth to Water (mbTOC): 24.62
Depth of Well (mbTOC): 52.84
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL:

Pump Type: Bladder pump
Total Volume purged: 2L/3
Pump Intake (mbTOC): 51.0

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
10:37	24.88	2L/3	19.2		4.71		249.7		5.48		74.4		
10:42	24.56		18.9		9.65		133.5		5.54		83.3		
10:47	25.43		18.8		11.59		248.4		5.78		90.8		Si, Cl, C
10:52	25.34		18.9		13.62		248.5		5.70		96.9	X	
10:57	25.26		19.0		6.23		248.0		5.51		103.9	✓	
11:02	25.31		19.1		5.67		246.3		5.45		103.7	✓	
11:07	25.25		19.2		5.57		238.4		5.40		102.2	✓	
11:12	25.26		19.2		5.52		234.9		5.43		102.0	✓	
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 26/09/2024

Monitoring Well ID: GW 125
Inner Diameter:
Depth to Water (mbTOC): 38.16
Depth of Well (mbTOC): 38.69
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: ~~Bladder pump~~
Total Volume purged:
Pump Intake (mbTOC):

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	3% % between readings	D.O[4] (mg/L) Reading	10% % between readings	Spec. Cond. (µS/cm) Reading	3% % between readings	pH (unit) Reading	± 0.1 ±between readings	ORP (mV) Reading	±10 ±between readings	Comments
Start:	Start:												
				No enough water for Sample									Around 50m of mud at the bottom of the well. No enough water to sample.
													dtw - 38.16 m
													dtb - 38.69 m
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GW12D
Project:	September GME 2024	Inner Diameter:	
360 Job No.:	72519	Depth to Water (mbTOC):	43.74
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	52.43
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	/
Date:	26/09/2024	Bottom of Well Screen (mbTOC):	/
		Height of Riser*(m above/below ground)	/
Pump Type:	Bladder pump	Presence & thickness of LNAPL:	/
Pump Intake (mbTOC):	51.0	Total Volume purged:	2L0/3

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
11.42	43.75	2L0/3	22.4		3.90		1218.0		5.31		18.5		
11.47	43.75	|	21.1		2.95		1347.0		5.31		58.4		
11.52	43.75	|	20.8		2.55		1388.0		5.29		69.5		D.C.C.
11.57	43.75	|	20.7		2.73		1402.0		5.28		74.8		
12:02	43.75	|	20.7		3.09		1426.0		5.26		80.0		
12:07	43.75	|	20.7		2.97		1445.0		5.26		82.9		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GW13S
Project:	September GME 2024	Inner Diameter:	-
360 Job No.:	72519	Depth to Water (mbTOC):	32.16
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	38.77
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	25 /09/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder pump	Presence & thickness of LNAPL:	-
Pump Intake (mbTOC):	37.5 m	Total Volume purged:	

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
15.50	32.12	2-3	20.7		9.15		246.6		5.99		4.92		light brown
15.55	32.40	|	19.9		10.34		446.1		5.64		107.7		no odour
16.00	32.61	|	19.8		10.88		469		5.62		114.6		high turb.
16.05	32.85	|	19.8		11.14		250.5		5.67		110.9		
16.05	33.23	↓	19.7		11.68		505		5.74		102.1		
													*lab filter
													RSO2 + FB 02
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 24/09/2024

Pump Type: Bladder pump
Total Volume purged: 2500/3
Pump Intake (mbTOC): ✓

Monitoring Well ID: GW13D
Inner Diameter: ✓
Depth to Water (mbTOC): 42.14 (25/09) 42.67 (26/09)
Depth of Well (mbTOC): 43.37
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL: —

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
													* Used bailer to sample as it was less than 1.23m of water, however, There was no enough water to sample all the bottles. Just filled in 1 Litre bottles & well got dry.
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to *groundwater* measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

* dipped on the second day (26th) water level has gone down. no recharge. mud on the bottom

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GW22S
Project:	September GME 2024	Inner Diameter:	-
360 Job No.:	72519	Depth to Water (mbTOC):	20.00
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	35.62
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	25/09/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder pump	Total Volume purged:	
Pump Intake (mbTOC):	34m	Presence & thickness of LNAPL:	-

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
09.28	20.07	250/3	18.7		6.48		273.2		5.11		166.8		
09.33	20.10	↓	18.7		5.65		271.1		5.16		190.2		O, C, C
09.38	20.10	↓	18.9		3.82		270.6		5.12		200.2		
09.43	↓	↓	19.0		3.80		271.4		5.12		205.5		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 25/09/2024

Monitoring Well ID: GMW22D
Inner Diameter:
Depth to Water (mbTOC): 23.45
Depth of Well (mbTOC): 49.79m
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: Bladder pump
Total Volume purged: 2.5L
Pump Intake (mbTOC): 48.0

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
9:27	23.66	250/3	18.7		4.90		2528		4.83		43.0		
9:32	23.81		18.5		4.70		248.9		4.71		66.5		
9:37	23.83		19.1		4.71		248.8		4.70		75.3		O, C. C.
9:42	23.83		19.3		4.85		249.2		4.69		83.7		
9:47	23.83		19.3		4.94		249.5		4.69		87.4		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway Pty Ltd	Monitoring Well ID:	GW 23 S
Project:	September GME 2024	Inner Diameter:	
360 Job No.:	72519	Depth to Water (mbTOC):	16.26
Location:	Banksia Road, Crooked Brook, WA	Depth of Well (mbTOC):	32.13
360 Field Representative:	PD/KS	Top of Well Screen (mbTOC):	-
Date:	25/09/2024	Bottom of Well Screen (mbTOC):	-
		Height of Riser*(m above/below ground)	-
Pump Type:	Bladder pump	Presence & thickness of LNAPL:	-
Pump Intake (mbTOC):	31m	Total Volume purged:	

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
12.20	16.25	250/3	21.8		5.63		400.5		5.08		213.4		O,C,C
12.25	16.25		20.6		5.33		413.6		4.78		216.7		
12.30	↓		20.5		5.07		412.8		4.81		212.3		
12.35	↓	↓	20.6		5.13		412.9		4.82		218.4		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 25 /09/2024

Monitoring Well ID: GW23D
Inner Diameter:
Depth to Water (mbTOC): 21.65
Depth of Well (mbTOC): 49.44
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: Bladder pump
Total Volume purged: 750L
Pump Intake (mbTOC): 48.0

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
12:17	21.83	450/L	20.9		13.50		308.4		5.57		85.5	✓	
12:22	21.59	|	19.5		12.99		303.2		5.03		88.6	✓	
12:27	21.88	|	19.0		13.50		305.2		5.94		89.8	✓	D.O. c.c
12:32	22.20	|	18.9		13.58		308.4		5.53		93.0	✓	
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway Pty Ltd
Project: September GME 2024
360 Job No.: 72519
Location: Banksia Road, Crooked Brook, WA
360 Field Representative: PD/KS
Date: 26 /09/2024

Pump Type: Bailer ~~Bladder pump~~ Total Volume purged:
Pump Intake (mbTOC):

Monitoring Well ID: Surface water
Inner Diameter:
Depth to Water (mbTOC):
Depth of Well (mbTOC):
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
LEP1			23.0		0.63		54060		7.69		48.8		dark brown, high turb, no odor, Lab filtr
LEP3			23.0		0.42		58930		7.56		60.3		dark brown, high turb, no, odor, Lab filtr
PSD1			22.5		5.82		1019		8.03		25.4		light cream, high turb, no odor, Lab filtr
PSD2			18.9		7.22		342.8		8.15		27.5		no colour, high turb, no odour, lab filtr
TDS Leachate cell 1			21.9		5.49		33107		7.40		58.1		no, colour, mod T, no odour, lab filtr
SAMPLING:													
PLP1			25.4		0.03		27724		8.09		-116.7		dark brown, high T, no odour, lab filtr

Notes:
[1] Readings to be collected every five minutes or greater
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile
[4] 10% for values greater than 0 5 mg/L; if three DO values are less that 0 5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screnn length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the it has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

GK Environmental EQUIPMENT

Calibration Report

Multi-Parameter Water Quality Instrument

Customer:
Contact:

Manufacturer: YSI
Instrument: Professional Plus with Quatro cable
Serial #: 22B104437
Cable length: 1m (24B100555)

Item	Test	Pass	Comments
Battery	2 x Alkaline C-cells	✓	Voltage reading above 2.9V
	Battery Saver	✓	Automatically turns off after 30 minutes if not used
Connections	Condition	✓	Good, clean
Cable	Condition	✓	Clean, no tears
Display	Operation	✓	
Firmware	Version	✓	4.0.0
Keypad	Operational	✓	
Display	Screen	✓	
Unit	Condition, seals and O-rings	✓	
Monitor housing	Condition	✓	
pH			
Condition		✓	Good, clean
pH millivolts for pH7 calibration range 0 mV ± 50 mV		✓	
pH 4 mV range + 165 to + 180 from 7 buffer mV value		✓	174.30 mV
pH slope		✓	55 to 60 mV/pH, ideal 59mV 58.76
Response time < 90 seconds		✓	
Calibrated and conforms to manufacturer's specifications		✓	
ORP			
Condition		✓	Good, clean
Response time < 90 seconds		✓	
within ± 80mv of reference Zobell Reading		✓	
Calibrated and conforms to manufacturer's specifications		✓	variance range ± 20mV 10 mV
Conductivity			
Condition		✓	Good, clean
Temperature		✓	°C
Conductivity cell constant 5.0 ± 1.0 in GLP file		✓	
Clean sensor reads less than 3 uS/cm in dry air		✓	
Calibrated and conforms to manufacturer's specifications		✓	µs/cm
Dissolved Oxygen			
Condition		✓	Good, clean
DO sensor in use		✓	polarographic
1.25 mil PE membrane (yellow membrane):		✓	
DO Sensor Value		✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA
Calibrated and conforms to manufacturer's specifications		✓	ppm

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

						Instrument Readings		
Parameter	**Standards**	**Reference**	**Calibration Point**	**Span**	**Units**	**Before**	**After**	**Units**
Temperature (22B100315)	Check Temp NATA	Room Temp	19.5	0	°C	NA	19.5	°C
pH (23F)	pH 7.00	398528	7.01	-16.40	mV	7.04	7.01	pH
pH (23F)	pH 4.00	401033	4.00	157.90	mV	3.98	4.00	pH
Conductivity (22B100315)	2764 µs/cm at 25°C	24/0107	2764	GLP	4.76	2800	2764	µs/cm
ORP (23L)	Zobell A & B	23/3006	241	241	mV	228	231.1	mV
Zero DO (22B100173)	NaSO3 in distilled water	10175	0.0	NA	NA	-0.2	0.0	%
100% DO (22B100173)	100% Air Saturation	Air	100.0	5.4	uA	105.8	100.0	%

Calibrated by: Gaurav Kanwar

Calibration Date: 15-Sep-24
Next Due: 14-Mar-25

GK Environmental EQUIPMENT

Calibration Report

Multi-Parameter Water Quality Instrument

Customer: SLR
Contact: Phuntsho

Manufacturer: YSI
Instrument: Professional Plus with Quatro cable
Serial #: 21F105631
Cable length: 1m 21G100412

Item	Test	Pass	Comments
Battery	2 x Alkaline C-cells	✓	Voltage reading above 2.9V
	Battery Saver	✓	Automatically turns off after 30 minutes if not used
Connections	Condition	✓	Good, clean
Cable	Condition	✓	Clean, no tears
Display	Operation	✓	
Firmware	Version	✓	0.0.78
Keypad	Operational	✓	
Display	Screen	✓	
Unit	Condition, seals and O-rings	✓	
Monitor housing	Condition	✓	
pH			
Condition		✓	Good, clean
pH millivolts for pH7 calibration range 0 mV ± 50 mV		✓	
pH 4 mV range + 165 to + 180 from 7 buffer mV value		✓	172.60 mV
pH slope		✓	55 to 60 mV/pH, ideal 59mV 58.37
Response time < 90 seconds		✓	
Calibrated and conforms to manufacturer's specifications		✓	
ORP			
Condition		✓	Good, clean
Response time < 90 seconds		✓	
within ± 80mv of reference Zobell Reading		✓	
Calibrated and conforms to manufacturer's specifications		✓	variance range ± 20mV 12 mV
Conductivity			
Condition		✓	Good, clean
Temperature		✓	°C
Conductivity cell constant 5.0 ± 1.0 in GLP file		✓	
Clean sensor reads less than 3 uS/cm in dry air		✓	
Calibrated and conforms to manufacturer's specifications		✓	µs/cm
Dissolved Oxygen			
Condition		✓	Good, clean
DO sensor in use		✓	Galvanic
1.25 mil PE membrane (yellow membrane):		✓	
DO Sensor Value		✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA
Calibrated and conforms to manufacturer's specifications		✓	ppm

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

						Instrument Readings		
Parameter	**Standards**	**Reference**	**Calibration Point**	**Span**	**Units**	**Before**	**After**	**Units**
Temperature	Check Temp NATA	Room Temp	17.8	-0.4	°C	NA	17.4	°C
pH (22J)	pH 7.00	398528	7.01	-25.00	mV	7.04	7.01	pH
pH (22J)	pH 4.00	401033	4.00	147.60	mV	4.01	4.00	pH
Conductivity (21H100008)	2764 µs/cm at 25°C	24/0107	2764	GLP	5.05	2765	2764	µs/cm
ORP (18H)	Zobell A & B	23/3006	246	246	mV	232.7	234.1	mV
Zero DO (21G100131)	NaSO3 in distilled water	10175	0.0	NA	NA	0.2	0.0	%
100% DO (21G100131)	100% Air Saturation	Air	100.0	4.9	uA	97.8	100.0	%

Calibrated by: Gaurav Kanwar

Calibration Date: 20-Sep-24
Next Due: 19-Mar-25

SLR

PROJECT FIELD LOG (DAILY)

Date: 18/11 **Project Number:** 7282 **Project Name:** Burlara Comm

Arrived: 7:10 am **Departed:** 11:30 am **Weather:** Sunny

PM: RW

Field Personnel: RW + KT

Contractors: -

Client Contact: Jeanette / Kenny **Site Contact:** _____

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☐ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify): surface water

Equipment Used:

YSI & ~~Bio~~ Bailers + Dipper

☐ Calibration Certificate Received : Yes ☐ Calibration Undertaken: _____

Sampling:

Sampling Conducted: ☐ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: Eurofins Secondary Lab: ALS

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS				
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB			
FB			
FB			
FB			
FB			

SLR

PROJECT FIELD LOG (DAILY)

Date: 17/12 **Project Number:** 7759 **Project Name:** Kulgera CMT

Arrived: 6:40 am **Departed:** 5:40 pm **Weather:** Sunny / 37°C

PM: PW

Field Personnel: PW + KT

Contractors: -

Client Contact: Barry / Jean He **Site Contact:** -

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☑ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify): Tailings sampling

Equipment Used:

YSI + Bladder + Bailer + Dipper

☑ Calibration Certificate Received : Yes ☐ Calibration Undertaken: _____

Sampling:

Sampling Conducted: ☐ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: Envirolab Services Secondary Lab: ALS

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC 03		17/12	GW11S	
QC 04				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS 02	1		17/12	
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB 02	17/12		
FB			
FB			
FB			
FB			

SLR

PROJECT FIELD LOG (DAILY)

Date: 16/12/24 **Project Number:** 72819 **Project Name:** Banksia Civil

Arrived: 8:00 am **Departed:** 5:30 pm **Weather:** Cloudy

PM: PW

Field Personnel: PW + KT

Contractors: _____

Client Contact: Barry / Jeanette **Site Contact:** –

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☑ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify):

Equipment Used:

YSI + Bladder pump + Dipper + Bailer (Surface water)

☑ Calibration Certificate Received: Yes ☐ Calibration Undertaken: _____

Sampling:

Sampling Conducted: ☑ Y ☐ N Matrix: ☐ Soil ☑ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: Eurofins Secondary Lab: ALS

SLR

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC 01		16/12	GW7D-R	
QC 02				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS 01			16/12	
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB 01	16/12		
FB			
FB			
FB			
FB			

SLR

PROJECT FIELD LOG (DAILY)

Date: _____ **Project Number:** _____ **Project Name:** _____

Arrived: _____ **Departed:** _____ **Weather:** _____

PM: _____

Field Personnel: _____

Contractors: _____

Client Contact: _____ **Site Contact:** _____

Purpose of Visit (Tick Appropriate Box):

☐ Site Inspection ☐ Well Integrity Assessment

☐ Soil Bore Advancement (Drill Rig) ☐ Hand Augering ☐ Test Pits ☐ Soil Sampling

☐ Monitoring Well Installation (Drill Rig) ☐ Groundwater Monitoring ☐ Sediment Sampling

☐ Sub-slab Vapour Probe Installation ☐ Landfill Gas Well Installation ☐ Gas/ Vapour Sampling

☐ Remediation Works Oversight ☐ Surface Water Sampling ☐ Other (Specify):

Equipment Used:

_____

_____

☐ Calibration Certificate Received :_____ ☐ Calibration Undertaken:_____

Sampling:

Sampling Conducted: ☐ Y ☐ N Matrix: ☐ Soil ☐ Water ☐ Air

CoC Completed: ☐ Y ☐ N

Primary Lab: _____ Secondary Lab: _____

Quality Control Details:

QC	Type	Date and time	Primary	Media
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				
QC				

QC	Collection Point	Collection Location	Date and time	Rinsate water batch #
RS				
RS				
RS				
RS				
RS				

QC	Date and time	Trip blank batch #
TB		
TB		
TB		
TB		
TB		

QC	Date and time	Collection Location	Blank water batch #
FB			
FB			
FB			
FB			
FB			

Groundwater Low Flow Purging: Water Quality Measurement Form

surface water

SLR

Client: Cleanaway
Project: Drinking Water Dec '24
Job No.: 72519
Location: Banksia
Field Representative: PW + KT
Date: 18/12

Monitoring Well ID: —
Inner Diameter: —
Depth to Water (mbTOC):
Depth of Well (mbTOC):
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL: —

Pump Type:
Total Volume purged:
Pump Intake (mbTOC):

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
LEP1			29.4		0.47		107211.0		7.29		268		Dark brown, organic odour, high turbidity
LEP3			27.1		0.30		76480.0		7.56		0.1		Dark brown, organic odour, high turbidity
PLP			25.6		0.93		276078.0		7.91		-146.0		Dark brown, organic odour high turbidity
TDS leachate cell 1			25.9		5.35		42089.0		6.75		90.5		0.6 C.
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway
Project: Drinking Water Dec '24
Job No.: 725194
Location: Banksmeadow
Field Representative: PW + KT
Date: 17/12

Monitoring Well ID: GW6b
Inner Diameter:
Depth to Water (mbTOC): 30.03
Depth of Well (mbTOC):
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground) —
Presence & thickness of LNAPL:

Pump Type: Total Volume purged:
Pump Intake (mbTOC):

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
2:30	30.14		27.8		4.52		518		5.18		114.0		clear
2:35	30.54		25.3		2.62		506		~~5.01~~		105.3		no odour
2:40	30.70		25.7		3.43		500		5.01				no bubbles
2:45			25.1		3.42		~~5.04~~		5.03		109.5		
							497		5.04		110.2		
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Drinks Cake Dec '24
Job No.: 72519
Location: Banks
Field Representative: PW + KT
Date: 17/12

Monitoring Well ID: GW12D
Inner Diameter:
Depth to Water (mbTOC): 45.17
Depth of Well (mbTOC):
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: Bladder
Total Volume purged:
Pump Intake (mbTOC):

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
3:50	43.73		25.1		3.89		1230		5.96		154.6		Clear
3:55	43.73		22.1		1.39		1212		5.29		108.2		no odour
4:00	↓		21.7		2.07		1370		5.27		108.5		No hydrocarbon
4:05			21.6		2.19		1476		5.22		108.5		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Banksia GME Dec '24
Job No.: 72519
Location: Banksia
Field Representative: PW + KT
Date: 17/12

Monitoring Well ID: GW12S
Inner Diameter:
Depth to Water (mbTOC):
Depth of Well (mbTOC):
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type:
Total Volume purged:
Pump Intake (mbTOC):

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
	Dry @		39.52										
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Galic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Banksia CME Dec '24
Job No.: 72519
Location: Banksia
Field Representative: PW + KT
Date: 17/12

Monitoring Well ID: GW1B
Inner Diameter:
Depth to Water (mbTOC): 35.80
Depth of Well (mbTOC):
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL: –

Pump Type: Bladder
Total Volume purged:
Pump Intake (mbTOC): –

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
4:50	35.87		27.6		5.85		601		6.27		93.7		clear
4:55	↓		24.9		5.40		790		6.09		91.9		
5:00			24.0		5.32		605		6.08		90.8		No odour
5:05			24.2		5.05		~~6.06~~		6.08		90.8		No turbid
							819						
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Drinking GWE Dec '22
Job No.: 72519
Location: Banksmeadow
Field Representative: PW + KT
Date: 19/12

Monitoring Well ID: GW15
Inner Diameter:
Depth to Water (mbTOC): 36.27
Depth of Well (mbTOC):
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: Bladder
Total Volume purged: —
Pump Intake (mbTOC):

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
4.40	36.29		27.5		5.60		875		4.17		189.2		Clear
4.45	36.29		23.5		4.00		618		4.56		154.7		No odour
4.50	↓		22.3		3.85		605		4.57		130.9		Low turbidity
4.55	↓		22.1		3.85		611		4.53		149.8		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stable.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway	**Monitoring Well ID:**	SEGS
Project:	Banksia GME Dec '24	**Inner Diameter:**	
Job No.:	72519	**Depth to Water (mbTOC):**	29.56
Location:	Banksia	**Depth of Well (mbTOC):**	
Field Representative:	PW + KT	**Top of Well Screen (mbTOC):**	–
Date:	17/12	**Bottom of Well Screen (mbTOC):**	–
		Height of Riser*(m above/below ground)	–
Pump Type:	1	**Total Volume purged:**	
Pump Intake (mbTOC):		**Presence & thickness of LNAPL:**	–

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
2:30	29.80		27.0		4.53		468		5.12		289.9		clear
2:35	29.81		22.7		3.77		470		5.14		211.2		No odour
2:40	29.81		22.4		4.36		467		5.16		222.4		No turbid
2:45	↓		22.1		4.20		466		5.16		227.0		
SAMPLING													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Clearaway	Monitoring Well ID:	–
Project:	Drinking Game Dec '21	Inner Diameter:	–
Job No.:	72519	Depth to Water (mbTOC):	–
Location:	Bunbury	Depth of Well (mbTOC):	–
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	–
Date:	16/12	Bottom of Well Screen (mbTOC):	–
Pump Type:	Surface water	Height of Riser*(m above/below ground)	–
Pump Intake (mbTOC):		Total Volume purged:	Presence & thickness of LNAPL: –

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
PSD 1			25.7		8.72		485		8.86		120.8		turbid, yellow, no odour
PSD 2			25.9		7.54		513.9		8.93		112.7		clear, no odour, no turbid.
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: {(R2-R1)/((R2+R1)/2)}*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Banksia GME Dec '24
Job No.: 72519
Location: Banksia
Field Representative: PW + KT
Date: ~~18/12~~ 18/12

Monitoring Well ID: GW5D
Inner Diameter:
Depth to Water (mbTOC):
Depth of Well (mbTOC):
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

Pump Type: Total Volume purged:
Pump Intake (mbTOC):

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
	dry	@	60.5										
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Banksia Gdns Dec 24
Job No.: 72519
Location: Banksia
Field Representative: PW + KT
Date: ~~18/12~~ 18/12

Pump Type: Bailer
Total Volume purged: –
Pump Intake (mbTOC): –

Monitoring Well ID: GW53
Inner Diameter: ~~50mm~~ 50mm
Depth to Water (mbTOC): ~~5.65~~ 5.65
Depth of Well (mbTOC): ~~49.47~~ 5.65
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground) –
Presence & thickness of LNAPL:

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
8.43		–	19.3		4.39		2108		4.08		152.0		odorless.
													high turbidity
													Brown colour
SAMPLING:													

Notes:
[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Bunbury CMF Dec '24
Job No.: 72519
Location: Bunbury
Field Representative: PJ + KT
Date: 17/12

Pump Type: Bladder
Pump Intake (mbTOC):
Total Volume purged: -

Monitoring Well ID: GW22DS
Inner Diameter: 50mm
Depth to Water (mbTOC): ~~23.60~~ 19.60
Depth of Well (mbTOC):
Top of Well Screen (mbTOC): -
Bottom of Well Screen (mbTOC): -
Height of Riser*(m above/below ground) -
Presence & thickness of LNAPL: -

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
7:45	19.82		19.6		3.41		209.3		5.13		173.7		
7:50	19.80		19.3		2.37		205.6		5.12		152.7		Clear
7:55	↓		19.2		2.38		202.6		5.77		117.9		No odour
8:00			19.5		2.50		205.6		5.64		118.5		No turbidity
													FB02 + RS02
													Batch no 7X PO 307
													Batch no 7Y
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Banksia GME Dec '24
Job No.: 72519
Location: Banksia
Field Representative: PW + KT
Date: 17/12

Pump Type: Mk1 SW
Pump Intake (mbTOC): /

Total Volume purged: –

Monitoring Well ID: GW22D
Inner Diameter: 50mm
Depth to Water (mbTOC): 19.65
Depth of Well (mbTOC): 23.60
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground): –
Presence & thickness of LNAPL: –

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
7:45	23.85		20.5		5.12		255.7		4.59		260	3	Clear
7:50	24.02		20.3		5.23		254.1		4.55		293	1	No odour
7:55	24.02		20.4		4.92		254.1		4.55		305.3		No bubbles
8:00	↓		20.5		4.51		255.7		4.54		310	1	
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: {(R2-R1)/((R2+R1)/2)}*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway	Monitoring Well ID:	GW23D
Project:	Drinking Water Dec '24	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	22.15
Location:	Banksia	Depth of Well (mbTOC):	
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	—
Date:	17/12	Bottom of Well Screen (mbTOC):	—
Pump Type:	Bladder	Total Volume purged:	—
Pump Intake (mbTOC):	—	Height of Riser*(m above/below ground)	—
		Presence & thickness of LNAPL:	—

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
9:10	22.26		27.0		3.02		318.7		5.20		254.5		clear
9:15	22.30		24.0		3.64		284.2		5.22		237.1		no clear
9:20	22.26		25.0		3.40		304.2		5.37		220.2		No turbid
9:25	22.30		24.8		3.45		305.8		5.33		218.6		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway	**Monitoring Well ID:**	GW23S
Project:	Drinking GWE Dec '24	**Inner Diameter:**	
Job No.:	72519	**Depth to Water (mbTOC):**	16.15
Location:	Banksia	**Depth of Well (mbTOC):**	
Field Representative:	PW + KT	**Top of Well Screen (mbTOC):**	–
Date:	17/12	**Bottom of Well Screen (mbTOC):**	–
Pump Type:	Bladder	**Height of Riser*(m above/below ground)**	
Total Volume purged:	✓	**Presence & thickness of LNAPL:**	–
Pump Intake (mbTOC):	–		

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. 3% % between readings	pH (unit) Reading	pH ± 0.1 ±between readings	ORP (mV) Reading	ORP ±10 ±between readings	Comments
Start:	Start:												
9:10	16.25		17.8		4.47		356.3		3.64		248.2		Clear
9:15	↓		25.3		3.10		287.7		4.85		172.7		No odour
9:20			25.6		3.04		287.0		4.85		165.8		No turbid
9:25			25.2		3.35		287.4		4.85		163.5		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Clearaway	**Monitoring Well ID:**	GW9D
Project:	Drinking Game Dec '24	**Inner Diameter:**	50 mm
Job No.:	72519	**Depth to Water (mbTOC):**	25.89
Location:	Bankna	**Depth of Well (mbTOC):**	-
Field Representative:	PW + KT	**Top of Well Screen (mbTOC):**	-
Date:	17/12	**Bottom of Well Screen (mbTOC):**	-
Pump Type:	Bladder	**Height of Riser*(m above/below ground)**	-
Pump Intake (mbTOC):	-	**Total Volume purged:**	-
		Presence & thickness of LNAPL:	-

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
10:15	25.89		30.2		3.66		311.5		4.71		189	7	clear
10:20	25.89		26.3		5.75		323.4		4.77		167	4	No odour
10:25	↓		25.3		5.6		321.1		4.77		168	0	No turbid
10:30	↓		24.4		~~6.~~								
					5.40		320.0		4.75		162	8	
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Clearaway	Monitoring Well ID:	GW9S
Project:	Drinks Cake Dec '24	Inner Diameter:	50mm
Job No.:	72519	Depth to Water (mbTOC):	25.59
Location:	Bankstown	Depth of Well (mbTOC):	-
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	-
Date:	17/12	Bottom of Well Screen (mbTOC):	-
Pump Type:	Bladder	Height of Riser*(m above/below ground)	-
Total Volume purged:	-	Presence & thickness of LNAPL:	-
Pump Intake (mbTOC):	-		

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
10:15	25.62		25.5		6.76		293.6		5.17		286	↓	Clear
10:20	25.62		23.8		7.56		288.7		5.30		249	↓	No odour
10:25	↓		23.8		7.72		289.0		5.50		239.4	↓	No turbid
10:30	↓		23.8		7.19		289.7		5.35		232.6		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Clearaway	Monitoring Well ID:	GW11D
Project:	Banksia Gdns DEC 22	Inner Diameter:	50m
Job No.:	72519	Depth to Water (mbTOC):	24.72
Location:	Banksia	Depth of Well (mbTOC):	
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	–
Date:	17/12	Bottom of Well Screen (mbTOC):	–
Pump Type:	Bladder	Height of Riser*(m above/below ground)	–
Pump Intake (mbTOC):	–	Total Volume purged:	–
		Presence & thickness of LNAPL:	–

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:	250/3											
13.01	25.74		37.8		3.52		258.7		5.40		115.1		
13.06	25.14		29.0		3.50		254.6		5.4		105.1		D.O, C
13.11	25.12		29.1		3.39		252.3		5.39		104.8		
13.16	↓	↓	29.0		3.35		250.7		5.37		106.3		
SAMPLING													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the salurated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway	Monitoring Well ID:	GW115
Project:	Drinking Game Dec '24	Inner Diameter:	50m
Job No.:	72519	Depth to Water (mbTOC):	21.01
Location:	Banksia	Depth of Well (mbTOC):	-
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	-
Date:	17/12	Bottom of Well Screen (mbTOC):	-
Pump Type:	Bladder	Height of Riser*(m above/below ground)	-
Pump Intake (mbTOC):	-	Total Volume purged:	-
		Presence & thickness of LNAPL:	-

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	Comments
			Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	
Start:	Start:												
13.0	21.10	250	24.8		5.12		188.4		4.65		256.0		clear
13.05	21.10		24.0		4.49		188.6		4.65		258.6		No odour
13.10			23.1		5.01		188.4		4.74		254.1		No bubbles
13.15			22.9		5.10		189.1		4.80		249.5		
													QC03+04
													taken here
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Cleanaway
Project: Drinking Water Dec '24
Job No.: 72519
Location: Banksia
Field Representative: PW + KT
Date: 16/12

Pump Type: Bailer
Total Volume purged:
Pump Intake (mbTOC):

Monitoring Well ID: GW13D
Inner Diameter:
Depth to Water (mbTOC): 42.33
Depth of Well (mbTOC): 43.83
Top of Well Screen (mbTOC):
Bottom of Well Screen (mbTOC):
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL:

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
			22.2		0.80		718		6.16		-70.2		Dark colour lots of sand + cement like odour. * small bottles sampled - * Two large green bottles unsampled.
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Galic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Banksia CME Dec '24
Job No.: 72519
Location: Banksia
Field Representative: PW + KT
Date: 16/12

Monitoring Well ID: GW13S
Inner Diameter:
Depth to Water (mbTOC): 33.60
Depth of Well (mbTOC): –
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground): –
Presence & thickness of LNAPL: –

Pump Type: Bladder
Total Volume purged: –
Pump Intake (mbTOC): –

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
1:40	33.60		24.3		3.12		675		4.31		301.3		
1:45	33.72		23.2		1.52		639		4.43		277.7		
1:50	33.80		22.6		1.04		653		4.43		274.3		O. C, C.
1:55	33.86		22.3		0.97		631		4.45		273.7		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.
[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Clearaway	Monitoring Well ID:	SEQS-R
Project:	Drinking Game Dec '24	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	36.92
Location:	Banksia	Depth of Well (mbTOC):	
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	—
Date:	16/12	Bottom of Well Screen (mbTOC):	—
Pump Type:	Bladder	Height of Riser*(m above/below ground)	—
Pump Intake (mbTOC):		Total Volume purged:	
		Presence & thickness of LNAPL:	—

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
2:35	36.92		27.5		1.56		1578		6.22		-96.2		
2:40	36.72		26.0		0.81		1514		6.22		-97.6		pale white colour
2:45	37.90		28.0		0.49		1472		6.20		-102.4		No odour
2:50	37.95		28.5		0.49		1470		6.50		-105.4		turbid H2O
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

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[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

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A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Bunbury CME Dec '22
Job No.: 72519
Location: Bunbury
Field Representative: PW + KT
Date: 16/12

Pump Type: Bladder
Total Volume purged: –
Pump Intake (mbTOC): –

Monitoring Well ID: GW10D
Inner Diameter:
Depth to Water (mbTOC): 25.13
Depth of Well (mbTOC):
Top of Well Screen (mbTOC): –
Bottom of Well Screen (mbTOC): –
Height of Riser*(m above/below ground): –
Presence & thickness of LNAPL:

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
4:05	25.36		24.1		5.48		335.4		4.70		288.9		
4:10	25.30		23.2		5.56	329.7	~~488.4~~		4.80		271.2		
4:15	25.37		21.5		6.01		329.8		4.81		270.1		O.C.C
4:20	~~22.7~~		22.7		6.01		327.8		4.89		265.1		
	25.35												
SAMPLING:													

Notes:

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Legend:
mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client: Clearaway
Project: Drinksea CMF Dec '22
Job No.: 72519
Location: Banteng
Field Representative: PW + KT
Date: 16/12

Monitoring Well ID: SG105
Inner Diameter: 50 mm
Depth to Water (mbTOC): 25.06
Depth of Well (mbTOC):
Top of Well Screen (mbTOC): —
Bottom of Well Screen (mbTOC): —
Height of Riser*(m above/below ground)
Presence & thickness of LNAPL: —

Pump Type: Mailer
Total Volume purged: —
Pump Intake (mbTOC): —

Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Temp (°C) Reading	Temp (°C) 3% % between readings	D.O[4] (mg/L) Reading	D.O[4] (mg/L) 10% % between readings	Spec. Cond. (µS/cm) Reading	Spec. Cond. (µS/cm) 3% % between readings	pH (unit) Reading	pH (unit) ± 0.1 ±between readings	ORP (mV) Reading	ORP (mV) ±10 ±between readings	Comments
Start:	Start:												
1645	—	—	20.3		4.52		413.2		4.85		229.4		O, C, C
													FB01 + RS01
													taken here.
													Batch no: P0209
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.
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[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.
The depth to groundwater measurement must be recorded before SAMPLING
VOC samples must be collected first
Pump intake should be located within the screen interval & at the mid point of the saturated screen length
* Gatic cover riser height should be a negative value
In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged
If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after
A minimum of 4 readings are required, unless the well runs dry
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Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Clemenger	Monitoring Well ID:	SE4D
Project:	Banksia Gdns Dec '24	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	37.09
Location:	Banksia	Depth of Well (mbTOC):	-
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	-
Date:	11/12	Bottom of Well Screen (mbTOC):	-
Pump Type:	Bladder	Height of Riser*(m above/below ground)	
Pump Intake (mbTOC):	-	Total Volume purged:	-
		Presence & thickness of LNAPL:	-

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
15.05	37.05	2	24.7		4.08		407.6		4.20		316.2		
15.10	37.09		23.5		3.59		400.6		4.23		303.6		pale white colour
15.15	↓		23.1		3.38		402.8		4.27		300.2		No odour
15.20	↓	↓	23.0		3.40		402.4		4.30		299.1		turbid H_2O
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway	**Monitoring Well ID:**	GW8D
Project:	Banksia GME Dec '24	**Inner Diameter:**	
Job No.:	72519	**Depth to Water (mbTOC):**	32.10
Location:	Banksia	**Depth of Well (mbTOC):**	
Field Representative:	PW + KT	**Top of Well Screen (mbTOC):**	–
Date:	16/12	**Bottom of Well Screen (mbTOC):**	–
		Height of Riser*(m above/below ground)	–
Pump Type:	Bladder	**Total Volume purged:**	–
Pump Intake (mbTOC):	–	**Presence & thickness of LNAPL:**	–

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	**Depth to groundwater (mbTOC)[2]**	**Purge rate (mL/min)[3]**	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	**Comments**
Start:	Start:												
11.03	32.10	200/3	22.5		4.67		362.6		4.80		237.3		No odour
11.08	32.34		21.6		4.08		376.9		4.66		238.6		No odour
11.13	32.37		21.0		3.59		377.2		4.62		258.2		No turbid.
11.18	32.40		20.6		3.80		400.7		4.62		262.8		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.

[2] Drawdown should not exceed 9 cm ONCE first set of readings obtained. This allows for natural drawdown stabilisation to occur.

[3] Must be such that the drawdown doesn't exceed 9 cm, or if it does exceed, remains stabile.

[4] 10% for values greater than 0.5 mg/L; if three DO values are less that 0.5 mg/L, consider these values as stabilised.

The depth to groundwater measurement must be recorded before SAMPLING

VOC samples must be collected first

Pump intake should be located within the screen interval & at the mid point of the saturated screen length

* Gatic cover riser height should be a negative value

In the event that the recharge is very slow and the well runs dry, the readings may be collected at intervals of less than 5 minutes or for every litres purged

If a well runs dry, it is assumed that stabilisation will have occurred once the the well has recharged and that samples can be collected straight after

A minimum of 4 readings are required, unless the well runs dry

To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway	**Monitoring Well ID:**	GW7S
Project:	Banksia GME Dec '24	**Inner Diameter:**	50mm
Job No.:	72519	**Depth to Water (mbTOC):**	32.45
Location:	Banksia	**Depth of Well (mbTOC):**	
Field Representative:	PW + KT	**Top of Well Screen (mbTOC):**	—
Date:	16/12	**Bottom of Well Screen (mbTOC):**	—
		Height of Riser*(m above/below ground)	—
Pump Type:	Bladder	**Total Volume purged:**	/ —
Pump Intake (mbTOC):	/	**Presence & thickness of LNAPL:**	—

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	**Depth to groundwater (mbTOC)[2]**	**Purge rate (mL/min)[3]**	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	**Comments**
Start:	Start:												
10.14	32.45	3L/s	22.8		6.95		279.0		5.01		221.9		
10.19	32.45		21.8		6.96		273.2		4.90		262.7		O.C.C.
10.24	↓		21.6		6.95		273.5		4.79		280.9		
10.29			21.6		6.95		273.4		4.85		290.1		
SAMPLING:													

Notes:

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The depth to groundwater measurement must be recorded before SAMPLING

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To calculate % difference, use the following equation: ((R2-R1)/((R2+R1)/2))*100

Legend:

mbTOC= metres below top of casing

DO = dissolved oxygen

ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Cleanaway	Monitoring Well ID:	GW3D
Project:	Banksia Gdns Dec '22	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	37.45
Location:	Banksia	Depth of Well (mbTOC):	
Field Representative:	PN + KT	Top of Well Screen (mbTOC):	—
Date:	16/12	Bottom of Well Screen (mbTOC):	—
Pump Type:	Bladder	Total Volume purged:	—
Pump Intake (mbTOC):	—	Height of Riser*(m above/below ground)	
		Presence & thickness of LNAPL:	—

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
11:55	37.45		25.8		3.91		750		4.86		256.6		No colour
12:00	37.52		23.6		2.76		737		4.92		240.8		No odour
12:05	37.56		23.6		2.27		735		4.94		232.2		No sheen
12:10	37.57		21.8		2.28		741		4.86		235.7		
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
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Pump intake should be located within the screen interval & at the mid point of the saturated screen length
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Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Clearaway	Monitoring Well ID:	SE3S-R
Project:	Banksia GME Dec '24	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	37.60
Location:	Banksia	Depth of Well (mbTOC):	
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	—
Date:	16/1/25	Bottom of Well Screen (mbTOC):	—
Pump Type:	Bladder	Total Volume purged:	—
Pump Intake (mbTOC):	—	Height of Riser*(m above/below ground)	—
		Presence & thickness of LNAPL:	—

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:	200											
12:00	37.64	200	25.9		3.23		1669		5.72		-60.3		
12:05	37.83	↓	22.5		1.85		1658		5.69		-77.4		odourless, milky white, high turbidity
12:10	37.95	↓	22.1		1.80		1646		5.70		-76.5		
12:15	37.94	↓	22.1		1.76		1639		5.73		-71.0		
SAMPLING:													

Notes:

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Legend:

mbTOC= metres below top of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

Groundwater Low Flow Purging: Water Quality Measurement Form

SLR

Client:	Clearaway	Monitoring Well ID:	GW76R
Project:	Banksia GWE Dec '24	Inner Diameter:	
Job No.:	72519	Depth to Water (mbTOC):	33.15
Location:	Banksia	Depth of Well (mbTOC):	
Field Representative:	PW + KT	Top of Well Screen (mbTOC):	—
Date:	16/12	Bottom of Well Screen (mbTOC):	—
Pump Type:	Bladder	Height of Riser*(m above/below ground)	—
Pump Intake (mbTOC):	—	Total Volume purged:	—
		Presence & thickness of LNAPL:	—

			Temp (°C)	3%	D.O[4] (mg/L)	10%	Spec. Cond. (µS/cm)	3%	pH (unit)	± 0.1	ORP (mV)	±10	
Time[1]	Depth to groundwater (mbTOC)[2]	Purge rate (mL/min)[3]	Reading	% between readings	Reading	% between readings	Reading	% between readings	Reading	±between readings	Reading	±between readings	Comments
Start:	Start:												
9:15	33.15		22.0		4.13		291.3		4.84		255.9		No colour
9:20	33.19		21.4		4.13		283.6		4.77		257.3		No odour
9:26	33.20		21.2		4.01		284.4		4.74		261.3		No turbid.
9:30	33.20		21.2		3.90		280.1		4.72		262.8		
													0.01+0.02
													collected here
SAMPLING:													

Notes:

[1] Readings to be collected every five minutes or greater.
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A minimum of 4 readings are required, unless the well runs dry
To calculate % difference, use the following equation: {(R2-R1)/((R2+R1)/2)}*100

Legend:
mbTOC= metres below lop of casing
DO = dissolved oxygen
ORP = oxygen reduction potential

GK Environmental EQUIPMENT

Calibration Report

Multi-Parameter Water Quality Instrument

Customer:
Contact:

Manufacturer: YSI
Instrument: Professional Plus with Quatro cable
Serial #: 20D101953
Cable length: 1m 22H100437

Item	Test	Pass	Comments
Battery	2 x Alkaline C-cells	✓	Voltage reading above 2.9V
	Battery Saver	✓	Automatically turns off after 30 minutes if not used
Connections	Condition	✓	Good, clean
Cable	Condition	✓	Clean, no tears
Display	Operation	✓	
Firmware	Version	✓	4.0.0
Keypad	Operational	✓	
Display	Screen	✓	
Unit	Condition, seals and O-rings	✓	
Monitor housing	Condition	✓	
pH			
Condition		✓	Good, clean
pH millivolts for pH7 calibration range 0 mV ± 50 mV		✓	
pH 4 mV range + 165 to + 180 from 7 buffer mV value		✓	176.50 mV
pH slope		✓	55 to 60 mV/pH, ideal 59mV 59.16
Response time < 90 seconds		✓	
Calibrated and conforms to manufacturer's specifications		✓	
ORP			
Condition		✓	Good, clean
Response time < 90 seconds		✓	
within ± 80mv of reference Zobell Reading		✓	
Calibrated and conforms to manufacturer's specifications		✓	variance range ± 20mV -1 mV
Conductivity			
Condition		✓	Good, clean
Temperature		✓	°C
Conductivity cell constant 5.0 ± 1.0 in GLP file		✓	
Clean sensor reads less than 3 uS/cm in dry air		✓	
Calibrated and conforms to manufacturer's specifications		✓	µs/cm
Dissolved Oxygen			
Condition		✓	Good, clean
DO sensor in use		✓	Galvanic
1.25 mil PE membrane (yellow membrane):		✓	
DO Sensor Value		✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA
Calibrated and conforms to manufacturer's specifications		✓	ppm

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

						Instrument Readings		
Parameter	**Standards**	**Reference**	**Calibration Point**	**Span**	**Units**	**Before**	**After**	**Units**
Temperature (20A100065)	Check Temp NATA	Room Temp	23.3	-0.9	°C	NA	22.4	°C
pH (23C)	pH 7.00	398528	7.01	-25.00	mV	7.09	7.01	pH
pH (23C)	pH 4.00	401033	4.00	151.50	mV	4.02	4.00	pH
Conductivity (20A100065)	2764 µs/cm at 25°C	24/0107	2764	GLP	5.00	2747	2764	µs/cm
ORP (200324SEN605102)	Zobell A & B	24/2803	235	235	mV	240.3	235.4	mV
Zero DO (20B140284)	NaSO3 in distilled water	10175	0.0	NA	NA	-0.2	0.0	%
100% DO (20B140284)	100% Air Saturation	Air	100.0	5.97	uA	102.3	100.0	%

Calibrated by: Gaurav Kanwar

Calibration Date: 10-Dec-24
Next Due: 08-Jun-25

GK Environmental EQUIPMENT

Calibration Report

Multi-Parameter Water Quality Instrument

Customer:
Contact:

Manufacturer: YSI
Instrument: Professional Plus with Quatro cable
Serial #: 21D101799
Cable length: 1m 24B100063

Item	Test	Pass	Comments
Battery	2 x Alkaline C-cells	✓	Voltage reading above 2.9V
	Battery Saver	✓	Automatically turns off after 30 minutes if not used
Connections	Condition	✓	Good, clean
Cable	Condition	✓	Clean, no tears
Display	Operation	✓	
Firmware	Version	✓	0.0.78
Keypad	Operational	✓	
Display	Screen	✓	
Unit	Condition, seals and O-rings	✓	
Monitor housing	Condition	✓	
pH			
Condition		✓	Good, clean
pH millivolts for pH7 calibration range 0 mV ± 50 mV		✓	
pH 4 mV range + 165 to + 180 from 7 buffer mV value		✓	176.50 mV
pH slope		✓	55 to 60 mV/pH, ideal 59mV 59.1
Response time < 90 seconds		✓	
Calibrated and conforms to manufacturer's specifications		✓	
ORP			
Condition		✓	Good, clean
Response time < 90 seconds		✓	
within ± 80mv of reference Zobell Reading		✓	
Calibrated and conforms to manufacturer's specifications		✓	variance range ± 20mV 8 mV
Conductivity			
Condition		✓	Good, clean
Temperature		✓	°C
Conductivity cell constant 5.0 ± 1.0 in GLP file		✓	
Clean sensor reads less than 3 uS/cm in dry air		✓	
Calibrated and conforms to manufacturer's specifications		✓	µs/cm
Dissolved Oxygen			
Condition		✓	Good, clean
DO sensor in use		✓	polarographic
1.25 mil PE membrane (yellow membrane):		✓	
DO Sensor Value		✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA
Calibrated and conforms to manufacturer's specifications		✓	ppm

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

						Instrument Readings		
Parameter	**Standards**	**Reference**	**Calibration Point**	**Span**	**Units**	**Before**	**After**	**Units**
Temperature (21G100029)	Check Temp NATA	Room Temp	23.3	-0.4	°C	NA	22.9	°C
pH (22M)	pH 7.00	398528	7.01	-29.30	mV	7.08	7.01	pH
pH (22M)	pH 4.00	401033	4.00	147.20	mV	4.06	4.00	pH
Conductivity (21G100029)	2764 µs/cm at 25°C	24/0107	2764	GLP	5.09	2763	2764	µs/cm
ORP (200124SEN605102)	Zobell A & B	24/2803	234	234	mV	229.5	226.1	mV
Zero DO (24E100086)	NaSO3 in distilled water	10175	0.0	NA	NA	0.4	0.0	%
100% DO (24E100086)	100% Air Saturation	Air	100.0	6.3	uA	105.9	100.0	%

Calibrated by: Gaurav Kanwar

Calibration Date: 10-Dec-24
Next Due: 08-Jun-25

APPENDIX F LABORATORY CERTIFICATES OF ANALYSIS

SLR Consulting Australia Pty Ltd
Level 1, 500 Hay Street
Subiaco
WA 6008

NATA Accredited
Accreditation Number 2377
Site Number 2370

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: **Phuntsho Wangdi**

Report **1083237-W**
Project name BANKSIA LANDFILL GME
Project ID 675.072519.00001
Received Date Mar 28, 2024

Client Sample ID			**GW1S**	**GW3D**	**SE4D**	**SE6S**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Ap0001461**	**L24-Ap0001462**	**L24-Ap0001463**	**L24-Ap0001464**
Date Sampled			**Mar 27, 2024**	**Mar 25, 2024**	**Mar 25, 2024**	**Mar 26, 2024**
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	87	86	81	80
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			GW1S	GW3D	SE4D	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001461	L24-Ap0001462	L24-Ap0001463	L24-Ap0001464
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Alkalinity	5	mg CaCO3/L	5.7	9.9	< 5	21
Ammonia-N	0.02	mg/L	0.07	0.05	0.06	0.06
Bicarbonate	5	mg CaCO3/L	5.7	9.9	< 5	21
Carbonate	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	160	240	98	100
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity	10	uS/cm	570	770	350	440
Dissolved Oxygen	0.1	mg/L	7.9	8.2	7.8	8.1
Hydroxide	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Nitrate-N	0.01	mg/L	2.6	1.6	0.13	5.7
Nitrite-N	0.01	mg/L	0.02	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	2.6	1.6	0.13	5.7
pH	0.1	pH Units	5.6	6.0	5.1	5.9
Redox Potential		mV	310	340	370	350
Sulfate	1	mg/L	18	13	11	4.0
Total Dissolved Solids	5	mg/L	340	460	210	270
Total Kjeldahl Nitrogen	0.2	mg/L	0.5	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	3.1	1.7	0.2	5.8
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.04	0.03	0.03	0.04
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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

Client Sample ID			GW1S	GW3D	SE4D	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001461	L24-Ap0001462	L24-Ap0001463	L24-Ap0001464
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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
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	%	65	121	69	82
p-Terphenyl-d14 (surr.)	1	%	64	116	66	85
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	60	94	51	60
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			GW1S	GW3D	SE4D	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001461	L24-Ap0001462	L24-Ap0001463	L24-Ap0001464
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	0.36	< 0.05	0.12	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.002	0.002	0.002	< 0.001
Iron	0.01	mg/L	0.56	0.09	0.10	0.07
Lead (filtered)	0.001	mg/L	0.002	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.075	0.30	< 0.005	0.010
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.005	0.004	< 0.001	0.004
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	0.13	0.007	< 0.005	0.050
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	8.6	10	5.4	8.9
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	2.7	8.1	1.0	2.9
Magnesium	0.5	mg/L	11	14	7.0	11
Potassium	0.5	mg/L	2.0	2.4	0.7	2.9
Sodium	0.5	mg/L	98	130	59	69

Client Sample ID			GW1S	GW3D	SE4D	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001461	L24-Ap0001462	L24-Ap0001463	L24-Ap0001464
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.06
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.04
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	182	162	178	147
13C5-PFPeA (surr.)	1	%	173	178	166	158
13C5-PFHxA (surr.)	1	%	166	160	169	152
13C4-PFHpA (surr.)	1	%	164	171	165	153
13C8-PFOA (surr.)	1	%	166	165	162	160
13C5-PFNA (surr.)	1	%	164	156	161	154
13C6-PFDA (surr.)	1	%	131	142	151	153
13C2-PFUnDA (surr.)	1	%	88	131	138	140
13C2-PFDoDA (surr.)	1	%	79	133	131	146
13C2-PFTeDA (surr.)	1	%	125	75	80	109
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	108	141	140	131
D3-N-MeFOSA (surr.)	1	%	87	157	152	154
D5-N-EtFOSA (surr.)	1	%	112	INT	192	INT
D7-N-MeFOSE (surr.)	1	%	84	141	140	131
D9-N-EtFOSE (surr.)	1	%	85	154	154	138
D5-N-EtFOSAA (surr.)	1	%	78	128	123	130
D3-N-MeFOSAA (surr.)	1	%	83	129	128	130
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	171	113	184	164
13C2-6:2 FTSA (surr.)	1	%	162	181	167	154

Client Sample ID			GW1S	GW3D	SE4D	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001461	L24-Ap0001462	L24-Ap0001463	L24-Ap0001464
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
13C2-8:2 FTSA (surr.)	1	%	112	151	150	141
13C2-10:2 FTSA (surr.)	1	%	83	135	142	147
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	151	157	155	148
18O2-PFHxS (surr.)	1	%	160	159	157	148
13C8-PFOS (surr.)	1	%	128	143	139	145
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	0.11
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	0.11

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001465	L24-Ap0001466	L24-Ap0001467	L24-Ap0001468
Date Sampled			Mar 26, 2024	Mar 25, 2024	Mar 25, 2024	Mar 25, 2024
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	87	83	81	87

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001465	L24-Ap0001466	L24-Ap0001467	L24-Ap0001468
Date Sampled			Mar 26, 2024	Mar 25, 2024	Mar 25, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Alkalinity	5	mg CaCO3/L	14	< 5	5.7	6.9
Ammonia-N	0.02	mg/L	0.05	0.04	0.05	0.05
Bicarbonate	5	mg CaCO3/L	14	< 5	5.7	6.9
Carbonate	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Chemical Oxygen Demand (COD)	25	mg/L	83	< 25	< 25	< 25
Chloride	5	mg/L	130	61	67	81
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity	10	uS/cm	500	270	270	310
Dissolved Oxygen	0.1	mg/L	8.1	8.5	8.3	7.9
Hydroxide	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Nitrate-N	0.01	mg/L	2.1	4.7	2.3	0.43
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	2.1	4.7	2.3	0.43
pH	0.1	pH Units	6.0	5.1	5.7	5.9
Redox Potential		mV	350	400	400	390
Sulfate	1	mg/L	24	16	8.5	8.6
Total Dissolved Solids	5	mg/L	300	160	160	190
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001465	L24-Ap0001466	L24-Ap0001467	L24-Ap0001468
Date Sampled			Mar 26, 2024	Mar 25, 2024	Mar 25, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
Total Nitrogen	0.2	mg/L	2.2	4.7	2.4	0.5
Total Organic Carbon	5	mg/L	6.8	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.03	0.02	0.03	0.03
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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
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	%	79	83	77	95
p-Terphenyl-d14 (surr.)	1	%	61	78	69	92
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	62	51	52	70
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001465	L24-Ap0001466	L24-Ap0001467	L24-Ap0001468
Date Sampled			Mar 26, 2024	Mar 25, 2024	Mar 25, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	0.08	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.001	0.002	0.007	0.001
Iron	0.01	mg/L	0.20	0.04	0.07	0.16
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.32	< 0.005	0.009	0.046
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.004	< 0.001	0.002	0.001
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	0.006	< 0.005	0.013	< 0.005

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001465	L24-Ap0001466	L24-Ap0001467	L24-Ap0001468
Date Sampled			Mar 26, 2024	Mar 25, 2024	Mar 25, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	4.5	6.1	4.2	5.0
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	3.2	1.5	0.9	1.3
Magnesium	0.5	mg/L	5.7	7.6	5.0	6.6
Potassium	0.5	mg/L	1.4	0.9	0.9	0.9
Sodium	0.5	mg/L	88	37	40	51
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	0.02	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	170	163	117	117
13C5-PFPeA (surr.)	1	%	166	159	122	125
13C5-PFHxA (surr.)	1	%	167	160	126	123
13C4-PFHpA (surr.)	1	%	167	158	115	120
13C8-PFOA (surr.)	1	%	176	155	124	120
13C5-PFNA (surr.)	1	%	177	151	145	121
13C6-PFDA (surr.)	1	%	161	138	105	92
13C2-PFUnDA (surr.)	1	%	159	130	101	90
13C2-PFDoDA (surr.)	1	%	156	141	112	95
13C2-PFTeDA (surr.)	1	%	108	113	71	73
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	143	133	120	113
D3-N-MeFOSA (surr.)	1	%	159	131	INT	INT
D5-N-EtFOSA (surr.)	1	%	INT	182	INT	INT
D7-N-MeFOSE (surr.)	1	%	147	131	124	111
D9-N-EtFOSE (surr.)	1	%	156	142	136	118
D5-N-EtFOSAA (surr.)	1	%	146	128	99	93
D3-N-MeFOSAA (surr.)	1	%	146	116	97	84

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001465	L24-Ap0001466	L24-Ap0001467	L24-Ap0001468
Date Sampled			Mar 26, 2024	Mar 25, 2024	Mar 25, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	0.14	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	182	169	116	117
13C2-6:2 FTSA (surr.)	1	%	175	159	103	109
13C2-8:2 FTSA (surr.)	1	%	151	154	104	92
13C2-10:2 FTSA (surr.)	1	%	164	143	100	97
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	146	155	146	148
18O2-PFHxS (surr.)	1	%	156	144	140	138
13C8-PFOS (surr.)	1	%	155	131	131	117
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	0.14	< 0.1
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	0.14	< 0.05

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001469	L24-Ap0001470	L24-Ap0001471	L24-Ap0001472
Date Sampled			Mar 27, 2024	Mar 27, 2024	Mar 27, 2024	Mar 27, 2024
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001469	L24-Ap0001470	L24-Ap0001471	L24-Ap0001472
Date Sampled			Mar 27, 2024	Mar 27, 2024	Mar 27, 2024	Mar 27, 2024
Test/Reference	LOR	Unit				
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	82	82	85	83
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Alkalinity	5	mg CaCO3/L	7.5	6.8	< 5	6.1
Ammonia-N	0.02	mg/L	0.05	0.10	0.07	0.08
Bicarbonate	5	mg CaCO3/L	7.5	6.8	< 5	6.1
Carbonate	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	76	86	31	84
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity	10	uS/cm	310	310	170	310

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001469	L24-Ap0001470	L24-Ap0001471	L24-Ap0001472
Date Sampled			Mar 27, 2024	Mar 27, 2024	Mar 27, 2024	Mar 27, 2024
Test/Reference	LOR	Unit				
Dissolved Oxygen	0.1	mg/L	8.4	8.0	8.3	8.0
Hydroxide	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Nitrate-N	0.01	mg/L	2.4	0.51	4.3	0.12
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	2.4	0.51	4.3	0.12
pH	0.1	pH Units	6.3	5.9	5.7	5.7
Redox Potential		mV	370	400	400	400
Sulfate	1	mg/L	11	4.7	2.3	8.3
Total Dissolved Solids	5	mg/L	180	190	100	190
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	2.5	0.6	4.4	0.2
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.03	< 0.01	0.02	0.04
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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
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	%	62	81	73	77
p-Terphenyl-d14 (surr.)	1	%	67	95	66	84
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001469	L24-Ap0001470	L24-Ap0001471	L24-Ap0001472
Date Sampled			Mar 27, 2024	Mar 27, 2024	Mar 27, 2024	Mar 27, 2024
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	65	62	67	54
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001469	L24-Ap0001470	L24-Ap0001471	L24-Ap0001472
Date Sampled			Mar 27, 2024	Mar 27, 2024	Mar 27, 2024	Mar 27, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	0.08
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.002	0.003	< 0.001	0.002
Iron	0.01	mg/L	0.24	0.26	0.05	0.35
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.016	< 0.005	< 0.005	0.020
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.005	0.001	< 0.001	0.003
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	0.015	< 0.005	< 0.005	0.010
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	5.1	4.6	3.2	4.3
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	2.8	2.2	< 0.5	2.0
Magnesium	0.5	mg/L	7.0	6.1	3.5	5.5
Potassium	0.5	mg/L	0.6	0.7	< 0.5	3.1
Sodium	0.5	mg/L	49	51	24	50
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	111	169	179	162
13C5-PFPeA (surr.)	1	%	122	150	186	153
13C5-PFHxA (surr.)	1	%	122	147	178	152
13C4-PFHpA (surr.)	1	%	120	149	164	161
13C8-PFOA (surr.)	1	%	118	147	179	139
13C5-PFNA (surr.)	1	%	119	133	169	142
13C6-PFDA (surr.)	1	%	101	113	151	127
13C2-PFUnDA (surr.)	1	%	99	104	133	125
13C2-PFDoDA (surr.)	1	%	107	110	127	133
13C2-PFTeDA (surr.)	1	%	78	85	72	130

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001469	L24-Ap0001470	L24-Ap0001471	L24-Ap0001472
Date Sampled			Mar 27, 2024	Mar 27, 2024	Mar 27, 2024	Mar 27, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	116	118	118	124
D3-N-MeFOSA (surr.)	1	%	INT	125	84	145
D5-N-EtFOSA (surr.)	1	%	INT	172	106	198
D7-N-MeFOSE (surr.)	1	%	120	115	114	126
D9-N-EtFOSE (surr.)	1	%	135	122	119	137
D5-N-EtFOSAA (surr.)	1	%	95	104	120	119
D3-N-MeFOSAA (surr.)	1	%	95	103	123	117
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	113	148	197	160
13C2-6:2 FTSA (surr.)	1	%	120	135	33	159
13C2-8:2 FTSA (surr.)	1	%	100	115	155	116
13C2-10:2 FTSA (surr.)	1	%	101	118	134	133
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	152	136	163	136
18O2-PFHxS (surr.)	1	%	140	140	168	140
13C8-PFOS (surr.)	1	%	130	113	152	125
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			GW11S	GW11D	GW12D	GW22S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001473	L24-Ap0001474	L24-Ap0001475	L24-Ap0001476
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 27, 2024	Mar 26, 2024
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	83	80	85	84
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			GW11S	GW11D	GW12D	GW22S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001473	L24-Ap0001474	L24-Ap0001475	L24-Ap0001476
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 27, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Alkalinity	5	mg CaCO3/L	5.4	26	19	8.0
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Bicarbonate	5	mg CaCO3/L	5.4	26	19	8.0
Carbonate	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	29	55	240	32
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity	10	uS/cm	180	260	900	200
Dissolved Oxygen	0.1	mg/L	8.5	9.1	8.5	9.0
Hydroxide	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Nitrate-N	0.01	mg/L	3.3	2.3	1.8	3.4
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	3.3	2.3	1.8	3.4
pH	0.1	pH Units	5.0	5.6	5.5	5.3
Redox Potential		mV	390	340	350	370
Sulfate	1	mg/L	1.9	11	32	9.0
Total Dissolved Solids	5	mg/L	110	150	540	120
Total Kjeldahl Nitrogen	0.2	mg/L	0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	3.5	2.3	1.8	3.4
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.03	0.04	0.04	0.04
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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
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	%	87	82	82	105
p-Terphenyl-d14 (surr.)	1	%	96	91	82	111

Client Sample ID			GW11S	GW11D	GW12D	GW22S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001473	L24-Ap0001474	L24-Ap0001475	L24-Ap0001476
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 27, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	61	64	67	68
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			GW11S	GW11D	GW12D	GW22S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001473	L24-Ap0001474	L24-Ap0001475	L24-Ap0001476
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 27, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.001
Iron	0.01	mg/L	< 0.01	0.12	0.04	0.02
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.037	0.10	0.039	0.057
Mercury (filtered)	0.0001	mg/L	< 0.0001	0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.002	0.002	0.003	0.002
Selenium (filtered)	0.001	mg/L	< 0.001	0.002	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	< 0.005	0.026	< 0.005	0.023
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	3.5	3.0	21	3.3
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	1.1	9.1	7.6	1.7
Magnesium	0.5	mg/L	3.7	3.4	24	3.6
Potassium	0.5	mg/L	< 0.5	0.8	4.3	< 0.5
Sodium	0.5	mg/L	24	35	140	29
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	99	63	104	117
13C5-PFPeA (surr.)	1	%	98	86	132	129
13C5-PFHxA (surr.)	1	%	96	86	101	126
13C4-PFHpA (surr.)	1	%	88	84	77	130
13C8-PFOA (surr.)	1	%	89	86	47	128

Client Sample ID			GW11S	GW11D	GW12D	GW22S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001473	L24-Ap0001474	L24-Ap0001475	L24-Ap0001476
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 27, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFNA (surr.)	1	%	87	76	32	129
13C6-PFDA (surr.)	1	%	81	63	19	112
13C2-PFUnDA (surr.)	1	%	78	62	11	109
13C2-PFDoDA (surr.)	1	%	76	62	INT	118
13C2-PFTeDA (surr.)	1	%	59	43	INT	70
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	82	42	12	126
D3-N-MeFOSA (surr.)	1	%	97	16	INT	INT
D5-N-EtFOSA (surr.)	1	%	124	21	INT	INT
D7-N-MeFOSE (surr.)	1	%	75	25	INT	127
D9-N-EtFOSE (surr.)	1	%	79	25	INT	137
D5-N-EtFOSAA (surr.)	1	%	71	60	INT	109
D3-N-MeFOSAA (surr.)	1	%	69	58	16	104
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	85	89	131	117
13C2-6:2 FTSA (surr.)	1	%	73	82	75	111
13C2-8:2 FTSA (surr.)	1	%	80	84	23	115
13C2-10:2 FTSA (surr.)	1	%	71	69	INT	116
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	102	105	110	145
18O2-PFHxS (surr.)	1	%	94	103	58	146
13C8-PFOS (surr.)	1	%	91	85	25	139

Client Sample ID			GW11S	GW11D	GW12D	GW22S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001473	L24-Ap0001474	L24-Ap0001475	L24-Ap0001476
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 27, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			GW22D	GW23S	GW23D	QC01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001477	L24-Ap0001478	L24-Ap0001479	L24-Ap0001480
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
TRH C10-C14	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	-
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	-
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	-
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
TRH >C10-C16 less Naphthalene (F2)[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	-
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	-
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	-
BTEX						
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Toluene	0.001	mg/L	< 0.001	< 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	-
BTEX						
4-Bromofluorobenzene (surr.)	1	%	81	84	79	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
DCM	5	ug/L	< 5	< 5	< 5	-
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	-

Client Sample ID			GW22D	GW23S	GW23D	QC01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001477	L24-Ap0001478	L24-Ap0001479	L24-Ap0001480
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	-
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	-
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	-
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	-
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	-
Alkalinity	5	mg CaCO3/L	< 5	< 5	66	5.3
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Bicarbonate	5	mg CaCO3/L	< 5	< 5	66	5.3
Carbonate	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	65	100	76	69
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity	10	uS/cm	240	360	360	270
Dissolved Oxygen	0.1	mg/L	8.6	8.5	9.5	8.5
Hydroxide	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Nitrate-N	0.01	mg/L	0.88	1.5	0.12	2.1
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	0.88	1.5	0.12	2.1
pH	0.1	pH Units	4.9	4.6	6.0	5.1
Redox Potential		mV	400	420	350	420
Sulfate	1	mg/L	8.6	6.5	7.1	< 1
Total Dissolved Solids	5	mg/L	150	220	220	160
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	0.3	0.3
Total Nitrogen	0.2	mg/L	0.9	1.6	0.4	2.4
Total Organic Carbon	5	mg/L	< 5	< 5	15	< 5
Total Phosphorus	0.01	mg/L	0.04	0.03	0.06	0.03
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-

Client Sample ID			GW22D	GW23S	GW23D	QC01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001477	L24-Ap0001478	L24-Ap0001479	L24-Ap0001480
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2-Fluorobiphenyl (surr.)	1	%	56	78	87	-
p-Terphenyl-d14 (surr.)	1	%	63	82	89	-
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Phenol-d6 (surr.)	1	%	71	67	70	-
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	-
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	-
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	-
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	-
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	-

Client Sample ID			GW22D	GW23S	GW23D	QC01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001477	L24-Ap0001478	L24-Ap0001479	L24-Ap0001480
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	-
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	-
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	-
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	-
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	-
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	-
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	-
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	0.05	0.08	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.006
Iron	0.01	mg/L	0.02	0.05	0.03	0.13
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.006	< 0.005	0.036	0.008
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.005	0.004	0.002	0.002
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	0.011
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	4.2	5.7	3.7	4.6
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	1.2	0.9	23	3.1
Magnesium	0.5	mg/L	4.6	6.3	5.1	5.0
Potassium	0.5	mg/L	0.6	< 0.5	2.8	1.0
Sodium	0.5	mg/L	38	56	41	42

Client Sample ID			GW22D	GW23S	GW23D	QC01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001477	L24-Ap0001478	L24-Ap0001479	L24-Ap0001480
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
13C4-PFBA (surr.)	1	%	31	117	111	-
13C5-PFPeA (surr.)	1	%	36	114	111	-
13C5-PFHxA (surr.)	1	%	35	101	111	-
13C4-PFHpA (surr.)	1	%	31	79	110	-
13C8-PFOA (surr.)	1	%	25	52	112	-
13C5-PFNA (surr.)	1	%	20	30	114	-
13C6-PFDA (surr.)	1	%	15	17	105	-
13C2-PFUnDA (surr.)	1	%	11	11	101	-
13C2-PFDoDA (surr.)	1	%	11	INT	106	-
13C2-PFTeDA (surr.)	1	%	17	INT	88	-
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
13C8-FOSA (surr.)	1	%	14	INT	105	-
D3-N-MeFOSA (surr.)	1	%	16	INT	125	-
D5-N-EtFOSA (surr.)	1	%	22	INT	166	-
D7-N-MeFOSE (surr.)	1	%	11	INT	92	-
D9-N-EtFOSE (surr.)	1	%	11	INT	103	-
D5-N-EtFOSAA (surr.)	1	%	12	10	88	-
D3-N-MeFOSAA (surr.)	1	%	13	12	81	-
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	-
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
13C2-4:2 FTSA (surr.)	1	%	35	102	110	-
13C2-6:2 FTSA (surr.)	1	%	28	76	111	-

Client Sample ID			GW22D	GW23S	GW23D	QC01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001477	L24-Ap0001478	L24-Ap0001479	L24-Ap0001480
Date Sampled			Mar 26, 2024	Mar 26, 2024	Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
13C2-8:2 FTSA (surr.)	1	%	23	34	97	-
13C2-10:2 FTSA (surr.)	1	%	11	12	88	-
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
13C3-PFBS (surr.)	1	%	41	118	111	-
18O2-PFHxS (surr.)	1	%	32	60	112	-
13C8-PFOS (surr.)	1	%	22	23	109	-
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	-
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	-
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	-

Client Sample ID			QC02	FB01	RS01
Sample Matrix			Water	Water	Water
Eurofins Sample No.			L24-Ap0001481	L24-Ap0001482	L24-Ap0001483
Date Sampled			Mar 26, 2024	Mar 25, 2024	Mar 25, 2024
Test/Reference	LOR	Unit			
Alkalinity	5	mg CaCO3/L	5.6	< 5	< 5
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02
Bicarbonate	5	mg CaCO3/L	5.6	< 5	< 5
Carbonate	5	mg CaCO3/L	< 5	< 5	< 5
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25
Chloride	5	mg/L	29	< 5	< 5
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002
Conductivity	10	uS/cm	180	< 10	< 10
Dissolved Oxygen	0.1	mg/L	8.4	-	-
Hydroxide	5	mg CaCO3/L	< 5	< 5	< 5
Nitrate-N	0.01	mg/L	3.2	< 0.01	< 0.01
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	3.2	< 0.01	< 0.01
pH	0.1	pH Units	5.2	-	-
Redox Potential		mV	410	-	-
Sulfate	1	mg/L	1.3	< 1	< 1
Total Dissolved Solids	5	mg/L	110	< 5	< 5
Total Kjeldahl Nitrogen	0.2	mg/L	0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	3.4	< 0.2	< 0.2
Total Organic Carbon	5	mg/L	< 5	< 5	< 5

Client Sample ID			QC02	FB01	RS01
Sample Matrix			Water	Water	Water
Eurofins Sample No.			L24-Ap0001481	L24-Ap0001482	L24-Ap0001483
Date Sampled			Mar 26, 2024	Mar 25, 2024	Mar 25, 2024
Test/Reference	LOR	Unit			
Total Phosphorus	0.01	mg/L	0.03	< 0.01	< 0.01
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002
Heavy Metals					
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001
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	0.01	mg/L	< 0.01	< 0.01	< 0.01
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.037	< 0.005	< 0.005
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.003	< 0.001	< 0.001
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005
Alkali Metals (filtered)					
Magnesium (filtered)	0.5	mg/L	3.7	< 0.5	< 0.5
Eurofins Suite B11C: Na/K/Ca/Mg					
Calcium	0.5	mg/L	1.3	< 0.5	< 0.5
Magnesium	0.5	mg/L	4.2	< 0.5	< 0.5
Potassium	0.5	mg/L	< 0.5	< 0.5	< 0.5
Sodium	0.5	mg/L	210	< 0.5	< 0.5

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
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	7 Days
BTEX - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	14 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Welshpool	Apr 08, 2024	7 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Welshpool	Apr 08, 2024	14 Day
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Welshpool	Apr 08, 2024	14 Day
VOCs in Water by GCMS - Method: ARL132 - Purgeable Volatile Organic Compounds in Water by GCMS	Welshpool	Apr 08, 2024	14 Days
Atrazine - Method: ARL042 - Base Neutral Pesticides in Water	Welshpool	Apr 08, 2024	7 Days
Chemical Oxygen Demand (COD) - Method: LTM-INO-4220 Determination of COD in Water	Melbourne	Apr 03, 2024	28 Days
Chromium (VI) - Method: ARL316 - Hexavalent Chromium in Water by Discrete Analyser	Welshpool	Apr 05, 2024	1 Day
pH - Method: ARL014 - pH in Water	Welshpool	Apr 05, 2024	1 Day
Redox Potential - Method: ARL119 - Reduction/Oxidation Potential of Water	Welshpool	Apr 08, 2024	28 Day
Total Organic Carbon - Method: LTM-INO-4060 Total Organic Carbon in water and soil	Melbourne	Apr 03, 2024	28 Days
Chromium (III) (filtered)* - Method: ARL402/403 - Metals in Water by ICPOES/ICPMS	Welshpool	Apr 02, 2024	180 Days
OCOP in Water - Method: ARL No. 002 - OCOP and PCB in Water	Welshpool	Apr 05, 2024	7 Days
PCB in Water - Method: ARL002 - OCOP and PCB in Water	Welshpool	Apr 05, 2024	14 Days
Heavy Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	28 Days
Metals M8 filtered - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	28 Days
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	28 Days
Alkali Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	6 Months
Eurofins Suite B11C: Na/K/Ca/Mg - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	180 Days
Alkalinity - Method: ARL037 - Alkalinity in Water	Welshpool	Apr 05, 2024	14 Days
Bicarbonate - Method: ARL037 - Alkalinity in Water	Welshpool	Apr 05, 2024	14 Days
Carbonate - Method: ARL037 - Alkalinity in Water	Welshpool	Apr 05, 2024	14 Days
Hydroxide	Welshpool	Apr 05, 2024	14 Day

Description	Testing Site	Extracted	Holding Time
- Method: ARL037 - Alkalinity in Water			
Ammonia-N	Welshpool	Apr 05, 2024	28 Days
- Method: ARL303 - Ammonia in Water by Discrete Analyser			
Nitrate-N	Welshpool	Apr 05, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Nitrite-N	Welshpool	Apr 05, 2024	2 Days
- Method: ARL311 - Nitrite in Water by Discrete Analyser			
NOx-N	Welshpool	Apr 05, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Total Kjeldahl Nitrogen	Welshpool	Apr 04, 2024	28 Day
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Nitrogen	Welshpool	Apr 05, 2024	28 Days
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Phosphorus	Welshpool	Apr 05, 2024	28 Days
- Method: ARL308 - Total Phosphorus in Water by Discrete Analyser			
Chloride	Welshpool	Apr 05, 2024	28 Days
- Method: ARL305 - Chloride in Water by Discrete Analyser			
Sulfate	Welshpool	Apr 05, 2024	28 Days
- Method: ARL301 - Sulfate in Water by Discrete Analyser			
Conductivity	Welshpool	Apr 05, 2024	28 Days
- Method: ARL019 - Conductivity and Salinity in Water			
Total Dissolved Solids	Welshpool	Apr 05, 2024	7 Days
- Method: ARL No. 017 - Total Dissolved Solids			
Perfluoroalkyl carboxylic acids (PFCAs)	Welshpool	Apr 08, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
Perfluoroalkyl sulfonamido substances	Welshpool	Apr 08, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Welshpool	Apr 08, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
Perfluoroalkyl sulfonic acids (PFSAs)	Welshpool	Apr 08, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
PFASs Summations	Welshpool	Apr 08, 2024	
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			

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Project Name: BANKSIA LANDFILL GME
Project ID: 675.072519.00001

Order No.:
Report #: 1083237
Phone: 08 9388 8360
Fax: 08 9381 2360

Received: Mar 28, 2024 2:50 PM
Due: Apr 8, 2024
Priority: 5 Day
Contact Name: *ALL RESULTS/SRA/COC"S

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Ammonia-N	Atrazine	Chemical Oxygen Demand (COD)	Chromium (III) (filtered)*	Chromium (VI)	Dissolved Oxygen	Iron	Magnesium (filtered)	Manganese (filtered)	Nitrate-N	pH	Redox Potential	Selenium (filtered)	Sulfate	Titanium (filtered)	Total Organic Carbon	Total Phosphorus	Metals M8 filtered	Eurofins Suite B4A	Eurofins Suite B11C: Na/K/Ca/Mg	OCOP in Water	PCB in Water	VOCs in Water by GCMS	Total Nitrogen	Alkalinity	Total Dissolved Solids (TDS)	Eurofins Suite B19A	Eurofins Suite B11E	Per- and Polyfluoroalkyl Substances (PFASs)
Perth Laboratory - NATA # 2377 Site # 2370						X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254									X													X														
External Laboratory																																				
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**																															
1	GW1S	Mar 27, 2024		Water	L24-Ap0001461	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
2	GW3D	Mar 25, 2024		Water	L24-Ap0001462	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
3	SE4D	Mar 25, 2024		Water	L24-Ap0001463	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
4	SE6S	Mar 26, 2024		Water	L24-Ap0001464	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
5	GW6D	Mar 26, 2024		Water	L24-Ap0001465	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
6	GW7S	Mar 25, 2024		Water	L24-Ap0001466	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
7	GW7D-R	Mar 25, 2024		Water	L24-Ap0001467	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
8	GW8D	Mar 25, 2024		Water	L24-Ap0001468	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
9	GW9S	Mar 27, 2024		Water	L24-Ap0001469	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
10	GW9D	Mar 27, 2024		Water	L24-Ap0001470	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
11	SE10S	Mar 27, 2024		Water	L24-Ap0001471	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
12	GW10D	Mar 27, 2024		Water	L24-Ap0001472	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X

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Perth Laboratory - NATA # 2377 Site # 2370						X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254									X													X														
External Laboratory																																				
13	GW11S	Mar 26, 2024		Water	L24-Ap0001473	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
14	GW11D	Mar 26, 2024		Water	L24-Ap0001474	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
15	GW12D	Mar 27, 2024		Water	L24-Ap0001475	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
16	GW22S	Mar 26, 2024		Water	L24-Ap0001476	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
17	GW22D	Mar 26, 2024		Water	L24-Ap0001477	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
18	GW23S	Mar 26, 2024		Water	L24-Ap0001478	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
19	GW23D	Mar 26, 2024		Water	L24-Ap0001479	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X			X	X	X	X
20	QC01	Mar 25, 2024		Water	L24-Ap0001480	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X		X		X						X	X	X	
21	QC02	Mar 26, 2024		Water	L24-Ap0001481	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X		X		X						X	X	X	
22	GB01	Mar 25, 2024		Water	L24-Ap0001482	X	X		X	X	X		X	X	X	X			X	X	X	X	X	X		X				X	X	X			
23	RS01	Mar 25, 2024		Water	L24-Ap0001483	X	X		X	X	X		X	X	X	X			X	X	X	X	X	X		X				X	X	X			
Test Counts						23	23	19	23	23	23	21	23	23	23	23	21	21	23	2	23	23	2	25	19	23	19	19	19	2	2	23	21	21	19

Internal Quality Control Review and Glossary

General

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

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.001			0.001	Pass	
Method Blank							
VOCs in Water by GCMS							
Benzene	ug/L	< 0.5			0.5	Pass	
Carbon tetrachloride	ug/L	< 0.5			0.5	Pass	
Chlorobenzene	ug/L	< 0.5			0.5	Pass	
DCM	ug/L	< 5			5	Pass	
Ethylbenzene	ug/L	< 0.5			0.5	Pass	
Hexachlorobutadiene	ug/L	< 0.5			0.5	Pass	
Methyl tert Butyl Ether	ug/L	< 0.5			0.5	Pass	
Styrene	ug/L	< 0.5			0.5	Pass	
Perchloroethene (PCE)	ug/L	< 0.5			0.5	Pass	
Toluene	ug/L	< 0.5			0.5	Pass	
Trichloroethylene(TCE)	ug/L	< 0.5			0.5	Pass	
Vinyl Chloride	ug/L	< 0.2			0.2	Pass	
Xylenes (Total)	ug/L	< 3			3	Pass	
1.1-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.1-Dichloroethene	ug/L	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	ug/L	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	ug/L	< 2			2	Pass	
1.1.1-Trichloroethane	ug/L	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3.5-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
Method Blank							
Alkalinity	mg CaCO3/L	< 5			5	Pass	
Ammonia-N	mg/L	< 0.02			0.02	Pass	
Bicarbonate	mg CaCO3/L	< 5			5	Pass	
Carbonate	mg CaCO3/L	< 5			5	Pass	
Chloride	mg/L	< 5			5	Pass	
Chromium (VI)	mg/L	< 0.002			0.002	Pass	
Conductivity	uS/cm	< 10			10	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Hydroxide	mg CaCO3/L	< 5			5	Pass	
Nitrate-N	mg/L	< 0.01			0.01	Pass	
Nitrite-N	mg/L	< 0.01			0.01	Pass	
NOx-N	mg/L	< 0.01			0.01	Pass	
Sulfate	mg/L	< 1			1	Pass	
Total Dissolved Solids	mg/L	< 5			5	Pass	
Total Phosphorus	mg/L	< 0.01			0.01	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.5-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.6-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.001			0.001	Pass	
Pentachlorophenol	mg/L	< 0.001			0.001	Pass	
Tetrachlorophenols - Total	mg/L	< 0.001			0.001	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/L	< 0.003			0.003	Pass	
2-Methyl-4.6-dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Nitrophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dimethylphenol	mg/L	< 0.001			0.001	Pass	
2.4-Dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.001			0.001	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.001			0.001	Pass	
4-Nitrophenol	mg/L	< 0.001			0.001	Pass	
Dinoseb	mg/L	< 0.002			0.002	Pass	
Phenol	mg/L	< 0.001			0.001	Pass	
Method Blank							
Total Organic Carbon	mg/L	< 5			5	Pass	
Method Blank							
Chemical Oxygen Demand (COD)	mg/L	< 25			25	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.05			0.05	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	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							
Total Recoverable Hydrocarbons							
TRH C10-C14	mg/L	< 0.02			0.02	Pass	
TRH C15-C28	mg/L	< 0.04			0.04	Pass	
TRH C29-C36	mg/L	< 0.04			0.04	Pass	
TRH >C10-C16	mg/L	< 0.02			0.02	Pass	
TRH >C16-C34	mg/L	< 0.05			0.05	Pass	
TRH >C34-C40	mg/L	< 0.05			0.05	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	Pass	
Method Blank							
Total Organic Carbon	mg/L	< 5			5	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	Pass	
Method Blank							
Atrazine	ug/L	< 0.1			0.1	Pass	
Ammonia-N	mg/L	< 0.02			0.02	Pass	
Chloride	mg/L	< 5			5	Pass	
Nitrate-N	mg/L	< 0.01			0.01	Pass	
Nitrite-N	mg/L	< 0.01			0.01	Pass	
NOx-N	mg/L	< 0.01			0.01	Pass	
Sulfate	mg/L	< 1			1	Pass	
Total Nitrogen	mg/L	< 0.2			0.2	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Atrazine	ug/L	< 0.1			0.1	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Iron	mg/L	< 0.01			0.01	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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Heavy Metals							
Aluminium (filtered)	mg/L	< 0.05			0.05	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.05			0.05	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	102			70-130	Pass	
TRH C6-C10	%	96			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	107			70-130	Pass	
Toluene	%	113			70-130	Pass	
Ethylbenzene	%	111			70-130	Pass	
m&p-Xylenes	%	106			70-130	Pass	
o-Xylene	%	108			70-130	Pass	
Xylenes - Total*	%	106			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	116			70-130	Pass	
LCS - % Recovery							
VOCs in Water by GCMS							
Benzene	%	115			60-120	Pass	
Ethylbenzene	%	105			60-120	Pass	
Methyl tert Butyl Ether	%	87			60-120	Pass	
Toluene	%	109			60-120	Pass	
Trichloroethylene(TCE)	%	110			60-120	Pass	
Xylenes (Total)	%	108			60-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1.2-Dichloroethane	%	98			60-120	Pass	
1.1-Dichloroethene	%	106			60-120	Pass	
1.1.1-Trichloroethane	%	100			60-120	Pass	
LCS - % Recovery							
Conductivity	%	95			80-120	Pass	
Total Dissolved Solids	%	95			70-130	Pass	
Total Organic Carbon	%	92			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	102			25-140	Pass	
2.4-Dichlorophenol	%	108			25-140	Pass	
2.4.5-Trichlorophenol	%	97			25-140	Pass	
2.4.6-Trichlorophenol	%	115			25-140	Pass	
2.6-Dichlorophenol	%	110			25-140	Pass	
4-Chloro-3-methylphenol	%	107			25-140	Pass	
Pentachlorophenol	%	102			25-140	Pass	
Tetrachlorophenols - Total	%	34			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	93			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	99			25-140	Pass	
2-Nitrophenol	%	36			25-140	Pass	
2.4-Dimethylphenol	%	98			25-140	Pass	
2.4-Dinitrophenol	%	116			25-140	Pass	
2-Methylphenol (o-Cresol)	%	104			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	53			25-140	Pass	
4-Nitrophenol	%	93			25-140	Pass	
Dinoseb	%	111			25-140	Pass	
Phenol	%	52			25-140	Pass	
LCS - % Recovery							
Chemical Oxygen Demand (COD)	%	103			70-130	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	78			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	74			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	79			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	80			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	72			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	69			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	69			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	70			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	71			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	88			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	68			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	68			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	70			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	64			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	69			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	69			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	68			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	69			50-150	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	72			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	84			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	72			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	73			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	69			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	%	62			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	%	69			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	64			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	77			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	68			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	76			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	70			50-150	Pass	
LCS - % Recovery							
VOCs in Water by GCMS							
Carbon tetrachloride	%	97			60-120	Pass	
Chlorobenzene	%	90			60-120	Pass	
DCM	%	89			60-120	Pass	
Hexachlorobutadiene	%	86			60-120	Pass	
Styrene	%	96			60-120	Pass	
Perchloroethene (PCE)	%	103			60-120	Pass	
Vinyl Chloride	%	97			60-120	Pass	
1.1-Dichloroethane	%	92			60-120	Pass	
cis-1.2-Dichloroethene	%	97			60-120	Pass	
trans-1.2-Dichloroethene	%	88			60-120	Pass	
1.1.1.2-Tetrachloroethane	%	105			60-120	Pass	
1.1.2.2-Tetrachloroethane	%	96			60-120	Pass	
1.2-Dichlorobenzene	%	107			60-120	Pass	
1.3-Dichlorobenzene	%	93			60-120	Pass	
1.4-Dichlorobenzene	%	95			60-120	Pass	
1.2.3-Trichlorobenzene	%	90			60-120	Pass	
1.2.4-Trichlorobenzene	%	92			60-120	Pass	
1.3.5-Trichlorobenzene	%	91			60-120	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	92			70-130	Pass	
Acenaphthylene	%	94			70-130	Pass	
Anthracene	%	80			70-130	Pass	
Benz(a)anthracene	%	105			70-130	Pass	
Benzo(a)pyrene	%	111			70-130	Pass	
Benzo(b&j)fluoranthene	%	81			70-130	Pass	
Benzo(g.h.i)perylene	%	104			70-130	Pass	
Benzo(k)fluoranthene	%	116			70-130	Pass	
Chrysene	%	104			70-130	Pass	
Dibenz(a.h)anthracene	%	96			70-130	Pass	
Fluoranthene	%	82			70-130	Pass	
Fluorene	%	82			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	101			70-130	Pass	
Naphthalene	%	112			70-130	Pass	
Phenanthrene	%	88			70-130	Pass	
Pyrene	%	100			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons							
TRH C10-C14	%	96			70-130	Pass	
TRH >C10-C16	%	96			70-130	Pass	
LCS - % Recovery							
OCOP in Water							
Aldrin	%	112			60-120	Pass	
Dieldrin	%	103			60-120	Pass	
Endrin	%	99			60-120	Pass	
Heptachlor	%	112			60-120	Pass	
Lindane	%	101			60-120	Pass	
p.p-DDT	%	105			60-120	Pass	
LCS - % Recovery							
Atrazine	%	107			60-120	Pass	
LCS - % Recovery							
OCOP in Water							
Aldrin	%	111			60-120	Pass	
Dieldrin	%	115			60-120	Pass	
Endrin	%	100			60-120	Pass	
Heptachlor	%	88			60-120	Pass	
Lindane	%	93			60-120	Pass	
p.p-DDT	%	94			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	96			80-120	Pass	
Arsenic (filtered)	%	97			80-120	Pass	
Cadmium (filtered)	%	97			80-120	Pass	
Chromium (filtered)	%	96			80-120	Pass	
Copper (filtered)	%	94			80-120	Pass	
Lead (filtered)	%	97			80-120	Pass	
Manganese (filtered)	%	95			80-120	Pass	
Mercury (filtered)	%	100			80-120	Pass	
Nickel (filtered)	%	95			80-120	Pass	
Selenium (filtered)	%	96			80-120	Pass	
Titanium (filtered)	%	97			80-120	Pass	
Zinc (filtered)	%	96			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	90			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	98			80-120	Pass	
Arsenic (filtered)	%	96			80-120	Pass	
Cadmium (filtered)	%	98			80-120	Pass	
Chromium (filtered)	%	94			80-120	Pass	
Copper (filtered)	%	92			80-120	Pass	
Lead (filtered)	%	98			80-120	Pass	
Manganese (filtered)	%	97			80-120	Pass	
Mercury (filtered)	%	102			80-120	Pass	
Nickel (filtered)	%	92			80-120	Pass	
Selenium (filtered)	%	95			80-120	Pass	
Titanium (filtered)	%	93			80-120	Pass	
Zinc (filtered)	%	97			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Magnesium (filtered)	%	91			80-120	Pass	
LCS - % Recovery							
Atrazine	%	94			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	103			80-120	Pass	
Arsenic (filtered)	%	99			80-120	Pass	
Cadmium (filtered)	%	101			80-120	Pass	
Chromium (filtered)	%	100			80-120	Pass	
Copper (filtered)	%	98			80-120	Pass	
Lead (filtered)	%	103			80-120	Pass	
Manganese (filtered)	%	99			80-120	Pass	
Mercury (filtered)	%	106			80-120	Pass	
Nickel (filtered)	%	100			80-120	Pass	
Selenium (filtered)	%	107			80-120	Pass	
Titanium (filtered)	%	102			80-120	Pass	
Zinc (filtered)	%	100			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	103			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	103			80-120	Pass	
Arsenic (filtered)	%	99			80-120	Pass	
Cadmium (filtered)	%	102			80-120	Pass	
Chromium (filtered)	%	100			80-120	Pass	
Copper (filtered)	%	96			80-120	Pass	
Iron	%	101			80-120	Pass	
Lead (filtered)	%	100			80-120	Pass	
Manganese (filtered)	%	99			80-120	Pass	
Mercury (filtered)	%	103			80-120	Pass	
Nickel (filtered)	%	98			80-120	Pass	
Selenium (filtered)	%	106			80-120	Pass	
Titanium (filtered)	%	102			80-120	Pass	
Zinc (filtered)	%	99			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	102			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	99			80-120	Pass	
Magnesium	%	99			80-120	Pass	
Potassium	%	102			80-120	Pass	
Sodium	%	99			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	103			80-120	Pass	
Arsenic (filtered)	%	98			80-120	Pass	
Cadmium (filtered)	%	102			80-120	Pass	
Chromium (filtered)	%	100			80-120	Pass	
Copper (filtered)	%	96			80-120	Pass	
Lead (filtered)	%	103			80-120	Pass	
Manganese (filtered)	%	99			80-120	Pass	
Mercury (filtered)	%	103			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nickel (filtered)	%	98			80-120	Pass	
Selenium (filtered)	%	95			80-120	Pass	
Titanium (filtered)	%	102			80-120	Pass	
Zinc (filtered)	%	99			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	104			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	128			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	64			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	88			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	96			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	72			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	72			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	72			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	76			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	68			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	92			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	68			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	76			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	76			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	72			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	72			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	72			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	80			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	72			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	80			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	100			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	72			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	68			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	64			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	%	64			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	%	64			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	72			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	84			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	112			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	116			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	56			50-150	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	102			80-120	Pass	
Arsenic (filtered)	%	96			80-120	Pass	
Cadmium (filtered)	%	101			80-120	Pass	
Chromium (filtered)	%	96			80-120	Pass	
Copper (filtered)	%	91			80-120	Pass	
Lead (filtered)	%	99			80-120	Pass	
Manganese (filtered)	%	96			80-120	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Mercury (filtered)			%	98			80-120	Pass	
Nickel (filtered)			%	93			80-120	Pass	
Selenium (filtered)			%	96			80-120	Pass	
Titanium (filtered)			%	103			80-120	Pass	
Zinc (filtered)			%	94			80-120	Pass	
LCS - % Recovery									
Alkali Metals (filtered)									
Magnesium (filtered)			%	103			80-120	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	L24-Ma0068590	NCP	%	103			70-130	Pass	
TRH C10-C14	L24-Ma0068672	NCP	%	101			70-130	Pass	
TRH C6-C10	L24-Ma0068590	NCP	%	97			70-130	Pass	
TRH >C10-C16	L24-Ma0068672	NCP	%	102			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	L24-Ma0068590	NCP	%	102			70-130	Pass	
Toluene	L24-Ma0068590	NCP	%	111			70-130	Pass	
Ethylbenzene	L24-Ma0068590	NCP	%	112			70-130	Pass	
m&p-Xylenes	L24-Ma0068590	NCP	%	105			70-130	Pass	
o-Xylene	L24-Ma0068590	NCP	%	109			70-130	Pass	
Xylenes - Total*	L24-Ma0068590	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	L24-Ma0068590	NCP	%	117			70-130	Pass	
Spike - % Recovery									
				Result 1					
Nitrate-N	L24-Ap0000370	NCP	%	118			70-130	Pass	
NOx-N	L24-Ap0000370	NCP	%	112			80-120	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
Pentachlorophenol	L24-Ma0051942	NCP	%	99			30-130	Pass	
Tetrachlorophenols - Total	L24-Ma0061127	NCP	%	39			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Nitrophenol	L24-Ap0003693	NCP	%	49			30-130	Pass	
2.4-Dinitrophenol	L24-Ap0003693	NCP	%	109			30-130	Pass	
4-Nitrophenol	L24-Ma0055066	NCP	%	82			30-130	Pass	
Spike - % Recovery									
				Result 1					
Ammonia-N	L24-Ap0001462	CP	%	107			80-120	Pass	
Chloride	L24-Ap0001462	CP	%	116			70-130	Pass	
Nitrite-N	L24-Ap0001462	CP	%	102			80-120	Pass	
Sulfate	L24-Ap0001462	CP	%	113			70-130	Pass	
Spike - % Recovery									
VOCs in Water by GCMS				Result 1					
Benzene	L24-Ap0011852	NCP	%	104			60-120	Pass	
Carbon tetrachloride	L24-Ap0019296	NCP	%	88			60-120	Pass	
Chlorobenzene	L24-Ap0019296	NCP	%	82			60-120	Pass	
DCM	L24-Ap0019296	NCP	%	96			60-120	Pass	
Ethylbenzene	L24-Ap0011852	NCP	%	101			60-120	Pass	
Hexachlorobutadiene	L24-Ap0019296	NCP	%	85			60-120	Pass	
Methyl tert Butyl Ether	L24-Ap0019296	NCP	%	83			60-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Styrene	L24-Ap0019296	NCP	%	84			60-120	Pass	
Perchloroethene (PCE)	L24-Ap0019296	NCP	%	98			60-120	Pass	
Toluene	L24-Ap0011852	NCP	%	103			60-120	Pass	
Trichloroethylene(TCE)	L24-Ap0011852	NCP	%	90			60-120	Pass	
Vinyl Chloride	L24-Ap0019296	NCP	%	100			60-120	Pass	
Xylenes (Total)	L24-Ap0011852	NCP	%	100			60-120	Pass	
1.1-Dichloroethane	L24-Ap0019296	NCP	%	95			60-120	Pass	
1.2-Dichloroethane	L24-Ap0011852	NCP	%	105			60-120	Pass	
1.1-Dichloroethene	L24-Ap0011852	NCP	%	92			60-120	Pass	
cis-1.2-Dichloroethene	L24-Ap0019296	NCP	%	101			60-120	Pass	
trans-1.2-Dichloroethene	L24-Ap0019296	NCP	%	92			60-120	Pass	
1.1.1-Trichloroethane	L24-Ap0011852	NCP	%	80			60-120	Pass	
1.1.1.2-Tetrachloroethane	L24-Ap0019296	NCP	%	92			60-120	Pass	
1.1.2.2-Tetrachloroethane	L24-Ap0019296	NCP	%	88			60-120	Pass	
1.2-Dichlorobenzene	L24-Ap0011852	NCP	%	102			60-120	Pass	
1.3-Dichlorobenzene	L24-Ap0019296	NCP	%	92			60-120	Pass	
1.4-Dichlorobenzene	L24-Ap0019296	NCP	%	94			60-120	Pass	
1.2.3-Trichlorobenzene	L24-Ap0019296	NCP	%	105			60-120	Pass	
1.2.4-Trichlorobenzene	L24-Ap0019296	NCP	%	83			60-120	Pass	
1.3.5-Trichlorobenzene	L24-Ap0019296	NCP	%	85			60-120	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	L24-Ap0001467	CP	%	103			70-130	Pass	
Acenaphthylene	L24-Ap0001467	CP	%	107			70-130	Pass	
Anthracene	L24-Ap0001467	CP	%	89			70-130	Pass	
Benz(a)anthracene	L24-Ap0001467	CP	%	96			70-130	Pass	
Benzo(a)pyrene	L24-Ap0001467	CP	%	104			70-130	Pass	
Benzo(b&j)fluoranthene	L24-Ap0001467	CP	%	96			70-130	Pass	
Benzo(g.h.i)perylene	L24-Ap0001467	CP	%	121			70-130	Pass	
Benzo(k)fluoranthene	L24-Ap0001467	CP	%	111			70-130	Pass	
Chrysene	L24-Ap0001467	CP	%	108			70-130	Pass	
Dibenz(a.h)anthracene	L24-Ap0001467	CP	%	96			70-130	Pass	
Fluoranthene	L24-Ap0001467	CP	%	80			70-130	Pass	
Fluorene	L24-Ap0001467	CP	%	94			70-130	Pass	
Indeno(1.2.3-cd)pyrene	L24-Ap0001467	CP	%	107			70-130	Pass	
Naphthalene	L24-Ap0001467	CP	%	114			70-130	Pass	
Phenanthrene	L24-Ap0001467	CP	%	88			70-130	Pass	
Pyrene	L24-Ap0001467	CP	%	82			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	L24-Ap0001467	CP	%	109			30-130	Pass	
2.4-Dichlorophenol	L24-Ap0001467	CP	%	113			30-130	Pass	
2.4.5-Trichlorophenol	L24-Ap0001467	CP	%	102			30-130	Pass	
2.4.6-Trichlorophenol	L24-Ap0001467	CP	%	108			30-130	Pass	
2.6-Dichlorophenol	L24-Ap0001467	CP	%	111			30-130	Pass	
4-Chloro-3-methylphenol	L24-Ap0001467	CP	%	111			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Methyl-4.6-dinitrophenol	L24-Ap0001467	CP	%	94			30-130	Pass	
2.4-Dimethylphenol	L24-Ap0001467	CP	%	106			30-130	Pass	
2-Methylphenol (o-Cresol)	L24-Ap0001467	CP	%	112			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Ap0001467	CP	%	113			30-130	Pass	
Dinoseb	L24-Ap0001467	CP	%	105			30-130	Pass	
Phenol	L24-Ap0001467	CP	%	50			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Ap0001469	CP	%	96			75-125	Pass	
Arsenic (filtered)	L24-Ap0001469	CP	%	96			75-125	Pass	
Cadmium (filtered)	L24-Ap0001469	CP	%	95			75-125	Pass	
Chromium (filtered)	L24-Ap0001469	CP	%	93			75-125	Pass	
Copper (filtered)	L24-Ap0001469	CP	%	91			75-125	Pass	
Lead (filtered)	L24-Ap0001469	CP	%	92			75-125	Pass	
Manganese (filtered)	L24-Ap0001469	CP	%	94			75-125	Pass	
Mercury (filtered)	L24-Ap0001469	CP	%	95			75-125	Pass	
Nickel (filtered)	L24-Ap0001469	CP	%	92			75-125	Pass	
Selenium (filtered)	L24-Ap0001469	CP	%	95			75-125	Pass	
Titanium (filtered)	L24-Ap0001469	CP	%	98			75-125	Pass	
Zinc (filtered)	L24-Ap0001469	CP	%	95			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-Ap0001469	CP	%	84			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	L24-Ap0001471	CP	%	110			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Ap0001471	CP	%	91			75-125	Pass	
Magnesium	L24-Ap0001471	CP	%	94			75-125	Pass	
Potassium	L24-Ap0001471	CP	%	95			75-125	Pass	
Sodium	L24-Ap0001471	CP	%	83			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	L24-Ap0001473	CP	%	98			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Ap0001473	CP	%	97			75-125	Pass	
Magnesium	L24-Ap0001473	CP	%	97			75-125	Pass	
Potassium	L24-Ap0001473	CP	%	101			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	L24-Ap0001473	CP	%	67			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Ap0001473	CP	%	71			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Ap0001473	CP	%	77			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Ap0001473	CP	%	71			50-150	Pass	
Perfluorooctanoic acid (PFOA)	L24-Ap0001473	CP	%	66			50-150	Pass	
Perfluorononanoic acid (PFNA)	L24-Ap0001473	CP	%	68			50-150	Pass	
Perfluorodecanoic acid (PFDA)	L24-Ap0001473	CP	%	66			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Ap0001473	CP	%	63			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Ap0001473	CP	%	63			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Ap0001473	CP	%	80			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Ap0001473	CP	%	68			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	L24-Ap0001473	CP	%	67			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Ap0001473	CP	%	64			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Ap0001473	CP	%	67			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Ap0001473	CP	%	67			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Ap0001473	CP	%	68			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Ap0001473	CP	%	77			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Ap0001473	CP	%	63			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Ap0001473	CP	%	77			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Ap0001473	CP	%	87			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Ap0001473	CP	%	68			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Ap0001473	CP	%	66			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	L24-Ap0001473	CP	%	62			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Ap0001473	CP	%	67			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Ap0001473	CP	%	70			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Ap0001473	CP	%	68			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Ap0001473	CP	%	73			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Ap0001473	CP	%	67			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Ap0001473	CP	%	72			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Ap0001473	CP	%	70			50-150	Pass	
Spike - % Recovery									
				Result 1					
Ammonia-N	L24-Ap0001474	CP	%	99			80-120	Pass	
Chloride	L24-Ap0001474	CP	%	111			70-130	Pass	
Chromium (VI)	L24-Ap0001474	CP	%	106			80-120	Pass	
Sulfate	L24-Ap0001474	CP	%	106			70-130	Pass	
Spike - % Recovery									
				Result 1					
Total Nitrogen	L24-Ap0001477	CP	%	103			70-130	Pass	
Total Phosphorus	L24-Ap0001477	CP	%	96			80-120	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	L24-Ap0001483	CP	%	100			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Ap0001483	CP	%	104			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Magnesium	L24-Ap0001483	CP	%	99			75-125	Pass	
Potassium	L24-Ap0001483	CP	%	100			75-125	Pass	
Sodium	L24-Ap0001483	CP	%	96			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
VOCs in Water by GCMS				Result 1	Result 2	RPD			
Benzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Carbon tetrachloride	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
DCM	L24-Ap0001461	CP	ug/L	< 5	< 5	<1	30%	Pass	
Ethylbenzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobutadiene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Styrene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perchloroethene (PCE)	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Toluene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethylene(TCE)	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Vinyl Chloride	L24-Ap0001461	CP	ug/L	< 0.2	< 0.2	<1	30%	Pass	
Xylenes (Total)	L24-Ap0001461	CP	ug/L	< 3	< 3	<1	30%	Pass	
1.1-Dichloroethane	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	L24-Ap0001461	CP	ug/L	< 2	< 2	<1	30%	Pass	
1.1.1-Trichloroethane	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichlorobenzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trichlorobenzene	L24-Ap0001461	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chemical Oxygen Demand (COD)	L24-Ap0001025	NCP	mg/L	750	730	1.6	30%	Pass	
Chloride	L24-Ap0001461	CP	mg/L	160	160	<1	30%	Pass	
Nitrate-N	L24-Ap0001461	CP	mg/L	2.6	2.7	2.4	30%	Pass	
NOx-N	L24-Ap0001461	CP	mg/L	2.6	2.7	1.6	20%	Pass	
Sulfate	L24-Ap0001461	CP	mg/L	18	18	<1	30%	Pass	
Total Organic Carbon	L24-Ap0001461	CP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Ap0016903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Ap0016903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Nitrogen	L24-Ap0001462	CP	mg/L	1.7	1.1	27	30%	Pass	
Total Phosphorus	L24-Ap0001462	CP	mg/L	0.03	0.03	7.3	20%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	L24-Ap0001465	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C6-C10	L24-Ap0001465	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	L24-Ap0001465	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	L24-Ap0001465	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	L24-Ap0001465	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	L24-Ap0001465	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
o-Xylene	L24-Ap0001465	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	L24-Ap0001465	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	L24-Ap0001465	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	L24-Ap0001466	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C15-C28	L24-Ap0001466	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C29-C36	L24-Ap0001466	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH >C10-C16	L24-Ap0001466	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C16-C34	L24-Ap0001466	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C34-C40	L24-Ap0001466	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Ap0001468	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Arsenic (filtered)	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	L24-Ap0001468	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Ap0001468	CP	mg/L	0.001	0.001	11	30%	Pass	
Lead (filtered)	L24-Ap0001468	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Ap0001468	CP	mg/L	0.046	0.046	1.1	30%	Pass	
Mercury (filtered)	L24-Ap0001468	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Ap0001468	CP	mg/L	0.001	0.001	3.2	30%	Pass	
Titanium (filtered)	L24-Ap0001468	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc (filtered)	L24-Ap0001468	CP	mg/L	< 0.005	0.005	15	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Ap0001468	CP	mg/L	5.0	4.9	1.3	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity	L24-Ap0001469	CP	uS/cm	310	310	<1	20%	Pass	
pH	L24-Ap0001469	CP	pH Units	6.3	6.2	1.8	30%	Pass	
Total Dissolved Solids	L24-Ap0001469	CP	mg/L	180	180	<1	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
Chloride	L24-Ap0001472	CP	mg/L	84	87	3.3	30%	Pass	
Nitrate-N	L24-Ap0001472	CP	mg/L	0.12	0.12	4.1	30%	Pass	
Nitrite-N	L24-Ap0001472	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx-N	L24-Ap0001472	CP	mg/L	0.12	0.13	6.3	20%	Pass	
Sulfate	L24-Ap0001472	CP	mg/L	8.3	10.0	18	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia-N	L24-Ap0001473	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-Ap0001473	CP	mg/L	29	29	<1	30%	Pass	
Chromium (VI)	L24-Ap0001473	CP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Nitrate-N	L24-Ap0001473	CP	mg/L	3.3	3.3	2.1	30%	Pass	
Nitrite-N	L24-Ap0001473	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx-N	L24-Ap0001473	CP	mg/L	3.3	3.3	2.1	20%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	L24-Ap0001474	CP	mg/L	0.12	0.12	<1	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-Ap0001474	CP	mg/L	9.1	8.8	2.9	30%	Pass	
Magnesium	L24-Ap0001474	CP	mg/L	3.4	3.4	<1	30%	Pass	
Potassium	L24-Ap0001474	CP	mg/L	0.8	0.8	<1	30%	Pass	
Duplicate									
VOCs in Water by GCMS				Result 1	Result 2	RPD			
Benzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Carbon tetrachloride	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
DCM	L24-Ap0001476	CP	ug/L	< 5	< 5	<1	30%	Pass	
Ethylbenzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobutadiene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Styrene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perchloroethene (PCE)	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Toluene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethylene(TCE)	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Vinyl Chloride	L24-Ap0001476	CP	ug/L	< 0.2	< 0.2	<1	30%	Pass	
Xylenes (Total)	L24-Ap0001476	CP	ug/L	< 3	< 3	<1	30%	Pass	
1.1-Dichloroethane	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	L24-Ap0001476	CP	ug/L	< 2	< 2	<1	30%	Pass	
1.1.1-Trichloroethane	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichlorobenzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trichlorobenzene	L24-Ap0001476	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Phosphorus	L24-Ap0001476	CP	mg/L	0.04	0.05	8.7	20%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dichlorophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.5-Trichlorophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.6-Trichlorophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.6-Dichlorophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chloro-3-methylphenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pentachlorophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachlorophenols - Total	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	L24-Ap0001477	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Nitrophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dimethylphenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dinitrophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Methylphenol (o-Cresol)	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Nitrophenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dinoseb	L24-Ap0001477	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Phenol	L24-Ap0001477	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Ap0001482	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Arsenic (filtered)	L24-Ap0001482	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	L24-Ap0001482	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Ap0001482	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Ap0001482	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Lead (filtered)	L24-Ap0001482	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Ap0001482	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Mercury (filtered)	L24-Ap0001482	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Ap0001482	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Selenium (filtered)	L24-Ap0001482	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-Ap0001482	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc (filtered)	L24-Ap0001482	CP	mg/L	< 0.005	0.016	1.1	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Ap0001482	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-Ap0001482	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Magnesium	L24-Ap0001482	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Potassium	L24-Ap0001482	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Sodium	L24-Ap0001482	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Natalie Hill	Analytical Services Manager
Douglas Todd	Senior Analyst-Metal
Lauren Killin	Senior Analyst-Inorganic
Mary Makarios	Senior Analyst-Inorganic
Patrick Patfield	Senior Analyst-Organic
Patrick Patfield	Senior Analyst-Volatile
Paul Nottle	Senior Analyst-Organic
Paul Nottle	Senior Analyst-PFAS
Paul Nottle	Senior Analyst-Volatile
Sam Becker	Senior Analyst-Inorganic

Kim Rodgers
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request

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CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN 50 005 085 521

☐ **Sydney Laboratory** Unit F3 Bld F 16 Mars Road Lane Cove West NSW 2066 02 9900 8400 EnviroSamplesNSW@eurofins.com

☐ **Brisbane Laboratory** Unit 1 21 Smallwood Place Murarrie QLD 4172 07 3902 4600 EnviroSamplesQLD@eurofins.com

☑ **Perth Laboratory** Unit 2 91 Leach Highway Kewdale WA 6105 08 9251 9600 EnviroSampleWA@eurofins.com

☐ **Melbourne Laboratory** 6 Monterey Road Dandenong South VIC 3175 03 8564 5000 EnviroSampleVic@eurofins.com

Company	SLR Consulting Australia Pty Ltd	Project №	675.072519.00001	Project Manager	Phuntsho Wangdi
Address	Level 1/500 Hay Street, Subiaco, WA	Project Name	Banksia Landfill GME	EDD Format (Esdat, EQuIS etc)	
Contact Name	Phuntsho Wangdi				
Phone №	433907756				
Special Directions					
Purchase Order					
Quote ID №	SLR 050324				

Sampler(s)	PD and PW
Handed over by	PD and PW
Email for Invoice	AccountsPayableAU@slrconsulting.com(?
Email for Results	pwangdi@slrconsutling.com, labresults@360environmental.com.au

Analytes (Where metals are requested, please specify Total or Filtered. SUITE code must be used to ensure SUITE pricing)

- Physio-chemical - pH, EC, Eh, DO
- PFAS/PFOA Standard
- Organics - BTEX, TPH, Phenols, PAH, Atrazine, PCB, UT, OCP/OPP, TEC/PCE
- Nutrients – COD, NH3, nitrate, total nitrogen, total phosphorus, TDS, Total Organic Carbon
- Major ions – Ca, Mg, K, Na, Cl, bicarbonate, sulfate
- Dissolved metals – Al, As, Cd, Cr (III+VI), Cu, Pb, Mn, Mg, Hg, Ni, Ti, Se, Zn
- Total Metals – Fe

Containers (Change container type & size if necessary)

- 500mL Plastic
- 250mL Plastic
- 125mL Plastic
- 200mL Amber Glass
- 40mL VOA vial
- 500mL PFAS Bottle
- Jar (Glass or HDPE)
- Other (Asbestos AS4964, WA Guidelines)

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

♦ Surcharge will apply

- ☐ Overnight (reporting by 9am)♦
- ☐ Same day♦
- ☐ 1 day♦
- ☐ 2 days♦
- ☐ 3 days♦
- ☑ 5 days (Standard)
- ☐ Other( )

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Physio-chemical	PFAS/PFOA Standard	Organics	Nutrients	Major ions	Dissolved metals	Total Metals	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	GW1S	27-03-2024	W	X	X	X	X	X	X	X									
	GW1D	27-03-2024	W																Dry (No sample colleted)
2	GW3D	25-03-2024	W	X	X	X	X	X	X	X									
3	SE3S	25-03-2024																	Dry (No sample collected)
5	SE4S	25-03-2024																	Dry (No sample collected)
6	SE4D	25-03-2024	W	X	X	X	X	X	X	X									
7	GW5S	28-03-2024																	Dry (No sample collected)
8	GW5D	28-03-2024																	Dry (No sample collected)
9	SE6S	26-03-2024	W	X	X	X	X	X	X	X									
10	GW6D	26-03-2024	W	X	X	X	X	X	X	X									
11	GW7S	25-03-2024	W	X	X	X	X	X	X	X									
12	GW7D-R	25-03-2024	W	X	X	X	X	X	X	X									
13	GW8D	25-03-2024	W	X	X	X	X	X	X	X									
14	GW9S	27-03-2024	W	X	X	X	X	X	X	X									
15	GW9D	27-03-2024	W	X	X	X	X	X	X	X									
16	SE10S	27-03-2024	W	X	X	X	X	X	X	X									
	SE10D	27-03-2024																	Dry (No sample colleted)
17	GW10D	27-03-2024	W	X	X	X	X	X	X	X									
18	GW11S	26-03-2024	W	X	X	X	X	X	X	X									
19	GW11D	26-03-2024	W	X	X	X	X	X	X	X									
20	GW12D	27-03-2024	W	X	X	X	X	X	X	X									
21	GW13S	26-03-2024																	well removed (No sample collected)
22	GW13D	26-03-2024																	well removed (No sample collected)
23	GW22S	26-03-2024	W	X	X	X	X	X	X	X									
24	GW22D	26-03-2024	W	X	X	X	X	X	X	X									
25	GW23S	26-03-2024	W	X	X	X	X	X	X	X									
26	GW23D	26-03-2024	W	X	X	X	X	X	X	X									
40	QC01	25-03-2024	W	X			X	X	X	X									
41	QC02	26-03-2024	W	X			X	X	X	X									
42	FB01	25-03-2024	W				X	X	X	X									
43	RS01	25-03-2024	W				X	X	X	X									
44																			
45																			
46																			
		Total Counts																	

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Name		Signature		Date		Time	
Eurofins | mgt Laboratory Use Only	Received By	Ugyley	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	28/3/24	Time	14:50	Temperature	12.C
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time		Report №	1083237

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | mgt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins | mgt Standard Terms and Conditions is available on request.

SLR Consulting Australia Pty Ltd
Level 1, 500 Hay Street
Subiaco
WA 6008

NATA Accredited
Accreditation Number 2377
Site Number 2370

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: **Phuntsho Wangdi**

Report **1083260-W**
Project name BANKSIA LANDFILL GME
Project ID 675.072519.00001
Received Date Apr 02, 2024

Client Sample ID			**TDS Leachate Cell 1**	**PLP**	**PSD1**	**LEP1**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Ap0001564**	**L24-Ap0001565**	**L24-Ap0001566**	**L24-Ap0001567**
Date Sampled			**Mar 27, 2024**	**Mar 25, 2024**	**Mar 25, 2024**	**Mar 26, 2024**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	0.02	mg/L	< 0.02	[G01]< 2	< 0.02	[G01]< 2
TRH C10-C14	0.02	mg/L	< 0.02	30	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	57	< 0.04	79
TRH C29-C36	0.04	mg/L	< 0.04	4.9	< 0.04	0.96
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	91.9	< 0.04	79.96
TRH C6-C10	0.02	mg/L	< 0.02	[G01]< 2	< 0.02	[G01]< 2
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02	< 2	< 0.02	< 2
TRH >C10-C16	0.02	mg/L	< 0.02	40	< 0.02	4.4
TRH >C10-C16 less Naphthalene (F2)[N01]	0.02	mg/L	< 0.02	40	< 0.02	4.4
TRH >C16-C34	0.05	mg/L	< 0.05	52	< 0.05	80
TRH >C34-C40	0.05	mg/L	< 0.05	0.59	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	92.59	< 0.05	84.4
BTEX						
Benzene	0.001	mg/L	< 0.001	[G01]< 0.1	< 0.001	[G01]< 0.1
Toluene	0.001	mg/L	< 0.001	[G01]< 0.1	< 0.001	[G01]< 0.1
Ethylbenzene	0.001	mg/L	< 0.001	[G01]< 0.1	< 0.001	[G01]< 0.1
m&p-Xylenes	0.002	mg/L	< 0.002	[G01]< 0.2	< 0.002	[G01]< 0.2
o-Xylene	0.001	mg/L	< 0.001	[G01]< 0.1	< 0.001	[G01]< 0.1
Xylenes - Total*	0.003	mg/L	< 0.003	[G01]< 0.3	< 0.003	[G01]< 0.3
BTEX						
4-Bromofluorobenzene (surr.)	1	%	89	83	85	83
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	[G01]< 0.1	< 0.001	[G01]< 0.1
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Carbon tetrachloride	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Chlorobenzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
DCM	5	ug/L	< 5	< 250	< 5	< 250
Ethylbenzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Styrene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Toluene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25

Client Sample ID			TDS Leachate Cell 1	PLP	PSD1	LEP1
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001564	L24-Ap0001565	L24-Ap0001566	L24-Ap0001567
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Vinyl Chloride	0.2	ug/L	< 0.2	< 10	< 0.2	< 10
Xylenes (Total)	3	ug/L	< 3	< 50	< 3	< 50
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
trans-1.2-Dichloroethene	2	ug/L	< 2	< 50	< 2	< 50
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 25	< 0.5	< 25
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Alkalinity	5	mg CaCO3/L	16	4900	76	1900
Ammonia-N	0.02	mg/L	2.2	1100	0.23	1400
Bicarbonate	5	mg CaCO3/L	16	4900	76	1900
Carbonate	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Chemical Oxygen Demand (COD)	25	mg/L	1300	8000	< 25	30000
Chloride	5	mg/L	27000	18000	140	140000
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity	10	uS/cm	57000	49000	670	200000
Dissolved Oxygen	0.1	mg/L	8.6	< 0.1	8.5	4.8
Hydroxide	5	mg CaCO3/L	< 5	< 5	< 5	< 5
Nitrate-N	0.01	mg/L	< 0.01	0.14	0.60	1.1
Nitrite-N	0.01	mg/L	0.01	< 0.01	0.01	< 0.01
NOx-N	0.01	mg/L	< 0.01	0.14	0.61	1.1
pH	0.1	pH Units	5.7	8.2	7.1	7.3
Redox Potential		mV	360	130	320	330
Sulfate	1	mg/L	440	< 1	27	< 1
Total Dissolved Solids	5	mg/L	34000	29000	400	120000
Total Kjeldahl Nitrogen	0.2	mg/L	2.7	1200	1.1	1500
Total Nitrogen	0.2	mg/L	2.7	1200	1.7	1500
Total Organic Carbon	5	mg/L	< 5	3600	< 5	11000
Total Phosphorus	0.01	mg/L	0.04	15	0.07	31
Total Suspended Solids	5	mg/L	17	450	65	480
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	0.70	< 0.002	2.1
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.0057
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01] < 0.0057
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01] < 0.0057
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01] < 0.0057
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01] < 0.0057

Client Sample ID			TDS Leachate Cell 1	PLP	PSD1	LEP1
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001564	L24-Ap0001565	L24-Ap0001566	L24-Ap0001567
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	[G01]< 0.0057
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.0057
2-Fluorobiphenyl (surr.)	1	%	110	98	84	68
p-Terphenyl-d14 (surr.)	1	%	107	82	76	62
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	93	73	73	73
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			TDS Leachate Cell 1	PLP	PSD1	LEP1
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001564	L24-Ap0001565	L24-Ap0001566	L24-Ap0001567
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.5	0.66	0.24	1.7
Arsenic	0.001	mg/L	< 0.01	0.10	0.002	0.23
Arsenic (filtered)	0.001	mg/L	< 0.01	0.095	0.001	0.21
Barium (filtered)	0.01	mg/L	1.5	1.6	0.14	12
Beryllium (filtered)	0.001	mg/L	< 0.01	< 0.01	< 0.001	< 0.01
Boron (filtered)	0.05	mg/L	1.4	41	0.06	300
Cadmium (filtered)	0.0001	mg/L	< 0.002	< 0.002	< 0.0001	0.0049
Chromium (filtered)	0.001	mg/L	< 0.01	0.70	< 0.001	2.1
Cobalt (filtered)	0.001	mg/L	< 0.01	0.069	< 0.001	0.15
Copper (filtered)	0.001	mg/L	< 0.01	< 0.01	0.001	0.013
Iron	0.01	mg/L	< 0.5	14	0.40	44
Lead (filtered)	0.001	mg/L	< 0.01	0.026	0.002	0.056
Manganese (filtered)	0.005	mg/L	9.7	0.31	< 0.005	4.1
Mercury (filtered)	0.0001	mg/L	< 0.001	< 0.001	< 0.0001	0.0024
Molybdenum (filtered)	0.001	mg/L	1.3	0.11	< 0.001	0.14
Nickel (filtered)	0.001	mg/L	0.063	1.1	0.001	4.8
Selenium (filtered)	0.001	mg/L	< 0.01	< 0.01	< 0.001	0.025
Silver (filtered)	0.001	mg/L	[G01]< 0.05	[G01]< 0.05	< 0.001	[G01]< 0.05
Titanium (filtered)	0.005	mg/L	< 0.05	0.68	< 0.005	1.6
Vanadium (filtered)	0.005	mg/L	< 0.05	0.22	< 0.005	0.56
Zinc (filtered)	0.005	mg/L	< 0.05	0.32	0.034	0.91

Client Sample ID			TDS Leachate Cell 1	PLP	PSD1	LEP1
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001564	L24-Ap0001565	L24-Ap0001566	L24-Ap0001567
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	540	240	8.6	2300
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	8900	170	26	3100
Magnesium	0.5	mg/L	540	260	9.4	3000
Potassium	0.5	mg/L	68	2300	5.5	20000
Sodium	0.5	mg/L	4600	9100	75	87000
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	160
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	0.05	79
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	14	0.04	110
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	[G01]< 40
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	0.02	8.9
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
13C4-PFBA (surr.)	1	%	76	40	119	14
13C5-PFPeA (surr.)	1	%	146	49	118	19
13C5-PFHxA (surr.)	1	%	137	51	117	23
13C4-PFHpA (surr.)	1	%	140	55	119	26
13C8-PFOA (surr.)	1	%	138	54	117	27
13C5-PFNA (surr.)	1	%	129	52	121	25
13C6-PFDA (surr.)	1	%	114	52	109	25
13C2-PFUnDA (surr.)	1	%	99	44	94	24
13C2-PFDoDA (surr.)	1	%	90	52	93	27
13C2-PFTeDA (surr.)	1	%	72	53	88	30
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	[G01]< 40
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	[G01]< 40
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	[G01]< 40
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	[G01]< 40
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	[G01]< 40
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	[G01]< 40
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	[G01]< 40
13C8-FOSA (surr.)	1	%	111	53	107	27
D3-N-MeFOSA (surr.)	1	%	127	58	116	31
D5-N-EtFOSA (surr.)	1	%	179	75	149	41
D7-N-MeFOSE (surr.)	1	%	96	44	89	23
D9-N-EtFOSE (surr.)	1	%	99	49	95	26
D5-N-EtFOSAA (surr.)	1	%	80	43	85	23
D3-N-MeFOSAA (surr.)	1	%	80	44	85	22

Client Sample ID			TDS Leachate Cell 1	PLP	PSD1	LEP1
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Ap0001564	L24-Ap0001565	L24-Ap0001566	L24-Ap0001567
Date Sampled			Mar 27, 2024	Mar 25, 2024	Mar 25, 2024	Mar 26, 2024
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	[G01]< 40	< 0.05	52
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
13C2-4:2 FTSA (surr.)	1	%	153	68	119	39
13C2-6:2 FTSA (surr.)	1	%	128	50	107	28
13C2-8:2 FTSA (surr.)	1	%	98	40	100	18
13C2-10:2 FTSA (surr.)	1	%	77	34	84	16
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	65	0.01	590
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	16
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	14
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	[G01]< 8	< 0.01	[G01]< 8
13C3-PFBS (surr.)	1	%	111	49	124	24
18O2-PFHxS (surr.)	1	%	38	49	121	24
13C8-PFOS (surr.)	1	%	111	44	117	23
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 8	< 0.01	14
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	79	0.12	1029.9
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 8	0.02	8.9
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 8	0.02	22.9
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	79	0.12	1013.9

Client Sample ID			LEP3	Trip Blank
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Ap0001568	L24-Ap0001626
Date Sampled			Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons				
TRH C6-C9	0.02	mg/L	[G01]< 2	< 0.02
TRH C10-C14	0.02	mg/L	2.2	-
TRH C15-C28	0.04	mg/L	8.5	-
TRH C29-C36	0.04	mg/L	0.88	-
TRH C10-C36 (Total)	0.04	mg/L	11.58	-
TRH C6-C10	0.02	mg/L	[G01]< 2	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 2	< 0.02
TRH >C10-C16	0.02	mg/L	3.3	-
TRH >C10-C16 less Naphthalene (F2)[N01]	0.02	mg/L	3.3	-
TRH >C16-C34	0.05	mg/L	8.1	-
TRH >C34-C40	0.05	mg/L	0.36	-
TRH >C10-C40 (total)*	0.05	mg/L	11.76	-

Client Sample ID			LEP3	Trip Blank
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Ap0001568	L24-Ap0001626
Date Sampled			Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit		
BTEX				
Benzene	0.001	mg/L	[G01]< 0.1	< 0.001
Toluene	0.001	mg/L	[G01]< 0.1	< 0.001
Ethylbenzene	0.001	mg/L	[G01]< 0.1	< 0.001
m&p-Xylenes	0.002	mg/L	[G01]< 0.2	< 0.002
o-Xylene	0.001	mg/L	[G01]< 0.1	< 0.001
Xylenes - Total*	0.003	mg/L	[G01]< 0.3	< 0.003
BTEX				
4-Bromofluorobenzene (surr.)	1	%	84	82
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.001	mg/L	[G01]< 0.1	-
VOCs in Water by GCMS				
Benzene	0.5	ug/L	[G01]< 50	-
Carbon tetrachloride	0.5	ug/L	[G01]< 50	-
Chlorobenzene	0.5	ug/L	[G01]< 50	-
DCM	5	ug/L	[G01]< 500	-
Ethylbenzene	0.5	ug/L	[G01]< 50	-
Hexachlorobutadiene	0.5	ug/L	[G01]< 50	-
Methyl tert Butyl Ether	0.5	ug/L	[G01]< 50	-
Styrene	0.5	ug/L	[G01]< 50	-
Perchloroethene (PCE)	0.5	ug/L	[G01]< 50	-
Toluene	0.5	ug/L	[G01]< 50	-
Trichloroethylene(TCE)	0.5	ug/L	[G01]< 50	-
Vinyl Chloride	0.2	ug/L	[G01]< 20	-
Xylenes (Total)	3	ug/L	[G01]< 100	-
1.1-Dichloroethane	0.5	ug/L	[G01]< 50	-
1.2-Dichloroethane	0.5	ug/L	[G01]< 50	-
1.1-Dichloroethene	0.5	ug/L	[G01]< 50	-
cis-1.2-Dichloroethene	0.5	ug/L	[G01]< 50	-
trans-1.2-Dichloroethene	2	ug/L	[G01]< 100	-
1.1.1-Trichloroethane	0.5	ug/L	[G01]< 50	-
1.1.1.2-Tetrachloroethane	0.5	ug/L	[G01]< 50	-
1.1.2.2-Tetrachloroethane	0.5	ug/L	[G01]< 50	-
1.2-Dichlorobenzene	0.5	ug/L	[G01]< 50	-
1.3-Dichlorobenzene	0.5	ug/L	[G01]< 50	-
1.4-Dichlorobenzene	0.5	ug/L	[G01]< 50	-
1.2.3-Trichlorobenzene	0.5	ug/L	[G01]< 50	-
1.2.4-Trichlorobenzene	0.5	ug/L	[G01]< 50	-
1.3.5-Trichlorobenzene	0.5	ug/L	[G01]< 50	-
Atrazine	0.1	ug/L	< 0.1	-
Alkalinity	5	mg CaCO3/L	3100	-
Ammonia-N	0.02	mg/L	1400	-
Bicarbonate	5	mg CaCO3/L	3100	-
Carbonate	5	mg CaCO3/L	< 5	-
Chemical Oxygen Demand (COD)	25	mg/L	20000	-
Chloride	5	mg/L	79000	-
Chromium (VI)	0.002	mg/L	< 0.002	-
Conductivity	10	uS/cm	160000	-

Client Sample ID			LEP3	Trip Blank
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Ap0001568	L24-Ap0001626
Date Sampled			Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit		
Dissolved Oxygen	0.1	mg/L	2.6	-
Hydroxide	5	mg CaCO3/L	< 5	-
Nitrate-N	0.01	mg/L	2.5	-
Nitrite-N	0.01	mg/L	2.0	-
NOx-N	0.01	mg/L	4.5	-
pH	0.1	pH Units	8.0	-
Redox Potential		mV	250	-
Sulfate	1	mg/L	< 1	-
Total Dissolved Solids	5	mg/L	96000	-
Total Kjeldahl Nitrogen	0.2	mg/L	1400	-
Total Nitrogen	0.2	mg/L	1400	-
Total Organic Carbon	5	mg/L	190	-
Total Phosphorus	0.01	mg/L	23	-
Total Suspended Solids	5	mg/L	250	-
Chromium (III) (filtered)*	0.002	mg/L	1.2	-
Naphthalene[N02]	0.001	mg/L	-	< 0.001
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	-
Acenaphthene	0.001	mg/L	< 0.001	-
Acenaphthylene	0.001	mg/L	< 0.001	-
Anthracene	0.001	mg/L	< 0.001	-
Benz(a)anthracene	0.001	mg/L	< 0.001	-
Benzo(a)pyrene	0.001	mg/L	< 0.001	-
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001	-
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	-
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	-
Chrysene	0.001	mg/L	< 0.001	-
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	-
Fluoranthene	0.001	mg/L	< 0.001	-
Fluorene	0.001	mg/L	< 0.001	-
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	-
Naphthalene	0.001	mg/L	< 0.001	-
Phenanthrene	0.001	mg/L	< 0.001	-
Pyrene	0.001	mg/L	< 0.001	-
Total PAH*	0.001	mg/L	< 0.001	-
2-Fluorobiphenyl (surr.)	1	%	64	-
p-Terphenyl-d14 (surr.)	1	%	61	-
Phenols (Halogenated)				
2-Chlorophenol	0.001	mg/L	< 0.001	-
2.4-Dichlorophenol	0.001	mg/L	< 0.001	-
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	-
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	-
2.6-Dichlorophenol	0.001	mg/L	< 0.001	-
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	-
Pentachlorophenol	0.001	mg/L	< 0.001	-
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	-
Total Halogenated Phenol*	0.01	mg/L	< 0.001	-

Client Sample ID			LEP3	Trip Blank
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Ap0001568	L24-Ap0001626
Date Sampled			Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit		
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	-
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	-
2-Nitrophenol	0.001	mg/L	< 0.001	-
2.4-Dimethylphenol	0.001	mg/L	< 0.001	-
2.4-Dinitrophenol	0.001	mg/L	< 0.001	-
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	-
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	-
Total cresols*	0.01	mg/L	< 0.01	-
4-Nitrophenol	0.001	mg/L	< 0.001	-
Dinoseb	0.002	mg/L	< 0.002	-
Phenol	0.001	mg/L	< 0.001	-
Phenol-d6 (surr.)	1	%	62	-
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	-
OCOP in Water				
Aldrin	0.001	ug/L	< 0.001	-
alpha-BHC (HCH)	0.001	ug/L	< 0.001	-
beta-BHC (HCH)	0.001	ug/L	< 0.001	-
delta-BHC (HCH)	0.001	ug/L	< 0.001	-
Bifenthrin	0.05	ug/L	< 0.05	-
Bromophos Ethyl	0.005	ug/L	< 0.005	-
Chlordane	0.002	ug/L	< 0.002	-
Chlorothalonil	0.01	ug/L	< 0.01	-
Chlorpyrifos	0.005	ug/L	< 0.005	-
Diazinon	0.01	ug/L	< 0.01	-
Dieldrin	0.001	ug/L	< 0.001	-
Endosulfan I	0.001	ug/L	< 0.001	-
Endosulfan II	0.001	ug/L	< 0.001	-
Endosulfan Sulfate	0.001	ug/L	< 0.001	-
Endrin	0.01	ug/L	< 0.01	-
Ethion	0.01	ug/L	< 0.01	-
Fenitrothion	0.01	ug/L	< 0.01	-
Fipronil	0.02	ug/L	< 0.02	-
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	-
Heptachlor Epoxide	0.001	ug/L	< 0.001	-
Heptachlor	0.001	ug/L	< 0.001	-
Lindane	0.001	ug/L	< 0.001	-
Malathion	0.01	ug/L	< 0.01	-
Methoxychlor	0.02	ug/L	< 0.02	-
o.p-DDT	0.001	ug/L	< 0.001	-
Oxychlordane	0.001	ug/L	< 0.001	-
p.p-DDD	0.001	ug/L	< 0.001	-
p.p-DDE	0.001	ug/L	< 0.001	-
p.p-DDT	0.001	ug/L	< 0.001	-
Parathion Ethyl	0.02	ug/L	< 0.02	-
Parathion Methyl	0.02	ug/L	< 0.02	-
Trifluralin	0.01	ug/L	< 0.01	-
Vinclozolin	0.02	ug/L	< 0.02	-
PCB in Water				
PCB	0.02	ug/L	< 0.02	-

Client Sample ID			LEP3	Trip Blank
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Ap0001568	L24-Ap0001626
Date Sampled			Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit		
Heavy Metals				
Aluminium (filtered)	0.05	mg/L	0.62	-
Arsenic	0.001	mg/L	0.15	-
Arsenic (filtered)	0.001	mg/L	0.14	-
Barium (filtered)	0.01	mg/L	4.1	-
Beryllium (filtered)	0.001	mg/L	< 0.01	-
Boron (filtered)	0.05	mg/L	190	-
Cadmium (filtered)	0.0001	mg/L	< 0.002	-
Chromium (filtered)	0.001	mg/L	1.2	-
Cobalt (filtered)	0.001	mg/L	0.090	-
Copper (filtered)	0.001	mg/L	< 0.01	-
Iron	0.01	mg/L	16	-
Lead (filtered)	0.001	mg/L	0.013	-
Manganese (filtered)	0.005	mg/L	1.5	-
Mercury (filtered)	0.0001	mg/L	0.0013	-
Molybdenum (filtered)	0.001	mg/L	0.093	-
Nickel (filtered)	0.001	mg/L	3.0	-
Selenium (filtered)	0.001	mg/L	0.027	-
Silver (filtered)	0.001	mg/L	[G01]< 0.05	-
Titanium (filtered)	0.005	mg/L	0.47	-
Vanadium (filtered)	0.005	mg/L	0.30	-
Zinc (filtered)	0.005	mg/L	0.31	-
Alkali Metals (filtered)				
Magnesium (filtered)	0.5	mg/L	1400	-
Eurofins Suite B11C: Na/K/Ca/Mg				
Calcium	0.5	mg/L	1600	-
Magnesium	0.5	mg/L	1600	-
Potassium	0.5	mg/L	12000	-
Sodium	0.5	mg/L	50000	-
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	47	-
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	24	-
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	38	-
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	[G01]< 40	-
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	[G01]< 8	-
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	[G01]< 8	-
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	[G01]< 8	-
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	[G01]< 8	-
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	[G01]< 8	-
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	[G01]< 8	-
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	[G01]< 8	-
13C4-PFBA (surr.)	1	%	32	-
13C5-PFPeA (surr.)	1	%	40	-
13C5-PFHxA (surr.)	1	%	49	-
13C4-PFHpA (surr.)	1	%	52	-
13C8-PFOA (surr.)	1	%	52	-
13C5-PFNA (surr.)	1	%	53	-
13C6-PFDA (surr.)	1	%	54	-
13C2-PFUnDA (surr.)	1	%	49	-
13C2-PFDoDA (surr.)	1	%	51	-
13C2-PFTeDA (surr.)	1	%	50	-

Client Sample ID			LEP3	Trip Blank
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Ap0001568	L24-Ap0001626
Date Sampled			Mar 26, 2024	Mar 25, 2024
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	[G01]< 40	-
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	[G01]< 40	-
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	[G01]< 40	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	[G01]< 40	-
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	[G01]< 40	-
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	[G01]< 40	-
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	[G01]< 40	-
13C8-FOSA (surr.)	1	%	52	-
D3-N-MeFOSA (surr.)	1	%	61	-
D5-N-EtFOSA (surr.)	1	%	83	-
D7-N-MeFOSE (surr.)	1	%	47	-
D9-N-EtFOSE (surr.)	1	%	53	-
D5-N-EtFOSAA (surr.)	1	%	47	-
D3-N-MeFOSAA (surr.)	1	%	44	-
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	[G01]< 8	-
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	[G01]< 40	-
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	[G01]< 8	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	[G01]< 8	-
13C2-4:2 FTSA (surr.)	1	%	81	-
13C2-6:2 FTSA (surr.)	1	%	52	-
13C2-8:2 FTSA (surr.)	1	%	37	-
13C2-10:2 FTSA (surr.)	1	%	34	-
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	190	-
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	[G01]< 8	-
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	[G01]< 8	-
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	[G01]< 8	-
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	[G01]< 8	-
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	[G01]< 8	-
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	[G01]< 8	-
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	[G01]< 8	-
13C3-PFBS (surr.)	1	%	48	-
18O2-PFHxS (surr.)	1	%	49	-
13C8-PFOS (surr.)	1	%	45	-
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 8	-
Sum of PFASs (n=30)*	0.1	ug/L	299	-
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 8	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 8	-
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	299	-

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
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	7 Days
Total Recoverable Hydrocarbons - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	7 Days
BTEX - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	14 Days
Naphthalene - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	14 Days
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Apr 05, 2024	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Welshpool	Apr 05, 2024	7 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Welshpool	Apr 05, 2024	14 Day
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Welshpool	Apr 05, 2024	14 Day
VOCs in Water by GCMS - Method: ARL132 - Purgeable Volatile Organic Compounds in Water by GCMS	Welshpool	Apr 05, 2024	14 Days
Atrazine - Method: ARL042 - Base Neutral Pesticides in Water	Welshpool	Apr 05, 2024	7 Days
Chemical Oxygen Demand (COD) - Method: LTM-INO-4220 Determination of COD in Water	Melbourne	Apr 03, 2024	28 Days
Chromium (VI) - Method: ARL316 - Hexavalent Chromium in Water by Discrete Analyser	Welshpool	Apr 05, 2024	1 Day
pH - Method: ARL014 - pH in Water	Welshpool	Apr 05, 2024	1 Day
Redox Potential - Method: ARL119 - Reduction/Oxidation Potential of Water	Welshpool	Apr 05, 2024	28 Day
Total Organic Carbon - Method: LTM-INO-4060 Total Organic Carbon in water and soil	Melbourne	Apr 03, 2024	28 Days
Total Suspended Solids - Method: ARL No. 016 - Total Suspended Solids	Welshpool	Apr 05, 2024	7 Days
Chromium (III) (filtered)* - Method: ARL402/403 - Metals in Water by ICPOES/ICPMS	Welshpool	Apr 02, 2024	180 Days
OCOP in Water - Method: ARL No. 002 - OCOP and PCB in Water	Welshpool	Apr 05, 2024	7 Days
PCB in Water - Method: ARL002 - OCOP and PCB in Water	Welshpool	Apr 05, 2024	14 Days
Heavy Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	28 Days
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	28 Days
Metals M8 filtered - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	28 Days
Alkali Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	6 Months
Eurofins Suite B11C: Na/K/Ca/Mg - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Apr 05, 2024	180 Days
Alkalinity	Welshpool	Apr 05, 2024	14 Days

Description	Testing Site	Extracted	Holding Time
- Method: ARL037 - Alkalinity in Water			
Bicarbonate	Welshpool	Apr 05, 2024	14 Days
- Method: ARL037 - Alkalinity in Water			
Carbonate	Welshpool	Apr 05, 2024	14 Days
- Method: ARL037 - Alkalinity in Water			
Hydroxide	Welshpool	Apr 05, 2024	14 Day
- Method: ARL037 - Alkalinity in Water			
Ammonia-N	Welshpool	Apr 05, 2024	28 Days
- Method: ARL303 - Ammonia in Water by Discrete Analyser			
Nitrate-N	Welshpool	Apr 05, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Nitrite-N	Welshpool	Apr 05, 2024	2 Days
- Method: ARL311 - Nitrite in Water by Discrete Analyser			
NOx-N	Welshpool	Apr 05, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Total Kjeldahl Nitrogen	Welshpool	Apr 04, 2024	28 Day
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Nitrogen	Welshpool	Apr 05, 2024	28 Days
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Phosphorus	Welshpool	Apr 05, 2024	28 Days
- Method: ARL308 - Total Phosphorus in Water by Discrete Analyser			
Chloride	Welshpool	Apr 05, 2024	28 Days
- Method: ARL305 - Chloride in Water by Discrete Analyser			
Sulfate	Welshpool	Apr 05, 2024	28 Days
- Method: ARL301 - Sulfate in Water by Discrete Analyser			
Conductivity	Welshpool	Apr 05, 2024	28 Days
- Method: ARL019 - Conductivity and Salinity in Water			
Total Dissolved Solids	Welshpool	Apr 05, 2024	7 Days
- Method: ARL No. 017 - Total Dissolved Solids			
Perfluoroalkyl carboxylic acids (PFCAs)	Welshpool	Apr 05, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
Perfluoroalkyl sulfonamido substances	Welshpool	Apr 05, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Welshpool	Apr 05, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
Perfluoroalkyl sulfonic acids (PFSAs)	Welshpool	Apr 05, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
PFASs Summations	Welshpool	Apr 05, 2024	
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			

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Project ID: 675.072519.00001

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Received: Apr 2, 2024 2:50 PM
Due: Apr 9, 2024
Priority: 5 Day
Contact Name: *ALL RESULTS/SRA/COC"S

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail	Aluminium (filtered)	Ammonia-N	Arsenic (filtered)	Cadmium (filtered)	Chemical Oxygen Demand (COD)	Chromium (filtered)	Chromium (III) (filtered)*	Chromium (VI)	Copper (filtered)	Dissolved Oxygen	HOLD	Iron	Lead (filtered)	Magnesium (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Nitrate-N	pH	Selenium (filtered)	Sulfate	Titanium (filtered)	Total Organic Carbon	Total Phosphorus	Zinc (filtered)	Phenols (Speciated)	Eurofins Suite B4	Eurofins Suite B11C: Na/K/Ca/Mg	OCOP in Water	PCB in Water	VOCs in Water by GCMS	Total Nitrogen	Alkalinity	Total Dissolved Solids (TDS)	Per- and Polyfluoroalkyl Substances (PFASs)
Perth Laboratory - NATA # 2377 Site # 2370	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254					X																		X												
External Laboratory																																			

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID																																
1	TDS Leachate Cell 1	Mar 27, 2024		Water	L24-Ap0001564	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	PLP	Mar 25, 2024		Water	L24-Ap0001565	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	PSD1	Mar 25, 2024		Water	L24-Ap0001566	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	LEP1	Mar 26, 2024		Water	L24-Ap0001567	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	LEP3	Mar 26, 2024		Water	L24-Ap0001568	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	RS02	Mar 25, 2024		Water	L24-Ap0001570										X																							
7	FB02	Mar 25, 2024		Water	L24-Ap0001571										X																							
8	Trip Blank	Mar 25, 2024		Water	L24-Ap0001626										X																							
Test Counts						5	5	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Internal Quality Control Review and Glossary

General

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

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C10-C14	mg/L	< 0.02			0.02	Pass	
TRH C15-C28	mg/L	< 0.04			0.04	Pass	
TRH C29-C36	mg/L	< 0.04			0.04	Pass	
TRH >C10-C16	mg/L	< 0.02			0.02	Pass	
TRH >C16-C34	mg/L	< 0.05			0.05	Pass	
TRH >C34-C40	mg/L	< 0.05			0.05	Pass	
Method Blank							
Atrazine	ug/L	< 0.1			0.1	Pass	
Alkalinity	mg CaCO3/L	< 5			5	Pass	
Ammonia-N	mg/L	< 0.02			0.02	Pass	
Bicarbonate	mg CaCO3/L	< 5			5	Pass	
Carbonate	mg CaCO3/L	< 5			5	Pass	
Chemical Oxygen Demand (COD)	mg/L	< 25			25	Pass	
Chloride	mg/L	< 5			5	Pass	
Conductivity	uS/cm	< 10			10	Pass	
Hydroxide	mg CaCO3/L	< 5			5	Pass	
Nitrate-N	mg/L	< 0.01			0.01	Pass	
Nitrite-N	mg/L	< 0.01			0.01	Pass	
NOx-N	mg/L	< 0.01			0.01	Pass	
Sulfate	mg/L	< 1			1	Pass	
Total Dissolved Solids	mg/L	< 5			5	Pass	
Total Nitrogen	mg/L	< 0.2			0.2	Pass	
Total Suspended Solids	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Silver (filtered)	mg/L	< 0.001			0.001	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Iron	mg/L	< 0.01			0.01	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	mg/L	< 0.5			0.5	Pass	
Magnesium	mg/L	< 0.5			0.5	Pass	
Potassium	mg/L	< 0.5			0.5	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.05			0.05	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Total Organic Carbon	mg/L	< 5			5	Pass	
Total Phosphorus	mg/L	< 0.01			0.01	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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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							
Phenols (Halogenated)							
2-Chlorophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.5-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.6-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.001			0.001	Pass	
Pentachlorophenol	mg/L	< 0.001			0.001	Pass	
Tetrachlorophenols - Total	mg/L	< 0.001			0.001	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/L	< 0.003			0.003	Pass	
2-Methyl-4.6-dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Nitrophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dimethylphenol	mg/L	< 0.001			0.001	Pass	
2.4-Dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.001			0.001	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.001			0.001	Pass	
4-Nitrophenol	mg/L	< 0.001			0.001	Pass	
Dinoseb	mg/L	< 0.002			0.002	Pass	
Phenol	mg/L	< 0.001			0.001	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	Pass	
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	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.001			0.001	Pass	
Method Blank							
VOCs in Water by GCMS							
Benzene	ug/L	< 0.5			0.5	Pass	
Carbon tetrachloride	ug/L	< 0.5			0.5	Pass	
Chlorobenzene	ug/L	< 0.5			0.5	Pass	
DCM	ug/L	< 5			5	Pass	
Ethylbenzene	ug/L	< 0.5			0.5	Pass	
Hexachlorobutadiene	ug/L	< 0.5			0.5	Pass	
Methyl tert Butyl Ether	ug/L	< 0.5			0.5	Pass	
Styrene	ug/L	< 0.5			0.5	Pass	
Perchloroethene (PCE)	ug/L	< 0.5			0.5	Pass	
Toluene	ug/L	< 0.5			0.5	Pass	
Trichloroethylene(TCE)	ug/L	< 0.5			0.5	Pass	
Vinyl Chloride	ug/L	< 0.2			0.2	Pass	
Xylenes (Total)	ug/L	< 3			3	Pass	
1.1-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.1-Dichloroethene	ug/L	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	ug/L	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	ug/L	< 2			2	Pass	
1.1.1-Trichloroethane	ug/L	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1.1.1.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3.5-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
Method Blank							
Total Organic Carbon	mg/L	< 5			5	Pass	
Total Phosphorus	mg/L	< 0.01			0.01	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	Pass	
Method Blank							
Heavy Metals							
Aluminium (filtered)	mg/L	< 0.05			0.05	Pass	
Arsenic	mg/L	< 0.001			0.001	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Barium (filtered)	mg/L	< 0.01			0.01	Pass	
Beryllium (filtered)	mg/L	< 0.001			0.001	Pass	
Boron (filtered)	mg/L	< 0.05			0.05	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Cobalt (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Iron	mg/L	< 0.01			0.01	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	
Molybdenum (filtered)	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Vanadium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C10-C14	%	106			70-130	Pass	
TRH >C10-C16	%	107			70-130	Pass	
LCS - % Recovery							
VOCs in Water by GCMS							
Carbon tetrachloride	%	97			60-120	Pass	
Chlorobenzene	%	90			60-120	Pass	
DCM	%	89			60-120	Pass	
Hexachlorobutadiene	%	86			60-120	Pass	
Methyl tert Butyl Ether	%	91			60-120	Pass	
Styrene	%	96			60-120	Pass	
Perchloroethene (PCE)	%	103			60-120	Pass	
Vinyl Chloride	%	97			60-120	Pass	
1.1-Dichloroethane	%	92			60-120	Pass	
cis-1.2-Dichloroethene	%	97			60-120	Pass	
trans-1.2-Dichloroethene	%	88			60-120	Pass	
1.1.1.2-Tetrachloroethane	%	105			60-120	Pass	
1.1.2.2-Tetrachloroethane	%	96			60-120	Pass	
1.3-Dichlorobenzene	%	93			60-120	Pass	
1.4-Dichlorobenzene	%	95			60-120	Pass	
1.2.3-Trichlorobenzene	%	90			60-120	Pass	
1.2.4-Trichlorobenzene	%	92			60-120	Pass	
1.3.5-Trichlorobenzene	%	91			60-120	Pass	
LCS - % Recovery							
Atrazine	%	120			60-120	Pass	
Chemical Oxygen Demand (COD)	%	108			70-130	Pass	
Conductivity	%	94			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Dissolved Solids	%	97			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
Tetrachlorophenols - Total	%	34			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	93			25-140	Pass	
4-Nitrophenol	%	93			25-140	Pass	
LCS - % Recovery							
Heavy Metals							
Boron (filtered)	%	81			80-120	Pass	
Silver (filtered)	%	100			80-120	Pass	
LCS - % Recovery							
OCOP in Water							
Aldrin	%	101			60-120	Pass	
Dieldrin	%	115			60-120	Pass	
Heptachlor	%	100			60-120	Pass	
Lindane	%	107			60-120	Pass	
p.p-DDT	%	120			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	101			80-120	Pass	
Iron	%	101			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	99			80-120	Pass	
Magnesium	%	101			80-120	Pass	
Potassium	%	102			80-120	Pass	
LCS - % Recovery							
OCOP in Water							
Aldrin	%	101			60-120	Pass	
Dieldrin	%	120			60-120	Pass	
Endrin	%	112			60-120	Pass	
Heptachlor	%	105			60-120	Pass	
Lindane	%	119			60-120	Pass	
p.p-DDT	%	103			60-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	81			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	76			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	87			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	82			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	73			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	76			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	68			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	70			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	68			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	74			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	72			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	69			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	63			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	69			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	72			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	72			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	78			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	71			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	83			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	81			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	68			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	68			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	68			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	%	73			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	%	75			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	72			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	80			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	73			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	78			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	82			50-150	Pass	
LCS - % Recovery							
Total Organic Carbon	%	107			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	92			70-130	Pass	
Acenaphthylene	%	114			70-130	Pass	
Anthracene	%	89			70-130	Pass	
Benz(a)anthracene	%	103			70-130	Pass	
Benzo(a)pyrene	%	106			70-130	Pass	
Benzo(b&j)fluoranthene	%	109			70-130	Pass	
Benzo(g.h.i)perylene	%	96			70-130	Pass	
Benzo(k)fluoranthene	%	107			70-130	Pass	
Chrysene	%	110			70-130	Pass	
Dibenz(a.h)anthracene	%	98			70-130	Pass	
Fluoranthene	%	84			70-130	Pass	
Fluorene	%	88			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	94			70-130	Pass	
Naphthalene	%	105			70-130	Pass	
Phenanthrene	%	88			70-130	Pass	
Pyrene	%	82			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	116			25-140	Pass	
2.4-Dichlorophenol	%	88			25-140	Pass	
2.4.5-Trichlorophenol	%	85			25-140	Pass	
2.4.6-Trichlorophenol	%	100			25-140	Pass	
2.6-Dichlorophenol	%	96			25-140	Pass	
4-Chloro-3-methylphenol	%	112			25-140	Pass	
Pentachlorophenol	%	81			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Methyl-4.6-dinitrophenol	%	73			25-140	Pass	
2-Nitrophenol	%	31			25-140	Pass	
2.4-Dimethylphenol	%	85			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dinitrophenol	%	91			25-140	Pass	
2-Methylphenol (o-Cresol)	%	81			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	41			25-140	Pass	
Dinoseb	%	80			25-140	Pass	
Phenol	%	62			25-140	Pass	
LCS - % Recovery							
OCOP in Water							
Aldrin	%	111			60-120	Pass	
Dieldrin	%	115			60-120	Pass	
Endrin	%	100			60-120	Pass	
Heptachlor	%	88			60-120	Pass	
Lindane	%	93			60-120	Pass	
p.p-DDT	%	94			60-120	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	107			70-130	Pass	
TRH C6-C10	%	106			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	81			70-130	Pass	
Toluene	%	85			70-130	Pass	
Ethylbenzene	%	89			70-130	Pass	
m&p-Xylenes	%	87			70-130	Pass	
o-Xylene	%	88			70-130	Pass	
Xylenes - Total*	%	87			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	86			70-130	Pass	
LCS - % Recovery							
VOCs in Water by GCMS							
Benzene	%	111			60-120	Pass	
Ethylbenzene	%	102			60-120	Pass	
Toluene	%	105			60-120	Pass	
Trichloroethylene(TCE)	%	92			60-120	Pass	
Xylenes (Total)	%	101			60-120	Pass	
1.2-Dichloroethane	%	114			60-120	Pass	
1.1-Dichloroethene	%	94			60-120	Pass	
1.1.1-Trichloroethane	%	85			60-120	Pass	
1.2-Dichlorobenzene	%	107			60-120	Pass	
LCS - % Recovery							
Total Organic Carbon	%	107			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	98			80-120	Pass	
Arsenic	%	101			80-120	Pass	
Arsenic (filtered)	%	96			80-120	Pass	
Barium (filtered)	%	101			80-120	Pass	
Beryllium (filtered)	%	103			80-120	Pass	
Cadmium (filtered)	%	98			80-120	Pass	
Chromium (filtered)	%	99			80-120	Pass	
Cobalt (filtered)	%	97			80-120	Pass	
Copper (filtered)	%	100			80-120	Pass	
Iron	%	98			80-120	Pass	
Lead (filtered)	%	97			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Manganese (filtered)	%	96			80-120	Pass	
Mercury (filtered)	%	100			80-120	Pass	
Molybdenum (filtered)	%	102			80-120	Pass	
Nickel (filtered)	%	97			80-120	Pass	
Selenium (filtered)	%	97			80-120	Pass	
Titanium (filtered)	%	100			80-120	Pass	
Vanadium (filtered)	%	98			80-120	Pass	
Zinc (filtered)	%	97			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	120			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	102			80-120	Pass	
Magnesium	%	117			80-120	Pass	
Potassium	%	103			80-120	Pass	
Sodium	%	106			80-120	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	L24-Ap0007448	NCP	%	90			70-130	Pass	
TRH C10-C14	L24-Ap0003692	NCP	%	109			70-130	Pass	
TRH C6-C10	L24-Ap0007448	NCP	%	85			70-130	Pass	
TRH >C10-C16	L24-Ap0003692	NCP	%	109			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	L24-Ap0007448	NCP	%	91			70-130	Pass	
Toluene	L24-Ap0007448	NCP	%	88			70-130	Pass	
Ethylbenzene	L24-Ap0007448	NCP	%	86			70-130	Pass	
m&p-Xylenes	L24-Ap0007448	NCP	%	95			70-130	Pass	
o-Xylene	L24-Ap0007448	NCP	%	91			70-130	Pass	
Xylenes - Total*	L24-Ap0007448	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	L24-Ap0007448	NCP	%	88			70-130	Pass	
Spike - % Recovery									
VOCs in Water by GCMS				Result 1					
Benzene	L24-Ap0011852	NCP	%	104			60-120	Pass	
Carbon tetrachloride	L24-Ap0019296	NCP	%	88			60-120	Pass	
Chlorobenzene	L24-Ap0019296	NCP	%	82			60-120	Pass	
DCM	L24-Ap0019296	NCP	%	96			60-120	Pass	
Ethylbenzene	L24-Ap0011852	NCP	%	101			60-120	Pass	
Hexachlorobutadiene	L24-Ap0019296	NCP	%	85			60-120	Pass	
Methyl tert Butyl Ether	L24-Ap0019296	NCP	%	83			60-120	Pass	
Styrene	L24-Ap0019296	NCP	%	84			60-120	Pass	
Perchloroethene (PCE)	L24-Ap0019296	NCP	%	98			60-120	Pass	
Toluene	L24-Ap0011852	NCP	%	103			60-120	Pass	
Trichloroethylene(TCE)	L24-Ap0011852	NCP	%	90			60-120	Pass	
Vinyl Chloride	L24-Ap0019296	NCP	%	100			60-120	Pass	
Xylenes (Total)	L24-Ap0011852	NCP	%	100			60-120	Pass	
1.1-Dichloroethane	L24-Ap0019296	NCP	%	95			60-120	Pass	
1.2-Dichloroethane	L24-Ap0011852	NCP	%	105			60-120	Pass	
1.1-Dichloroethene	L24-Ap0011852	NCP	%	92			60-120	Pass	
cis-1.2-Dichloroethene	L24-Ap0019296	NCP	%	101			60-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
trans-1.2-Dichloroethene	L24-Ap0019296	NCP	%	92			60-120	Pass	
1.1.1-Trichloroethane	L24-Ap0011852	NCP	%	80			60-120	Pass	
1.1.1.2-Tetrachloroethane	L24-Ap0019296	NCP	%	92			60-120	Pass	
1.1.2.2-Tetrachloroethane	L24-Ap0019296	NCP	%	88			60-120	Pass	
1.2-Dichlorobenzene	L24-Ap0011852	NCP	%	102			60-120	Pass	
1.3-Dichlorobenzene	L24-Ap0019296	NCP	%	92			60-120	Pass	
1.4-Dichlorobenzene	L24-Ap0019296	NCP	%	94			60-120	Pass	
1.2.3-Trichlorobenzene	L24-Ap0019296	NCP	%	105			60-120	Pass	
1.2.4-Trichlorobenzene	L24-Ap0019296	NCP	%	83			60-120	Pass	
1.3.5-Trichlorobenzene	L24-Ap0019296	NCP	%	85			60-120	Pass	
Spike - % Recovery									
				Result 1					
Ammonia-N	L24-Ap0001474	NCP	%	99			80-120	Pass	
Chemical Oxygen Demand (COD)	B24-Ap0007857	NCP	%	88			70-130	Pass	
Chloride	L24-Ap0001474	NCP	%	111			70-130	Pass	
Chromium (VI)	L24-Ap0001474	NCP	%	106			80-120	Pass	
NOx-N	L24-Ap0007031	NCP	%	116			80-120	Pass	
Sulfate	L24-Ap0001474	NCP	%	106			70-130	Pass	
Total Nitrogen	L24-Ap0001477	NCP	%	103			70-130	Pass	
Total Phosphorus	L24-Ap0001477	NCP	%	96			80-120	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	L24-Ap0003693	NCP	%	111			70-130	Pass	
Acenaphthylene	L24-Ap0003693	NCP	%	114			70-130	Pass	
Anthracene	L24-Ap0003693	NCP	%	105			70-130	Pass	
Benz(a)anthracene	L24-Ap0003693	NCP	%	101			70-130	Pass	
Benzo(a)pyrene	L24-Ap0003693	NCP	%	106			70-130	Pass	
Benzo(b&j)fluoranthene	L24-Ap0003693	NCP	%	102			70-130	Pass	
Benzo(g.h.i)perylene	L24-Ap0003693	NCP	%	95			70-130	Pass	
Benzo(k)fluoranthene	L24-Ap0003693	NCP	%	115			70-130	Pass	
Chrysene	L24-Ap0003693	NCP	%	109			70-130	Pass	
Dibenz(a.h)anthracene	L24-Ap0003693	NCP	%	105			70-130	Pass	
Fluoranthene	L24-Ap0003693	NCP	%	100			70-130	Pass	
Fluorene	L24-Ap0003693	NCP	%	103			70-130	Pass	
Indeno(1.2.3-cd)pyrene	L24-Ap0003693	NCP	%	100			70-130	Pass	
Naphthalene	L24-Ap0003693	NCP	%	89			70-130	Pass	
Phenanthrene	L24-Ap0003693	NCP	%	82			70-130	Pass	
Pyrene	L24-Ap0003693	NCP	%	103			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	L24-Ap0003693	NCP	%	118			30-130	Pass	
2.4-Dichlorophenol	L24-Ap0003693	NCP	%	114			30-130	Pass	
2.4.5-Trichlorophenol	L24-Ap0003693	NCP	%	101			30-130	Pass	
2.4.6-Trichlorophenol	L24-Ap0003693	NCP	%	100			30-130	Pass	
2.6-Dichlorophenol	L24-Ap0003693	NCP	%	117			30-130	Pass	
4-Chloro-3-methylphenol	L24-Ap0003693	NCP	%	50			30-130	Pass	
Pentachlorophenol	L24-Ma0051942	NCP	%	99			30-130	Pass	
Tetrachlorophenols - Total	L24-Ma0061127	NCP	%	39			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Methyl-4.6-dinitrophenol	L24-Ap0001467	NCP	%	94			30-130	Pass	
2-Nitrophenol	L24-Ap0003693	NCP	%	49			30-130	Pass	
2.4-Dimethylphenol	L24-Ap0003693	NCP	%	111			30-130	Pass	
2.4-Dinitrophenol	L24-Ap0003693	NCP	%	109			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Methylphenol (o-Cresol)	L24-Ap0003693	NCP	%	116			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Ap0003693	NCP	%	100			30-130	Pass	
4-Nitrophenol	L24-Ma0055066	NCP	%	82			30-130	Pass	
Dinoseb	L24-Ap0001467	NCP	%	105			30-130	Pass	
Phenol	L24-Ap0003693	NCP	%	54			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Ap0007310	NCP	%	95			75-125	Pass	
Arsenic (filtered)	L24-Ap0007310	NCP	%	96			75-125	Pass	
Barium (filtered)	L24-Ap0007310	NCP	%	94			75-125	Pass	
Beryllium (filtered)	L24-Ap0007310	NCP	%	91			75-125	Pass	
Cadmium (filtered)	L24-Ap0007310	NCP	%	94			75-125	Pass	
Chromium (filtered)	L24-Ap0007310	NCP	%	93			75-125	Pass	
Cobalt (filtered)	L24-Ap0007310	NCP	%	87			75-125	Pass	
Copper (filtered)	L24-Ap0007310	NCP	%	83			75-125	Pass	
Lead (filtered)	L24-Ap0007310	NCP	%	89			75-125	Pass	
Mercury (filtered)	L24-Ap0007321	NCP	%	88			75-125	Pass	
Nickel (filtered)	L24-Ap0007310	NCP	%	86			75-125	Pass	
Selenium (filtered)	L24-Ap0007310	NCP	%	97			75-125	Pass	
Silver (filtered)	L24-Ap0007310	NCP	%	66			75-125	Fail	Q08
Titanium (filtered)	L24-Ap0007310	NCP	%	94			75-125	Pass	
Vanadium (filtered)	L24-Ap0007310	NCP	%	98			75-125	Pass	
Zinc (filtered)	L24-Ap0007310	NCP	%	103			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Sodium	L24-Ap0007352	NCP	%	96			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	L24-Ap0001473	NCP	%	67			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Ap0001473	NCP	%	71			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Ap0001473	NCP	%	77			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Ap0001473	NCP	%	71			50-150	Pass	
Perfluorooctanoic acid (PFOA)	L24-Ap0001473	NCP	%	66			50-150	Pass	
Perfluorononanoic acid (PFNA)	L24-Ap0001473	NCP	%	68			50-150	Pass	
Perfluorodecanoic acid (PFDA)	L24-Ap0001473	NCP	%	66			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Ap0001473	NCP	%	63			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Ap0001473	NCP	%	63			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Ap0001473	NCP	%	80			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Ap0001473	NCP	%	68			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	L24-Ap0001473	NCP	%	67			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Ap0001473	NCP	%	64			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Ap0001473	NCP	%	67			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Ap0001473	NCP	%	67			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Ap0001473	NCP	%	68			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Ap0001473	NCP	%	77			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Ap0001473	NCP	%	63			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Ap0001473	NCP	%	77			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Ap0001473	NCP	%	87			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Ap0001473	NCP	%	68			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Ap0001473	NCP	%	66			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	L24-Ap0001473	NCP	%	62			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Ap0001473	NCP	%	67			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Ap0001473	NCP	%	70			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Ap0001473	NCP	%	68			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Ap0001473	NCP	%	73			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Ap0001473	NCP	%	67			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Ap0001473	NCP	%	72			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Ap0001473	NCP	%	70			50-150	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	L24-Ap0001566	CP	%	101			75-125	Pass	
Iron	L24-Ap0001566	CP	%	97			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Ap0001566	CP	%	87			75-125	Pass	
Magnesium	L24-Ap0001566	CP	%	95			75-125	Pass	
Potassium	L24-Ap0001566	CP	%	97			75-125	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	L24-Ap0010927	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C6-C10	L24-Ap0010927	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	L24-Ap0010927	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	L24-Ap0010927	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	L24-Ap0010927	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	L24-Ap0010927	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	L24-Ap0010927	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	L24-Ap0010927	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	L24-Ap0010927	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia-N	L24-Ap0001564	CP	mg/L	2.2	2.3	5.0	20%	Pass	
Chemical Oxygen Demand (COD)	B24-Ap0007858	NCP	mg/L	< 25	< 25	<1	30%	Pass	
Chloride	L24-Ap0007030	NCP	mg/L	120	120	2.4	30%	Pass	
Chromium (VI)	L24-Ap0001473	NCP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Conductivity	L24-Ap0009047	NCP	uS/cm	6000	5900	<1	20%	Pass	
Nitrate-N	L24-Ap0001473	NCP	mg/L	3.3	3.3	2.1	30%	Pass	
Nitrite-N	L24-Ap0001564	CP	mg/L	0.01	0.01	3.5	20%	Pass	
NOx-N	L24-Ap0001473	NCP	mg/L	3.3	3.3	2.1	20%	Pass	
pH	L24-Ap0009047	NCP	pH Units	6.8	6.8	<1	30%	Pass	
Sulfate	L24-Ap0007030	NCP	mg/L	8.4	8.8	5.3	30%	Pass	
Total Dissolved Solids	L24-Ap0009047	NCP	mg/L	3600	3600	<1	30%	Pass	
Total Organic Carbon	L24-Ap0001461	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dichlorophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.5-Trichlorophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.6-Trichlorophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.6-Dichlorophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chloro-3-methylphenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pentachlorophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachlorophenols - Total	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	L24-Ap0001477	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Nitrophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dimethylphenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dinitrophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Methylphenol (o-Cresol)	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Nitrophenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dinoseb	L24-Ap0001477	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Phenol	L24-Ap0001477	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	L24-Ap0010961	NCP	mg/L	0.008	0.009	1.7	30%	Pass	
Arsenic (filtered)	L24-Ap0007320	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Barium (filtered)	L24-Ap0007320	NCP	mg/L	0.02	0.02	2.9	30%	Pass	
Beryllium (filtered)	L24-Ap0007320	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Boron (filtered)	L24-Ap0007320	NCP	mg/L	2.2	2.2	<1	30%	Pass	
Cadmium (filtered)	L24-Ap0007320	NCP	mg/L	0.044	0.030	1.6	30%	Pass	
Chromium (filtered)	L24-Ap0007320	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cobalt (filtered)	L24-Ap0007320	NCP	mg/L	0.088	0.073	2.1	30%	Pass	
Copper (filtered)	L24-Ap0007320	NCP	mg/L	0.35	0.070	6.0	30%	Pass	
Iron	L24-Ap0010961	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Lead (filtered)	L24-Ap0007320	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Ap0007330	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Mercury (filtered)	L24-Ap0007320	NCP	mg/L	0.0011	0.0013	4.1	30%	Pass	
Molybdenum (filtered)	L24-Ap0007320	NCP	mg/L	0.001	0.001	2.2	30%	Pass	
Nickel (filtered)	L24-Ap0007320	NCP	mg/L	0.008	0.007	6.9	30%	Pass	
Selenium (filtered)	L24-Ap0007320	NCP	mg/L	0.030	0.035	2.1	30%	Pass	
Silver (filtered)	L24-Ap0007320	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-Ap0007320	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Vanadium (filtered)	L24-Ap0007320	NCP	mg/L	0.005	0.005	<1	30%	Pass	
Zinc (filtered)	L24-Ap0007320	NCP	mg/L	0.59	0.14	8.6	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Ap0007330	NCP	mg/L	120	120	2.4	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-Ap0010961	NCP	mg/L	20	19	4.0	30%	Pass	
Magnesium	L24-Ap0010961	NCP	mg/L	110	110	<1	30%	Pass	
Potassium	L24-Ap0010961	NCP	mg/L	13	12	1.7	30%	Pass	
Sodium	L24-Ap0010961	NCP	mg/L	150	140	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Suspended Solids	L24-Ap0001565	CP	mg/L	450	490	8.5	20%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	L24-Ap0001566	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C15-C28	L24-Ap0001566	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C29-C36	L24-Ap0001566	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH >C10-C16	L24-Ap0001566	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C16-C34	L24-Ap0001566	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C34-C40	L24-Ap0001566	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Nitrogen	L24-Ap0001566	CP	mg/L	1.7	1.4	15	30%	Pass	
Total Phosphorus	L24-Ap0001566	CP	mg/L	0.07	0.06	11	20%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Ap0001566	CP	ug/L	0.05	0.05	1.6	30%	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Ap0001566	CP	ug/L	0.04	0.04	3.4	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	L24-Ap0001566	CP	ug/L	0.02	0.02	1.8	30%	Pass	
Perfluorononanoic acid (PFNA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluoroundecanoic acid (PFUnDA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Ap0001566	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	L24-Ap0001566	CP	ug/L	0.01	0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Ap0001566	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
VOCs in Water by GCMS				Result 1	Result 2	RPD			
Benzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Carbon tetrachloride	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Chlorobenzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
DCM	L24-Ap0001568	CP	ug/L	< 500	< 500	<1	30%	Pass	

Duplicate									
VOCs in Water by GCMS				Result 1	Result 2	RPD			
Ethylbenzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Hexachlorobutadiene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Methyl tert Butyl Ether	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Styrene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Perchloroethene (PCE)	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Toluene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Trichloroethylene(TCE)	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
Vinyl Chloride	L24-Ap0001568	CP	ug/L	< 20	< 20	<1	30%	Pass	
Xylenes (Total)	L24-Ap0001568	CP	ug/L	< 100	< 100	<1	30%	Pass	
1.1-Dichloroethane	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.2-Dichloroethane	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.1-Dichloroethene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
cis-1.2-Dichloroethene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
trans-1.2-Dichloroethene	L24-Ap0001568	CP	ug/L	< 100	< 100	<1	30%	Pass	
1.1.1-Trichloroethane	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.2-Dichlorobenzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.3-Dichlorobenzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.4-Dichlorobenzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.2.3-Trichlorobenzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.2.4-Trichlorobenzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	
1.3.5-Trichlorobenzene	L24-Ap0001568	CP	ug/L	< 50	< 50	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Natalie Hill	Analytical Services Manager
Douglas Todd	Senior Analyst-Metal
Lauren Killin	Senior Analyst-Inorganic
Mary Makarios	Senior Analyst-Inorganic
Patrick Patfield	Senior Analyst-Organic
Patrick Patfield	Senior Analyst-Volatile
Paul Nottle	Senior Analyst-Organic
Paul Nottle	Senior Analyst-PFAS
Paul Nottle	Senior Analyst-Volatile
Sam Becker	Senior Analyst-Inorganic

Kim Rodgers
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request

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CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN 50 005 085 521

☐ **Sydney Laboratory** Unit F3 Bld F 16 Mars Road Lane Cove West 02 9900 8400

☐ **Brisbane Laboratory** Unit 1 21 Smallwood Place Murarrie QLD 4172 07 3902 4600 EnviroSampleQLD@eurofins.com

☑ **Perth Laboratory** Unit 2 91 Leach Highway Kewdale WA 6105 08 9251 9600 EnviroSampleWA@eurofins.com

☐ **Melbourne Laboratory** 6 Monterey Road Dandenong South VIC 3175 03 8564 5000 EnviroSampleVic@eurofins.com

Company	SLR Consulting	Project №	72519	Project Manager	P Wangdi
Address	Level 1/500 Hay Street, Subiaco, WA	Project Name	Banksia Rd Landfill	EDD Format (ESdat, EQuIS etc)	
Contact Name	P Wangdi				
Phone №	0433907756				
Special Directions					
Purchase Order	5831				
Quote ID №	SLR 050324 (Suite 2 Including PFAS and organics)				

Sampler(s)	P Wangdi and P Dorji
Handed over by	P Wangdi and P Dorji
Email for Invoice	AccountsPayableAU@slrconsulting.com
Email for Results	pwangdi@slrconsutling.com, labresults@360environmental.com.au,

Analyses * Where metals are requested, please specify "total" or "filtered". SUITE code must be used to attract SUITE pricing

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Nutrients – COD, Ammonical Nitrogen, , nitrate -nitrogen, total nitrogen, total phosphorus, TDS, TSS, TOC	Major ions – Ca, Mg, K, Na, Cl, bicarbonate, sulfate	Dissolved metals – Al, As, Ba, Be, B, Cd, Cr (III+VI), Co, Cu, Pb, Mn, Mg, Hg, Mo, Ni, Se, Ag, Zn, V, Ti	Total metals – As, Fe	BTEX, TPH/TRH, PHENOLS, PAH, ATRIZINE, PCB, UT, OCP/OPP, TCE/PCE	PFAS/PFOA - 28 Suite Standard LOR	Physio-chemical – pH, EC, Eh, DO										Sample Comments / Dangerous Goods Hazard Warning
											500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)		
1	TDS Leachate Cell 1	27-03-24	W	X	X	X	X	X	X	X										High TDS
2	PLP	27-03-24	W	X	X	X	X	X	X	X										High TDS
3	PSD1	28-03-24	W	X	X	X	X	X	X	X										
4	PSD2	27-03-24																		Dry
5	LEP1	27-03-24	W	X	X	X	X	X	X	X										High TDS
6	LEP3	27-03-24	W	X	X	X	X	X	X	X										High TDS
	Total Counts			5	5	5	5	5	5	5										

Containers Change container type & size if necessary

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

♦Surcharge will apply

☐ Overnight (reporting by 9am)♦
☐ Same day♦ ☐ 1 day♦
☐ 2 days♦ ☐ 3 days♦
☑ 5 days (Standard)
☐ Other( )

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Name		Signature		Date		Time	
Eurofins | mgt Laboratory Use Only	Received By	Hayley	BNE | MEL | PER | ADL | NTL	Signature		Date	28/3/24	Time	14:50	Temperature 12.6
	Received By		BNE | MEL | PER | ADL | NTL	Signature		Date		Time		Report № 1083260

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | mgt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins | mgt Standard Terms and Conditions is available on request

SLR Consulting Australia Pty Ltd
Level 1, 500 Hay Street
Subiaco
WA 6008

NATA Accredited
Accreditation Number 2377
Site Number 2370

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: **Phuntsho Wangdi**

Report **1112682-W**
Project name BANKSIA LANDFILL JUNE QUARTER GME 2024
Project ID 675.072519.00001
Received Date Jun 28, 2024

Client Sample ID			**GW1S**	**GW1D**	**GW3D**	**SE4D**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Jn0074081**	**L24-Jn0074082**	**L24-Jn0074083**	**L24-Jn0074086**
Date Sampled			**Jun 26, 2024**	**Jun 26, 2024**	**Jun 26, 2024**	**Jun 26, 2024**
Test/Reference	LOR	Unit				
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	160	410	210	99
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	620	1500	760	450
Dissolved Oxygen	0.1	mg/L	8.4	8.4	8.4	8.5
Nitrate-N	0.01	mg/L	2.4	1.5	1.5	0.08
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	2.4	1.5	1.5	0.08
pH (at 25 °C)	0.1	pH Units	5.9	5.7	5.6	6.2
Redox Potential		mV	490	500	530	540
Sulfate	1	mg/L	19	22	13	12
Total Dissolved Solids	5	mg/L	370	900	450	270
Total Kjeldahl Nitrogen	0.2	mg/L	0.3	< 0.2	< 0.2	0.4
Total Nitrogen	0.2	mg/L	2.7	1.5	1.5	0.5
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.19	0.04	0.04	0.10
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	0.08	0.38	0.03	0.11
Radium 228*		mBq/L	0.13	0.58	0.11	0.18
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	< 5	15	7.9	40
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	< 5	15	7.9	40
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	0.56	0.21	< 0.05	0.57
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.008	0.003	< 0.001	0.003
Iron	0.01	mg/L	3.8	0.22	0.08	2.0
Lead (filtered)	0.001	mg/L	0.004	0.003	< 0.001	0.003
Manganese (filtered)	0.005	mg/L	0.46	0.005	0.30	< 0.005
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Client Sample ID			GW1S	GW1D	GW3D	SE4D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074081	L24-Jn0074082	L24-Jn0074083	L24-Jn0074086
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Nickel (filtered)	0.001	mg/L	0.006	0.002	0.004	0.002
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	0.001	< 0.001	< 0.001	0.002
Zinc (filtered)	0.005	mg/L	0.20	0.008	0.006	< 0.005
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	11	29	11	6.7
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	3.5	7.1	6.1	1.3
Magnesium	0.5	mg/L	12	30	12	7.2
Potassium	0.5	mg/L	2.3	5.3	2.6	1.4
Sodium	0.5	mg/L	99	230	120	65

Client Sample ID			GW5S	SE6S	GW6D	GW7S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074087	L24-Jn0074089	L24-Jn0074090	L24-Jn0074091
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	26	< 25	< 25	< 25
Chloride	5	mg/L	610	88	110	49
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	2300	430	490	280
Dissolved Oxygen	0.1	mg/L	8.3	8.5	8.2	8.7
Nitrate-N	0.01	mg/L	1.8	6.8	2.1	5.1
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	1.8	6.9	2.1	5.1
pH (at 25 °C)	0.1	pH Units	3.9	5.9	5.7	4.9
Redox Potential		mV	640	490	520	560
Sulfate	1	mg/L	48	14	26	11
Total Dissolved Solids	5	mg/L	1400	260	300	170
Total Kjeldahl Nitrogen	0.2	mg/L	2.0	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	3.8	6.9	2.1	5.1
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.37	0.08	0.13	0.03
Chromium (III) (filtered)*	0.002	mg/L	0.003	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	0.44	0.02	0.03	0.04
Radium 228*		mBq/L	0.66	<0.08	<0.08	0.09
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	< 5	17	13	< 5
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	< 5	17	13	< 5

Client Sample ID			GW5S	SE6S	GW6D	GW7S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074087	L24-Jn0074089	L24-Jn0074090	L24-Jn0074091
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	3.4	0.07	0.23	0.11
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	0.003	< 0.001	0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.013	< 0.001	0.002	0.003
Iron	0.01	mg/L	7.2	0.30	3.4	0.07
Lead (filtered)	0.001	mg/L	0.020	< 0.001	0.006	< 0.001
Manganese (filtered)	0.005	mg/L	0.059	0.038	0.53	< 0.005
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.004	0.002	0.007	0.003
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	0.007	< 0.001	0.001	< 0.001
Zinc (filtered)	0.005	mg/L	0.11	0.007	0.019	0.008
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	47	8.2	5.5	6.4
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	1.6	2.8	4.5	1.4
Magnesium	0.5	mg/L	47	8.4	5.7	6.6
Potassium	0.5	mg/L	9.1	2.5	1.6	0.9
Sodium	0.5	mg/L	340	65	88	39

Client Sample ID			GW7D-R	GW8D	GW9S	GW9D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074092	L24-Jn0074093	L24-Jn0074094	L24-Jn0074095
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	59	76	66	77
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	270	310	290	330
Dissolved Oxygen	0.1	mg/L	8.5	8.5	8.6	8.8
Nitrate-N	0.01	mg/L	1.9	0.35	2.0	0.57
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	0.02
NOx-N	0.01	mg/L	1.9	0.35	2.0	0.59
pH (at 25 °C)	0.1	pH Units	5.4	5.2	5.1	5.5
Redox Potential		mV	500	550	560	550
Sulfate	1	mg/L	8.8	8.6	9.4	9.0
Total Dissolved Solids	5	mg/L	160	190	170	200
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	1.9	0.5	2.0	0.6
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.04	0.08	0.05	0.04
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	0.02	0.03	0.01	0.02
Radium 228*		mBq/L	<0.08	<0.08	<0.08	<0.08

Client Sample ID			GW7D-R	GW8D	GW9S	GW9D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074092	L24-Jn0074093	L24-Jn0074094	L24-Jn0074095
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	5.3	6.2	< 5	14
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	5.3	6.2	< 5	14
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	0.07	0.15	0.10	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.005	0.001	0.001	0.002
Iron	0.01	mg/L	0.13	0.22	0.21	0.08
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.013	0.065	0.029	0.008
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.004	0.003	0.002	0.007
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	0.061	0.005	< 0.005	< 0.005
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	4.7	5.7	5.8	5.3
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	1.2	1.3	1.2	5.4
Magnesium	0.5	mg/L	4.9	5.8	5.8	5.4
Potassium	0.5	mg/L	1.0	1.0	< 0.5	0.7
Sodium	0.5	mg/L	42	48	42	48

Client Sample ID			SE10S	GW10D	GW11S	GW11D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074096	L24-Jn0074097	L24-Jn0074098	L24-Jn0074099
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	25	76	28	39
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	170	310	180	250
Dissolved Oxygen	0.1	mg/L	8.3	9.9	8.5	9.9
Nitrate-N	0.01	mg/L	4.7	0.08	3.6	2.2
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	4.7	0.08	3.7	2.2
pH (at 25 °C)	0.1	pH Units	6.2	5.6	5.3	5.8
Redox Potential		mV	580	500	550	520
Sulfate	1	mg/L	6.1	8.0	7.3	12
Total Dissolved Solids	5	mg/L	100	190	110	150
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	0.3	< 0.2

Client Sample ID			SE10S	GW10D	GW11S	GW11D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074096	L24-Jn0074097	L24-Jn0074098	L24-Jn0074099
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Total Nitrogen	0.2	mg/L	4.7	< 0.2	4.0	2.2
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.11	0.05	0.05	0.05
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	<0.01	0.09	<0.01	<0.01
Radium 228*		mBq/L	<0.08	<0.08	<0.08	<0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	6.2	5.9	5.3	22
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	6.2	5.9	5.3	22
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	0.14	0.11	< 0.05	0.28
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.001	0.003	0.002	0.002
Iron	0.01	mg/L	0.24	0.07	0.02	0.03
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	< 0.005	0.022	0.040	0.089
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	< 0.001	0.005	0.004	0.003
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	0.007	0.009	< 0.005	0.026
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	3.4	4.8	3.8	3.2
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	< 0.5	1.9	0.9	7.3
Magnesium	0.5	mg/L	3.5	4.8	3.7	3.4
Potassium	0.5	mg/L	< 0.5	2.9	< 0.5	0.8
Sodium	0.5	mg/L	25	47	25	36

Client Sample ID			GW12D	GW22S	GW22D	GW23S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074100	L24-Jn0074101	L24-Jn0074102	L24-Jn0074103
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	240	31	63	90
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	930	190	250	340
Dissolved Oxygen	0.1	mg/L	8.3	8.9	10.0	9.2
Nitrate-N	0.01	mg/L	1.5	3.8	0.86	1.5

Client Sample ID			GW12D	GW22S	GW22D	GW23S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074100	L24-Jn0074101	L24-Jn0074102	L24-Jn0074103
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	1.5	3.8	0.87	1.5
pH (at 25 °C)	0.1	pH Units	5.7	5.5	5.5	5.2
Redox Potential		mV	520	530	530	550
Sulfate	1	mg/L	42	8.5	8.7	5.9
Total Dissolved Solids	5	mg/L	560	120	150	200
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	1.5	3.8	0.9	1.5
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.05	0.04	0.04	0.03
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	0.02	<0.01	0.01	0.02
Radium 228*		mBq/L	<0.08	<0.08	<0.08	<0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	18	7.0	< 5	< 5
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	18	7.0	< 5	< 5
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	0.07
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	< 0.001	0.001	0.005	< 0.001
Iron	0.01	mg/L	< 0.01	< 0.01	0.01	0.02
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.032	0.051	0.008	0.026
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.002	0.002	0.009	0.002
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	< 0.005	0.019	0.005	< 0.005
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	22	3.7	4.3	5.7
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	6.9	1.5	1.3	1.3
Magnesium	0.5	mg/L	23	3.8	4.5	5.7
Potassium	0.5	mg/L	4.0	< 0.5	0.7	< 0.5
Sodium	0.5	mg/L	130	30	39	52

Client Sample ID			GW23D	QC01	QC02	RS01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074104	L24-Jn0074105	L24-Jn0074106	L24-Jn0074107
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Ammonia-N	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	69	58	29	< 5
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	310	270	180	< 10
Dissolved Oxygen	0.1	mg/L	8.4	8.4	8.9	9.7
Nitrate-N	0.01	mg/L	0.15	1.8	4.4	< 0.01
Nitrite-N	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx-N	0.01	mg/L	0.16	1.8	4.4	< 0.01
pH (at 25 °C)	0.1	pH Units	5.9	6.6	5.2	5.0
Redox Potential		mV	500	540	550	530
Sulfate	1	mg/L	7.0	8.1	7.4	< 1
Total Dissolved Solids	5	mg/L	190	160	110	< 5
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	0.2	1.8	4.4	< 0.2
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.08	0.05	0.04	< 0.01
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	0.02	0.02	<0.01	<0.01
Radium 228*		mBq/L	<0.08	<0.08	<0.08	<0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	29	10	< 5	< 5
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	29	10	< 5	< 5
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	< 0.001	0.004	0.002	< 0.001
Iron	0.01	mg/L	< 0.01	0.02	< 0.01	< 0.01
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.056	0.011	0.029	< 0.005
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.003	0.003	0.004	< 0.001
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	< 0.005	0.033	< 0.005	< 0.005
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	4.2	5.0	3.8	< 0.5
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	9.9	1.3	0.9	< 0.5
Magnesium	0.5	mg/L	4.1	4.8	3.8	< 0.5
Potassium	0.5	mg/L	4.0	1.4	< 0.5	< 0.5
Sodium	0.5	mg/L	43	42	25	< 0.5

Client Sample ID			FB01	TDS Leachate Cell 1	PLP	PSD1
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074108	L24-Jn0074109	L24-Jn0074110	L24-Jn0074111
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Ammonia-N	0.02	mg/L	< 0.02	-	-	-
Chemical Oxygen Demand (COD)	25	mg/L	< 25	-	-	-
Chloride	5	mg/L	< 5	-	-	-
Chromium (VI)	0.002	mg/L	< 0.002	-	-	-
Conductivity (at 25 °C)	10	uS/cm	< 10	35000	22000	430
Dissolved Oxygen	0.1	mg/L	9.7	9.4	0.3	8.2
Nitrate-N	0.01	mg/L	< 0.01	-	-	-
Nitrite-N	0.01	mg/L	< 0.01	-	-	-
NOx-N	0.01	mg/L	< 0.01	-	-	-
pH (at 25 °C)	0.1	pH Units	4.8	6.2	8.1	7.4
Redox Potential		mV	530	460	74	380
Sulfate	1	mg/L	< 1	-	-	-
Total Dissolved Solids	5	mg/L	< 5	-	-	-
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	-	-	-
Total Nitrogen	0.2	mg/L	< 0.2	-	-	-
Total Organic Carbon	5	mg/L	< 5	-	-	-
Total Phosphorus	0.01	mg/L	< 0.01	-	-	-
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	-	-	-
Radium 226*		mBq/L	<0.01	0.36	0.02	0.02
Radium 228*		mBq/L	<0.08	0.23	<0.08	<0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	< 5	-	-	-
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	-	-	-
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	-	-	-
Total Alkalinity (as CaCO3)	5	mg/L	< 5	-	-	-
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	-	-	-
Arsenic (filtered)	0.001	mg/L	< 0.001	-	-	-
Cadmium (filtered)	0.0001	mg/L	< 0.0001	-	-	-
Chromium (filtered)	0.001	mg/L	< 0.001	-	-	-
Copper (filtered)	0.001	mg/L	< 0.001	-	-	-
Iron	0.01	mg/L	< 0.01	-	-	-
Lead (filtered)	0.001	mg/L	< 0.001	-	-	-
Manganese (filtered)	0.005	mg/L	< 0.005	-	-	-
Mercury (filtered)	0.0001	mg/L	< 0.0001	-	-	-
Nickel (filtered)	0.001	mg/L	< 0.001	-	-	-
Selenium (filtered)	0.001	mg/L	< 0.001	-	-	-
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	-	-	-
Uranium	0.001	mg/L	< 0.001	0.002	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	< 0.005	-	-	-
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	< 0.5	-	-	-
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	< 0.5	-	-	-
Magnesium	0.5	mg/L	< 0.5	-	-	-
Potassium	0.5	mg/L	< 0.5	-	-	-
Sodium	0.5	mg/L	< 0.5	-	-	-

Client Sample ID			PSD2	LEP1	LEP3	RS02
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Jn0074112	L24-Jn0074113	L24-Jn0074114	L24-Jn0074115
Date Sampled			Jun 26, 2024	Jun 26, 2024	Jun 26, 2024	Jun 26, 2024
Test/Reference	LOR	Unit				
Conductivity (at 25 °C)	10	uS/cm	310	76000	57000	< 10
Dissolved Oxygen	0.1	mg/L	9.5	7.2	4.6	9.2
pH (at 25 °C)	0.1	pH Units	7.4	6.9	6.9	4.7
Redox Potential		mV	370	380	370	450
Radium 226*		mBq/L	<0.01	0.02	0.02	<0.01
Radium 228*		mBq/L	<0.08	<0.08	<0.08	<0.08
Heavy Metals						
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			FB02
Sample Matrix			Water
Eurofins Sample No.			L24-Jn0074116
Date Sampled			Jun 26, 2024
Test/Reference	LOR	Unit	
Conductivity (at 25 °C)	10	uS/cm	< 10
Dissolved Oxygen	0.1	mg/L	9.3
pH (at 25 °C)	0.1	pH Units	4.8
Redox Potential		mV	480
Radium 226*		mBq/L	<0.01
Radium 228*		mBq/L	<0.08
Heavy Metals			
Thorium*	0.05	mg/L	< 0.05
Uranium	0.001	mg/L	< 0.001

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
Ammonia-N	Welshpool	Jul 02, 2024	28 Days
- Method: ARL303 - Ammonia in Water by Discrete Analyser			
Nitrate-N	Welshpool	Jul 02, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Nitrite-N	Welshpool	Jul 02, 2024	2 Days
- Method: ARL311 - Nitrite in Water by Discrete Analyser			
NOx-N	Welshpool	Jul 02, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Total Kjeldahl Nitrogen	Welshpool	Jul 01, 2024	28 Day
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Nitrogen	Welshpool	Jul 02, 2024	28 Days
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Phosphorus	Welshpool	Jul 02, 2024	28 Days
- Method: ARL308 - Total Phosphorus in Water by Discrete Analyser			
Chemical Oxygen Demand (COD)	Melbourne	Jul 01, 2024	28 Days
- Method: LTM-INO-4220 Determination of COD in Water			
Chromium (VI)	Welshpool	Jul 02, 2024	1 Day
- Method: ARL316 - Hexavalent Chromium in Water by Discrete Analyser			
pH (at 25 °C)	Welshpool	Jul 02, 2024	6 Hours
- Method: LTM-GEN-7090 pH in water by ISE			
Redox Potential	Welshpool	Jul 02, 2024	28 Day
- Method: ARL119 - Reduction/Oxidation Potential of Water			
Total Organic Carbon	Melbourne	Jul 01, 2024	28 Days
- Method: LTM-INO-4060 Total Organic Carbon in water and soil			
Chromium (III) (filtered)*	Welshpool	Jun 28, 2024	180 Days
- Method: ARL402/403 - Metals in Water by ICPOES/ICPMS			
Heavy Metals (filtered)	Welshpool	Jul 02, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Metals M8 filtered	Welshpool	Jul 01, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Heavy Metals	Welshpool	Jul 02, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Alkali Metals (filtered)	Welshpool	Jul 02, 2024	6 Months
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B11C: Na/K/Ca/Mg	Welshpool	Jul 02, 2024	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Chloride	Welshpool	Jul 02, 2024	28 Days
- Method: ARL305 - Chloride in Water by Discrete Analyser			
Sulfate	Welshpool	Jul 02, 2024	28 Days
- Method: ARL301 - Sulfate in Water by Discrete Analyser			
Alkalinity (speciated)	Welshpool	Jul 02, 2024	14 Days
- Method: LTM-INO-4250 Alkalinity by Electrometric Titration			
Conductivity (at 25 °C)	Welshpool	Jul 02, 2024	28 Days
- Method: LTM-INO-4030 Conductivity			
Total Dissolved Solids	Welshpool	Jul 02, 2024	7 Days
- Method: ARL No. 017 - Total Dissolved Solids			

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079 & 25289

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Project Name: BANKSIA LANDFILL JUNE QUARTER GME 2024
Project ID: 675.072519.00001

Order No.:
Report #: 1112682
Phone: 08 9388 8360
Fax: 08 9381 2360

Received: Jun 28, 2024 1:10 PM
Due: Jul 5, 2024
Priority: 5 Day
Contact Name: Phuntsho Wangdi

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail	Aluminium (filtered)	Ammonia-N	Arsenic (filtered)	Bicarbonate	Cadmium (filtered)	Calcium	Chemical Oxygen Demand (COD)	Chloride	Chromium (III) (filtered)*	Chromium (VI)	Conductivity (at 25 °C)	Copper (filtered)	Dissolved Oxygen	Iron	Lead (filtered)	Magnesium	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Nitrate-N	pH (at 25 °C)	Potassium	Radium 226	Radium 228	Redox Potential	Selenium (filtered)	Sodium	Sulfate	Thorium*	Titanium (filtered)	Total Organic Carbon	Total Phosphorus	Uranium	Zinc (filtered)	Total Nitrogen	Total Dissolved Solids (TDS)
Perth Laboratory - NATA # 2377 Site # 2370	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X		X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254							X																								X					
External Laboratory																							X	X												

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID																																	
1	GW1S	Jun 26, 2024		Water	L24-Jn0074081	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	GW1D	Jun 26, 2024		Water	L24-Jn0074082	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	GW3D	Jun 26, 2024		Water	L24-Jn0074083	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	SE4D	Jun 26, 2024		Water	L24-Jn0074086	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	GW5S	Jun 26, 2024		Water	L24-Jn0074087	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	SE6S	Jun 26, 2024		Water	L24-Jn0074089	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7	GW6D	Jun 26, 2024		Water	L24-Jn0074090	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	GW7S	Jun 26, 2024		Water	L24-Jn0074091	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9	GW7D-R	Jun 26, 2024		Water	L24-Jn0074092	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	GW8D	Jun 26, 2024		Water	L24-Jn0074093	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11	GW9S	Jun 26, 2024		Water	L24-Jn0074094	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12	GW9D	Jun 26, 2024		Water	L24-Jn0074095	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13	SE10S	Jun 26, 2024		Water	L24-Jn0074096	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Contact Name: Phuntsho Wangdi

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Ammonia-N	Arsenic (filtered)	Bicarbonate	Cadmium (filtered)	Calcium	Chemical Oxygen Demand (COD)	Chloride	Chromium (III) (filtered)*	Chromium (VI)	Conductivity (at 25 °C)	Copper (filtered)	Dissolved Oxygen	Iron	Lead (filtered)	Magnesium	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Nitrate-N	pH (at 25 °C)	Potassium	Radium 226	Radium 228	Redox Potential	Selenium (filtered)	Sodium	Sulfate	Thorium*	Titanium (filtered)	Total Organic Carbon	Total Phosphorus	Uranium	Zinc (filtered)	Total Nitrogen	Total Dissolved Solids (TDS)
Perth Laboratory - NATA # 2377 Site # 2370						X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X		X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254												X																								X					
External Laboratory																												X	X												
14	GW10D	Jun 26, 2024		Water	L24-Jn0074097	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15	GW11S	Jun 26, 2024		Water	L24-Jn0074098	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16	GW11D	Jun 26, 2024		Water	L24-Jn0074099	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17	GW12D	Jun 26, 2024		Water	L24-Jn0074100	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18	GW22S	Jun 26, 2024		Water	L24-Jn0074101	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19	GW22D	Jun 26, 2024		Water	L24-Jn0074102	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20	GW23S	Jun 26, 2024		Water	L24-Jn0074103	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21	GW23D	Jun 26, 2024		Water	L24-Jn0074104	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22	QC01	Jun 26, 2024		Water	L24-Jn0074105	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23	QC02	Jun 26, 2024		Water	L24-Jn0074106	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24	RS01	Jun 26, 2024		Water	L24-Jn0074107	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
25	FB01	Jun 26, 2024		Water	L24-Jn0074108	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26	TDS Leachate Cell 1	Jun 26, 2024		Water	L24-Jn0074109											X		X								X		X	X	X				X				X			
27	PLP	Jun 26, 2024		Water	L24-Jn0074110											X		X								X		X	X	X				X				X			

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Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Ammonia-N	Arsenic (filtered)	Bicarbonate	Cadmium (filtered)	Calcium	Chemical Oxygen Demand (COD)	Chloride	Chromium (III) (filtered)*	Chromium (VI)	Conductivity (at 25 °C)	Copper (filtered)	Dissolved Oxygen	Iron	Lead (filtered)	Magnesium	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Nitrate-N	pH (at 25 °C)	Potassium	Radium 226	Radium 228	Redox Potential	Selenium (filtered)	Sodium	Sulfate	Thorium*	Titanium (filtered)	Total Organic Carbon	Total Phosphorus	Uranium	Zinc (filtered)	Total Nitrogen	Total Dissolved Solids (TDS)
Perth Laboratory - NATA # 2377 Site # 2370						X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X		X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254												X																								X					
External Laboratory																												X	X												
28	PSD1	Jun 26, 2024		Water	L24-Jn0074111											X		X								X			X	X	X				X				X		
29	PSD2	Jun 26, 2024		Water	L24-Jn0074112											X		X								X			X	X	X				X				X		
30	LEP1	Jun 26, 2024		Water	L24-Jn0074113											X		X								X			X	X	X				X				X		
31	LEP3	Jun 26, 2024		Water	L24-Jn0074114											X		X								X			X	X	X				X				X		
32	RS02	Jun 26, 2024		Water	L24-Jn0074115											X		X								X			X	X	X				X				X		
33	FB02	Jun 26, 2024		Water	L24-Jn0074116											X		X								X			X	X	X				X				X		
Test Counts						25	25	25	25	25	25	25	25	25	25	8	25	33	25	25	25	25	25	25	25	33	25	33	33	33	25	25	25	33	25	25	25	33	25	25	25

Internal Quality Control Review and Glossary

General

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

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Chemical Oxygen Demand (COD)	mg/L	< 25			25	Pass	
Total Dissolved Solids	mg/L	< 5			5	Pass	
Total Nitrogen	mg/L	< 0.2			0.2	Pass	
Total Phosphorus	mg/L	< 0.01			0.01	Pass	
Method Blank							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO3)	mg/L	< 5			5	Pass	
Hydroxide Alkalinity (as CaCO3)	mg/L	< 5			5	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Thorium*	mg/L	< 0.05			0.05	Pass	
Uranium	mg/L	< 0.001			0.001	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Total Organic Carbon	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Nitrate-N	mg/L	< 0.01			0.01	Pass	
Nitrite-N	mg/L	< 0.01			0.01	Pass	
NOx-N	mg/L	< 0.01			0.01	Pass	
Method Blank							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Sulfate	mg/L	< 1			1	Pass	
Method Blank							
Total Organic Carbon	mg/L	< 5			5	Pass	
Method Blank							
Nitrite-N	mg/L	< 0.01			0.01	Pass	
Method Blank							
Ammonia-N	mg/L	< 0.02			0.02	Pass	
Method Blank							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Thorium*	mg/L	< 0.05			0.05	Pass	
Uranium	mg/L	< 0.001			0.001	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Chromium (VI)	mg/L	< 0.002			0.002	Pass	
Method Blank							
Chloride	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Thorium*	mg/L	< 0.05			0.05	Pass	
Uranium	mg/L	< 0.001			0.001	Pass	
LCS - % Recovery							
Chemical Oxygen Demand (COD)	%	99			70-130	Pass	
Total Dissolved Solids	%	95			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	96			80-120	Pass	
Arsenic (filtered)	%	98			80-120	Pass	
Cadmium (filtered)	%	94			80-120	Pass	
Chromium (filtered)	%	95			80-120	Pass	
Copper (filtered)	%	92			80-120	Pass	
Lead (filtered)	%	98			80-120	Pass	
Manganese (filtered)	%	94			80-120	Pass	
Mercury (filtered)	%	95			80-120	Pass	
Nickel (filtered)	%	92			80-120	Pass	
Selenium (filtered)	%	99			80-120	Pass	
Titanium (filtered)	%	97			80-120	Pass	
Zinc (filtered)	%	95			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	103			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	98			80-120	Pass	
Thorium*	%	100			80-120	Pass	
Uranium	%	102			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	102			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Magnesium	%	102			80-120	Pass	
Potassium	%	101			80-120	Pass	
Sodium	%	101			80-120	Pass	
LCS - % Recovery							
Total Organic Carbon	%	76			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	94			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	98			80-120	Pass	
Magnesium	%	101			80-120	Pass	
Potassium	%	103			80-120	Pass	
Sodium	%	100			80-120	Pass	
LCS - % Recovery							
Total Organic Carbon	%	102			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	94			80-120	Pass	
Thorium*	%	95			80-120	Pass	
Uranium	%	94			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	103			80-120	Pass	
Magnesium	%	99			80-120	Pass	
Potassium	%	102			80-120	Pass	
Sodium	%	99			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Thorium*	%	95			80-120	Pass	
Uranium	%	95			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
				Result 1					
Chemical Oxygen Demand (COD)	M24-Jn0077509	NCP	%	105			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Jn0074082	CP	%	94			75-125	Pass	
Arsenic (filtered)	L24-Jn0074082	CP	%	101			75-125	Pass	
Cadmium (filtered)	L24-Jn0074082	CP	%	100			75-125	Pass	
Chromium (filtered)	L24-Jn0074082	CP	%	98			75-125	Pass	
Copper (filtered)	L24-Jn0074082	CP	%	95			75-125	Pass	
Iron	L24-Jn0074082	CP	%	90			75-125	Pass	
Lead (filtered)	L24-Jn0074082	CP	%	98			75-125	Pass	
Manganese (filtered)	L24-Jn0074082	CP	%	96			75-125	Pass	
Mercury (filtered)	L24-Jn0074082	CP	%	98			75-125	Pass	
Nickel (filtered)	L24-Jn0074082	CP	%	93			75-125	Pass	
Selenium (filtered)	L24-Jn0074082	CP	%	107			75-125	Pass	
Thorium*	L24-Jn0074082	CP	%	93			75-125	Pass	
Titanium (filtered)	L24-Jn0074082	CP	%	97			75-125	Pass	
Uranium	L24-Jn0074082	CP	%	93			75-125	Pass	
Zinc (filtered)	L24-Jn0074082	CP	%	100			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Magnesium (filtered)	L24-Jn0074082	CP	%	81			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Jn0074082	CP	%	96			75-125	Pass	
Magnesium	L24-Jn0074082	CP	%	85			75-125	Pass	
Potassium	L24-Jn0074082	CP	%	97			75-125	Pass	
Spike - % Recovery									
				Result 1					
Total Nitrogen	L24-Jn0074089	CP	%	106			70-130	Pass	
Total Phosphorus	L24-Jn0074089	CP	%	94			80-120	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Jn0074095	CP	%	97			75-125	Pass	
Arsenic (filtered)	L24-Jn0074095	CP	%	97			75-125	Pass	
Cadmium (filtered)	L24-Jn0074095	CP	%	100			75-125	Pass	
Chromium (filtered)	L24-Jn0074095	CP	%	99			75-125	Pass	
Copper (filtered)	L24-Jn0074095	CP	%	97			75-125	Pass	
Lead (filtered)	L24-Jn0074095	CP	%	101			75-125	Pass	
Manganese (filtered)	L24-Jn0074095	CP	%	97			75-125	Pass	
Mercury (filtered)	L24-Jn0074095	CP	%	99			75-125	Pass	
Nickel (filtered)	L24-Jn0074095	CP	%	94			75-125	Pass	
Selenium (filtered)	L24-Jn0074095	CP	%	109			75-125	Pass	
Titanium (filtered)	L24-Jn0074095	CP	%	99			75-125	Pass	
Zinc (filtered)	L24-Jn0074095	CP	%	103			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-Jn0074095	CP	%	100			75-125	Pass	
Spike - % Recovery									
				Result 1					
Ammonia-N	L24-Jn0074101	CP	%	87			80-120	Pass	
Chloride	L24-Jn0074101	CP	%	113			70-130	Pass	
Chromium (VI)	L24-Jn0074101	CP	%	102			80-120	Pass	
Nitrate-N	L24-Jn0074101	CP	%	114			70-130	Pass	
Nitrite-N	L24-Jn0074101	CP	%	101			80-120	Pass	
NOx-N	L24-Jn0074101	CP	%	109			80-120	Pass	
Sulfate	L24-Jn0074101	CP	%	112			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Jn0074105	CP	%	99			75-125	Pass	
Arsenic (filtered)	L24-Jn0074105	CP	%	105			75-125	Pass	
Cadmium (filtered)	L24-Jn0074105	CP	%	98			75-125	Pass	
Chromium (filtered)	L24-Jn0074105	CP	%	95			75-125	Pass	
Copper (filtered)	L24-Jn0074105	CP	%	92			75-125	Pass	
Iron	L24-Jn0074105	CP	%	90			75-125	Pass	
Lead (filtered)	L24-Jn0074105	CP	%	97			75-125	Pass	
Manganese (filtered)	L24-Jn0074105	CP	%	93			75-125	Pass	
Mercury (filtered)	L24-Jn0074105	CP	%	97			75-125	Pass	
Nickel (filtered)	L24-Jn0074105	CP	%	92			75-125	Pass	
Selenium (filtered)	L24-Jn0074105	CP	%	100			75-125	Pass	
Thorium*	L24-Jn0074105	CP	%	89			75-125	Pass	
Titanium (filtered)	L24-Jn0074105	CP	%	99			75-125	Pass	
Uranium	L24-Jn0074105	CP	%	89			75-125	Pass	
Zinc (filtered)	L24-Jn0074105	CP	%	92			75-125	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-Jn0074105	CP	%	102			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Jn0074105	CP	%	100			75-125	Pass	
Magnesium	L24-Jn0074105	CP	%	94			75-125	Pass	
Potassium	L24-Jn0074105	CP	%	99			75-125	Pass	
Sodium	L24-Jn0074105	CP	%	78			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	L24-Jn0074115	CP	%	101			75-125	Pass	
Thorium*	L24-Jn0074115	CP	%	124			75-125	Pass	
Uranium	L24-Jn0074115	CP	%	101			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Jn0074115	CP	%	99			75-125	Pass	
Magnesium	L24-Jn0074115	CP	%	100			75-125	Pass	
Potassium	L24-Jn0074115	CP	%	101			75-125	Pass	
Sodium	L24-Jn0074115	CP	%	98			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
				Result 1	Result 2	RPD			
Chemical Oxygen Demand (COD)	M24-Jn0077526	NCP	mg/L	2000	2000	1.5	30%	Pass	
Total Organic Carbon	M24-Jn0077498	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Jn0074081	CP	mg/L	0.56	0.56	<1	30%	Pass	
Arsenic (filtered)	L24-Jn0074081	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	L24-Jn0074081	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Jn0074081	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Jn0074081	CP	mg/L	0.008	0.008	<1	30%	Pass	
Iron	L24-Jn0074081	CP	mg/L	3.8	3.7	2.2	30%	Pass	
Lead (filtered)	L24-Jn0074081	CP	mg/L	0.004	0.004	<1	30%	Pass	
Manganese (filtered)	L24-Jn0074081	CP	mg/L	0.46	0.46	<1	30%	Pass	
Mercury (filtered)	L24-Jn0074081	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Jn0074081	CP	mg/L	0.006	0.006	1.0	30%	Pass	
Selenium (filtered)	L24-Jn0074081	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Thorium*	L24-Jn0074081	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Titanium (filtered)	L24-Jn0074081	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Uranium	L24-Jn0074081	CP	mg/L	0.001	0.001	1.4	30%	Pass	
Zinc (filtered)	L24-Jn0074081	CP	mg/L	0.20	0.20	<1	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Jn0074081	CP	mg/L	11	11	1.0	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-Jn0074081	CP	mg/L	3.5	3.4	4.3	30%	Pass	
Magnesium	L24-Jn0074081	CP	mg/L	12	12	1.4	30%	Pass	
Potassium	L24-Jn0074081	CP	mg/L	2.3	2.3	<1	30%	Pass	
Sodium	L24-Jn0074081	CP	mg/L	99	98	1.6	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
Ammonia-N	L24-Jn0074089	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-Jn0074089	CP	mg/L	88	85	3.6	30%	Pass	
Chromium (VI)	L24-Jn0074089	CP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Conductivity (at 25 °C)	L24-Jn0074089	CP	uS/cm	430	430	<1	30%	Pass	
Nitrate-N	L24-Jn0074089	CP	mg/L	6.8	6.9	<1	30%	Pass	
Nitrite-N	L24-Jn0074089	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx-N	L24-Jn0074089	CP	mg/L	6.9	6.9	<1	20%	Pass	
pH (at 25 °C)	L24-Jn0074089	CP	pH Units	5.9	5.9	1.0	30%	Pass	
Sulfate	L24-Jn0074089	CP	mg/L	14	14	2.0	30%	Pass	
Total Dissolved Solids	L24-Jn0074089	CP	mg/L	260	260	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Jn0074094	CP	mg/L	0.10	0.10	1.1	30%	Pass	
Arsenic (filtered)	L24-Jn0074094	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	L24-Jn0074094	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Jn0074094	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Jn0074094	CP	mg/L	0.001	0.001	<1	30%	Pass	
Lead (filtered)	L24-Jn0074094	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Jn0074094	CP	mg/L	0.029	0.029	<1	30%	Pass	
Mercury (filtered)	L24-Jn0074094	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Jn0074094	CP	mg/L	0.002	0.002	2.1	30%	Pass	
Selenium (filtered)	L24-Jn0074094	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-Jn0074094	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc (filtered)	L24-Jn0074094	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Jn0074094	CP	mg/L	5.8	5.8	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Phosphorus	L24-Jn0074098	CP	mg/L	0.05	0.05	1.0	20%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia-N	L24-Jn0074100	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-Jn0074100	CP	mg/L	240	230	1.2	30%	Pass	
Chromium (VI)	L24-Jn0074100	CP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Nitrate-N	L24-Jn0074100	CP	mg/L	1.5	1.5	<1	30%	Pass	
Nitrite-N	L24-Jn0074100	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx-N	L24-Jn0074100	CP	mg/L	1.5	1.5	<1	20%	Pass	
Sulfate	L24-Jn0074100	CP	mg/L	42	43	1.3	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	L24-Jn0074103	CP	uS/cm	340	340	<1	30%	Pass	
pH (at 25 °C)	L24-Jn0074103	CP	pH Units	5.2	5.1	2.3	30%	Pass	
Total Dissolved Solids	L24-Jn0074103	CP	mg/L	200	200	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Jn0074104	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Arsenic (filtered)	L24-Jn0074104	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	L24-Jn0074104	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Jn0074104	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Jn0074104	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iron	L24-Jn0074104	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Lead (filtered)	L24-Jn0074104	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Jn0074104	CP	mg/L	0.056	0.055	1.7	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Mercury (filtered)	L24-Jn0074104	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Jn0074104	CP	mg/L	0.003	0.003	6.2	30%	Pass	
Selenium (filtered)	L24-Jn0074104	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Thorium*	L24-Jn0074104	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Titanium (filtered)	L24-Jn0074104	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Uranium	L24-Jn0074104	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Zinc (filtered)	L24-Jn0074104	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Jn0074104	CP	mg/L	4.2	4.1	2.4	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-Jn0074104	CP	mg/L	9.9	10	4.5	30%	Pass	
Magnesium	L24-Jn0074104	CP	mg/L	4.1	4.1	<1	30%	Pass	
Potassium	L24-Jn0074104	CP	mg/L	4.0	3.4	16	30%	Pass	
Sodium	L24-Jn0074104	CP	mg/L	43	41	5.1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Nitrogen	L24-Jn0074108	CP	mg/L	< 0.2	0.2	8.3	30%	Pass	
Total Phosphorus	L24-Jn0074108	CP	mg/L	< 0.01	0.02	<1	20%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	L24-Jn0074112	CP	uS/cm	310	310	<1	30%	Pass	
pH (at 25 °C)	L24-Jn0074112	CP	pH Units	7.4	7.4	<1	30%	Pass	
Total Dissolved Solids	L24-Jn0074112	CP	mg/L	190	180	<1	30%	Pass	

Comments

Radium 226 and 228 analysis by: ALS, NATA accreditation no. 825, report reference EP2409256

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
Q05	The matrix spike concentration is less than five times the background concentration in the sample - therefore the spike recovery cannot be determined
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Natalie Hill	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Inorganic
Douglas Todd	Senior Analyst-Metal
Lauren Killin	Senior Analyst-Inorganic
Mary Makarios	Senior Analyst-Inorganic

Kim Rodgers
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request

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CHAIN OF CUSTODY RECORD

Eurofins | ingt ABN 50 005 085 521

☐ **Sydney Laboratory** Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW 2066, 02 9900 8400, EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory** Unit 1, 21 Smallwood Place, Murarrie, QLD 4172, 07 3902 4600, EnviroSampleQLD@eurofins.com

☑ **Perth Laboratory** Unit 2, 91 Leach Highway, Kenwick, WA 6105, 08 9251 9600, EnviroSamplePTH@eurofins.com

☐ **Melbourne Laboratory** 6 Monterey Road, Dandenong South, VIC 3175, 03 8564 5000, EnviroSampleVic@eurofins.com

Company	SLR Consulting Australia Pty Ltd	Project №	675.072519.00001	Project Manager	Phuntsho Wangdi
Address	Level 1/500 Hay Street, Subiaco, WA	Project Name	Banksia Landfill June Quarter GME 2024	EDD Format (Excel, EDuS etc)	Esdat
Contact Name	Phuntsho Wangdi			Sampler(s)	PD and KS
Phone №	433907756			Handed over by	PD and KS
Special Directions				Email for Invoice	AccountsPayableAU@slrconsulting.com/l
Purchase Order				Email for Results	pwangdi@slrconsulting.com, pderli@slrconsulting.com.au
Quote ID №	SLR 050324 (excluding PFAS and Organics)				

Analyses (Where metals are requested, please specify "Total" or "Dissolved". SAFE soils must be sent to either SAFE perth or SAFE melb)

- Physico-chemical – pH, EC, Eh, DO
- Nutrients – COD, NH3, nitrate, total nitrogen, total phosphorus, TDS, Total Organic Carbon
- Major ions – Ca, Mg, K, Na, Cl, bicarbonate, sulfate
- Dissolved metals – Al, As, Cd, Cr (III+VI), Cu, Pb, Mn, Mg, Hg, Ni, Ti, Se, Zn
- Total Metals – Fe
- Radionuclides – Ra226, Ra228
- Metals – Th and U

Containers (Change container type & size if necessary)

- 500mL Plastic
- 250mL Plastic
- 125mL Plastic
- 200mL Amber Glass
- 40mL VOA vial
- 500mL PFAS Bottle
- Jar (Glass or HDPE)
- Other (Asbestos AS4964, WA Guidelines)

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

* Surcharge will apply

- ☐ Overnight (reporting by 9am)*
- ☐ Same day*
- ☐ 1 day*
- ☐ 2 days*
- ☐ 3 days*
- ☑ 5 days (Standard)
- ☐ Other ( )

№	Client Sample ID	Sampled Date/Time (dd/mm/yy hh:mm)	Matrix (Soil (S) Water (W))	Sample Comments / Dangerous Goods Hazard Warning
1	GW1S	26-06-2024	W	Lab filter for dissolved metals
	GW1D	26-06-2024	W	
2	GW3D	24-06-2024	W	
3	SE3S	24-06-2024		Dry (No sample collected)
5	SE4S	24-06-2024		Dry (No sample collected)
6	SE4D	24-06-2024	W	
7	GW5S	27-06-2024	W	Lab filter for dissolved metals
8	GW5D	27-06-2024		Dry (No sample collected)
9	SE6S	26-06-2024	W	
10	GW6D	26-06-2024	W	Lab filter for dissolved metals
11	GW7S	24-06-2024	W	
12	GW7D-R	24-06-2024	W	
13	GW8D	24-06-2024	W	
14	GW9S	26-06-2024	W	
15	GW9D	26-06-2024	W	
16	SE10S	25-06-2024	W	
17	GW10D	25-06-2024	W	
18	GW11S	25-06-2024	W	
19	GW11D	25-06-2024	W	
20	GW12D	25-06-2024	W	
23	GW22S	25-06-2024	W	
24	GW22D	25-06-2024	W	
25	GW23S	26-06-2024	W	
26	GW23D	25-06-2024	W	
40	QC01	24-06-2024	W	
41	QC02	24-06-2024	W	
42	RS01	24-06-2024	W	
43	FB01	24-06-2024	W	
44	TDS Leachate Cell 1	26-06-2024	W	
45	PLP	26-06-2024	W	
46	PSD1	26-06-2024	W	
47	PSD2	26-06-2024	W	
48	LEP1	24-06-2024	W	
49	LEP3	24-06-2024	W	
50	RS02	26-06-2024	W	
51	FB02	26-06-2024	W	
	Total Counts			

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Name		Signature	Date	Time
Eurofins | ingt Laboratory Use Only	Received By	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date 27/6/24	Time 13:10	Temperature 12.8°C
	Received By	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	Time	Report №

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | ingt

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | ingt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins | ingt Standard Terms and Conditions is available on request.

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SLR Consulting Australia Pty Ltd
Level 1, 500 Hay Street
Subiaco
WA 6008

NATA Accredited
Accreditation Number 2377
Site Number 2370 & 2554

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Attention: **Pema Dorji**

Report **1144109-W**
Project name BANKSIA LANDFILL SITE GME 2024
Project ID 72519
Received Date Sep 30, 2024

Client Sample ID			**GW1S**	**GW1D**	**SE3S-R**	**GW3D**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Se0073489**	**L24-Se0073490**	**L24-Se0073491**	**L24-Se0073492**
Date Sampled			**Sep 26, 2024**	**Sep 26, 2024**	**Sep 24, 2024**	**Sep 24, 2024**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	0.03	< 0.02
TRH C10-C14	0.02	mg/L	< 0.02	< 0.02	23	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	23	< 0.04
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	0.04	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02	< 0.02	0.04	< 0.02
TRH >C10-C16	0.02	mg/L	< 0.02	< 0.02	22	< 0.02
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	< 0.02	< 0.02	22	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	22	< 0.05
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	88	88	90	84
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			GW1S	GW1D	SE3S-R	GW3D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073489	L24-Se0073490	L24-Se0073491	L24-Se0073492
Date Sampled			Sep 26, 2024	Sep 26, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	1.2	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	28	< 25	< 25	< 25
Chloride	5	mg/L	160	390	61	190
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	650	1500	1100	740
Dissolved Oxygen	0.1	mg/L	7.8	8.7	6.3	8.1
Nitrate (as N)	0.01	mg/L	2.1	1.1	0.33	1.4
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	2.1	1.1	0.34	1.4
pH (at 25 °C)	0.1	pH Units	5.3	5.9	5.6	6.2
Redox Potential		mV	300	280	100	280
Sulfate (as SO4)	1	mg/L	17	22	13	12
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	390	920	670	450
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	2.6	0.2
Total Nitrogen	0.2	mg/L	2.2	1.2	2.9	1.6
Total Organic Carbon	5	mg/L	< 5	< 5	780	< 5
Total Phosphorus	0.01	mg/L	0.02	0.02	< 0.01	0.02
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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

Client Sample ID			GW1S	GW1D	SE3S-R	GW3D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073489	L24-Se0073490	L24-Se0073491	L24-Se0073492
Date Sampled			Sep 26, 2024	Sep 26, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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
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	%	83	122	77	137
p-Terphenyl-d14 (surr.)	1	%	71	103	99	121
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	0.002	< 0.001
Phenol-d6 (surr.)	1	%	84	138	96	80
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			GW1S	GW1D	SE3S-R	GW3D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073489	L24-Se0073490	L24-Se0073491	L24-Se0073492
Date Sampled			Sep 26, 2024	Sep 26, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	< 5	13	300	10
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	< 5	13	300	10
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	0.003	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.002	0.004	< 0.001	0.002
Iron	0.01	mg/L	1.6	0.50	140	0.24
Lead (filtered)	0.001	mg/L	< 0.001	0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.037	0.007	0.94	0.25
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.005	0.004	0.006	0.012
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	0.049	0.011	0.049	0.011
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	11	35	25	13
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	2.8	7.0	32	6.6
Magnesium	0.5	mg/L	12	33	24	12
Potassium	0.5	mg/L	2.1	5.0	8.6	1.9
Sodium	0.5	mg/L	100	250	140	120

Client Sample ID			GW1S	GW1D	SE3S-R	GW3D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073489	L24-Se0073490	L24-Se0073491	L24-Se0073492
Date Sampled			Sep 26, 2024	Sep 26, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	0.06	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	0.08	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	[N09]0.02	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	81	80	69	80
13C5-PFPeA (surr.)	1	%	79	86	67	80
13C5-PFHxA (surr.)	1	%	78	91	64	77
13C4-PFHpA (surr.)	1	%	75	91	49	79
13C8-PFOA (surr.)	1	%	73	92	66	78
13C5-PFNA (surr.)	1	%	79	92	79	83
13C6-PFDA (surr.)	1	%	76	93	76	77
13C2-PFUnDA (surr.)	1	%	70	85	57	76
13C2-PFDoDA (surr.)	1	%	69	83	46	75
13C2-PFTeDA (surr.)	1	%	73	76	48	59
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	68	84	65	71
D3-N-MeFOSA (surr.)	1	%	83	106	89	87
D5-N-EtFOSA (surr.)	1	%	99	127	105	105
D7-N-MeFOSE (surr.)	1	%	56	71	56	63
D9-N-EtFOSE (surr.)	1	%	57	72	54	62
D5-N-EtFOSAA (surr.)	1	%	65	79	59	73
D3-N-MeFOSAA (surr.)	1	%	61	81	50	72
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	80	92	92	76
13C2-6:2 FTSA (surr.)	1	%	77	83	61	69

Client Sample ID			GW1S	GW1D	SE3S-R	GW3D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073489	L24-Se0073490	L24-Se0073491	L24-Se0073492
Date Sampled			Sep 26, 2024	Sep 26, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
13C2-8:2 FTSA (surr.)	1	%	73	80	69	73
13C2-10:2 FTSA (surr.)	1	%	68	86	53	66
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	80	96	61	80
18O2-PFHxS (surr.)	1	%	77	92	85	76
13C8-PFOS (surr.)	1	%	73	84	78	73
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	0.16	< 0.1
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	0.02	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	0.02	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	0.16	< 0.05

Client Sample ID			SE34S-R	SE4D	GW5S	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073493	L24-Se0073494	L24-Se0073495	L24-Se0073496
Date Sampled			Sep 27, 2024	Sep 24, 2024	Sep 27, 2024	Sep 25, 2024
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	0.02	mg/L	0.87	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	0.87	< 0.04	< 0.04	< 0.04
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	0.02	mg/L	0.62	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	0.62	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	0.62	< 0.05	< 0.05	< 0.05
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	84	86	85	86

Client Sample ID			SE34S-R	SE4D	GW5S	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073493	L24-Se0073494	L24-Se0073495	L24-Se0073496
Date Sampled			Sep 27, 2024	Sep 24, 2024	Sep 27, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.02	mg/L	1.6	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	1300	< 25	980	< 25
Chloride	5	mg/L	49	91	570	81
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	1800	400	2300	450
Dissolved Oxygen	0.1	mg/L	1.6	7.7	7.0	7.7
Nitrate (as N)	0.01	mg/L	0.08	0.10	1.7	6.6
Nitrite (as N)	0.01	mg/L	0.03	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	0.11	0.10	1.7	6.7
pH (at 25 °C)	0.1	pH Units	5.7	5.1	4.1	5.9
Redox Potential		mV	59	370	430	320
Sulfate (as SO4)	1	mg/L	4.0	11	44	16
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	1100	240	1400	270
Total Kjeldahl Nitrogen	0.2	mg/L	2.4	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	2.5	< 0.2	1.7	6.7
Total Organic Carbon	5	mg/L	750	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	< 0.01	0.02	0.04	0.02
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002

Client Sample ID			SE34S-R	SE4D	GW5S	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073493	L24-Se0073494	L24-Se0073495	L24-Se0073496
Date Sampled			Sep 27, 2024	Sep 24, 2024	Sep 27, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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
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	%	98	109	109	132
p-Terphenyl-d14 (surr.)	1	%	83	105	105	89
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	141	82	82	91
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			SE34S-R	SE4D	GW5S	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073493	L24-Se0073494	L24-Se0073495	L24-Se0073496
Date Sampled			Sep 27, 2024	Sep 24, 2024	Sep 27, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	570	< 5	< 5	22
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	570	< 5	< 5	22
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	0.14	2.0	< 0.05
Arsenic (filtered)	0.001	mg/L	0.008	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	< 0.001	0.003	0.002	< 0.001
Iron	0.01	mg/L	330	0.22	41	0.89
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	0.001	< 0.001
Manganese (filtered)	0.005	mg/L	9.3	< 0.005	0.15	0.042
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.096	0.002	0.005	0.002
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	0.043	0.005	0.11	0.005

Client Sample ID			SE34S-R	SE4D	GW5S	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073493	L24-Se0073494	L24-Se0073495	L24-Se0073496
Date Sampled			Sep 27, 2024	Sep 24, 2024	Sep 27, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	20	7.1	53	9.1
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	85	1.0	2.8	3.0
Magnesium	0.5	mg/L	26	7.4	49	9.6
Potassium	0.5	mg/L	14	0.7	10	2.5
Sodium	0.5	mg/L	280	69	340	66
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	0.06	< 0.01	< 0.01	0.07
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	0.07	< 0.01	< 0.01	0.05
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	[N09]0.02	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	72	80	60	63
13C5-PFPeA (surr.)	1	%	68	77	61	68
13C5-PFHxA (surr.)	1	%	62	77	64	71
13C4-PFHpA (surr.)	1	%	69	79	67	71
13C8-PFOA (surr.)	1	%	62	78	61	66
13C5-PFNA (surr.)	1	%	56	82	65	71
13C6-PFDA (surr.)	1	%	41	78	63	67
13C2-PFUnDA (surr.)	1	%	24	71	59	60
13C2-PFDoDA (surr.)	1	%	15	77	54	63
13C2-PFTeDA (surr.)	1	%	20	68	43	56
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	27	70	55	62
D3-N-MeFOSA (surr.)	1	%	25	87	70	75
D5-N-EtFOSA (surr.)	1	%	25	107	84	91
D7-N-MeFOSE (surr.)	1	%	14	64	50	52
D9-N-EtFOSE (surr.)	1	%	12	61	49	53
D5-N-EtFOSAA (surr.)	1	%	13	70	51	61
D3-N-MeFOSAA (surr.)	1	%	18	68	50	59

Client Sample ID			SE34S-R	SE4D	GW5S	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073493	L24-Se0073494	L24-Se0073495	L24-Se0073496
Date Sampled			Sep 27, 2024	Sep 24, 2024	Sep 27, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	66	78	64	64
13C2-6:2 FTSA (surr.)	1	%	59	70	63	64
13C2-8:2 FTSA (surr.)	1	%	39	68	50	55
13C2-10:2 FTSA (surr.)	1	%	16	76	56	60
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	0.02	< 0.01	< 0.01	0.02
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	[N09]0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	70	80	67	69
18O2-PFHxS (surr.)	1	%	67	76	62	66
13C8-PFOS (surr.)	1	%	49	71	58	63
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	0.18	< 0.1	< 0.1	0.14
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	0.03	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	0.03	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.18	< 0.05	< 0.05	0.14

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073497	L24-Se0073498	L24-Se0073499	L24-Se0073500
Date Sampled			Sep 25, 2024	Sep 24, 2024	Sep 24, 2024	Sep 24, 2024
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073497	L24-Se0073498	L24-Se0073499	L24-Se0073500
Date Sampled			Sep 25, 2024	Sep 24, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	85	81	83	83
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	110	45	59	66
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	490	270	270	310
Dissolved Oxygen	0.1	mg/L	7.6	8.5	8.1	8.1
Nitrate (as N)	0.01	mg/L	2.6	5.1	2.2	0.38
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	2.6	5.1	2.2	0.39

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073497	L24-Se0073498	L24-Se0073499	L24-Se0073500
Date Sampled			Sep 25, 2024	Sep 24, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
pH (at 25 °C)	0.1	pH Units	5.7	5.1	5.6	5.7
Redox Potential		mV	330	360	330	310
Sulfate (as SO4)	1	mg/L	25	10	8.0	9.6
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	290	160	160	190
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	0.2
Total Nitrogen	0.2	mg/L	2.6	5.1	2.2	0.6
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.03	< 0.01	0.01	0.03
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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
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	%	118	102	126	87
p-Terphenyl-d14 (surr.)	1	%	119	79	116	97
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073497	L24-Se0073498	L24-Se0073499	L24-Se0073500
Date Sampled			Sep 25, 2024	Sep 24, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	124	77	107	62
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	13	< 5	6.6	9.8
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	13	< 5	6.6	9.8

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073497	L24-Se0073498	L24-Se0073499	L24-Se0073500
Date Sampled			Sep 25, 2024	Sep 24, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	0.08	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.002	0.003	0.002	0.003
Iron	0.01	mg/L	0.11	0.02	0.01	< 0.01
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.26	< 0.005	0.011	0.035
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.008	0.002	0.002	0.005
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	0.010	< 0.005	0.011	0.025
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	5.0	6.4	5.1	6.1
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	2.8	1.3	1.3	< 0.5
Magnesium	0.5	mg/L	5.3	6.5	5.3	5.7
Potassium	0.5	mg/L	1.4	0.7	0.7	0.8
Sodium	0.5	mg/L	88	41	47	48
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	60	74	65	96
13C5-PFPeA (surr.)	1	%	62	88	72	106
13C5-PFHxA (surr.)	1	%	61	82	72	100
13C4-PFHpA (surr.)	1	%	62	88	71	105
13C8-PFOA (surr.)	1	%	61	83	67	101
13C5-PFNA (surr.)	1	%	64	93	74	109
13C6-PFDA (surr.)	1	%	57	82	69	99
13C2-PFUnDA (surr.)	1	%	57	73	61	84
13C2-PFDoDA (surr.)	1	%	55	71	56	82
13C2-PFTeDA (surr.)	1	%	46	50	42	59
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073497	L24-Se0073498	L24-Se0073499	L24-Se0073500
Date Sampled			Sep 25, 2024	Sep 24, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	57	76	65	92
D3-N-MeFOSA (surr.)	1	%	71	80	55	68
D5-N-EtFOSA (surr.)	1	%	87	94	60	75
D7-N-MeFOSE (surr.)	1	%	51	65	50	65
D9-N-EtFOSE (surr.)	1	%	50	66	47	60
D5-N-EtFOSAA (surr.)	1	%	54	71	63	87
D3-N-MeFOSAA (surr.)	1	%	58	71	60	83
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	61	87	74	102
13C2-6:2 FTSA (surr.)	1	%	57	88	76	105
13C2-8:2 FTSA (surr.)	1	%	57	87	68	99
13C2-10:2 FTSA (surr.)	1	%	53	74	68	93
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	62	82	73	104
18O2-PFHxS (surr.)	1	%	60	86	73	103
13C8-PFOS (surr.)	1	%	58	75	63	92
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073501	L24-Se0073502	L24-Se0073503	L24-Se0073504
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 26, 2024
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	0.02	mg/L	< 0.02	< 0.02	0.31	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	0.42	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	0.11	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	0.84	< 0.04
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	0.02	mg/L	< 0.02	< 0.02	0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	< 0.02	< 0.02	0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	0.51	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	0.53	< 0.05
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	83	83	82	82
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073501	L24-Se0073502	L24-Se0073503	L24-Se0073504
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	66	76	< 25
Chloride	5	mg/L	63	63	86	68
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	280	320	420	320
Dissolved Oxygen	0.1	mg/L	8.2	8.3	8.5	8.3
Nitrate (as N)	0.01	mg/L	1.4	0.44	5.0	0.03
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	1.4	0.44	5.0	0.03
pH (at 25 °C)	0.1	pH Units	5.6	6.0	5.7	5.7
Redox Potential		mV	320	270	290	250
Sulfate (as SO4)	1	mg/L	8.1	8.7	8.0	8.4
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	170	190	250	190
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	1.5	0.5	5.0	< 0.2
Total Organic Carbon	5	mg/L	< 5	< 5	16	< 5
Total Phosphorus	0.01	mg/L	0.02	0.02	< 0.01	0.03
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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
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	%	94	72	78	77
p-Terphenyl-d14 (surr.)	1	%	95	112	113	99
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073501	L24-Se0073502	L24-Se0073503	L24-Se0073504
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.002
Phenol-d6 (surr.)	1	%	67	99	146	96
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073501	L24-Se0073502	L24-Se0073503	L24-Se0073504
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	9.3	11	7.5	6.0
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	9.3	11	7.5	6.0
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	0.05	0.07
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.003	0.002	< 0.001	0.002
Iron	0.01	mg/L	0.01	0.05	0.07	0.04
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.014	0.014	< 0.005	0.047
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.002	0.003	< 0.001	0.003
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	< 0.005	0.005	0.014	0.011
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	6.1	5.9	6.8	5.3
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	1.3	2.7	5.3	1.7
Magnesium	0.5	mg/L	5.6	5.0	7.3	4.7
Potassium	0.5	mg/L	< 0.5	0.6	3.5	2.2
Sodium	0.5	mg/L	41	45	63	45
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	88	86	79	81
13C5-PFPeA (surr.)	1	%	87	105	88	94
13C5-PFHxA (surr.)	1	%	82	105	93	92
13C4-PFHpA (surr.)	1	%	86	101	97	90
13C8-PFOA (surr.)	1	%	85	106	94	92
13C5-PFNA (surr.)	1	%	93	110	106	100

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073501	L24-Se0073502	L24-Se0073503	L24-Se0073504
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C6-PFDA (surr.)	1	%	83	97	96	88
13C2-PFUnDA (surr.)	1	%	74	85	82	77
13C2-PFDoDA (surr.)	1	%	75	84	82	72
13C2-PFTeDA (surr.)	1	%	53	61	52	58
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	81	95	94	82
D3-N-MeFOSA (surr.)	1	%	83	76	77	69
D5-N-EtFOSA (surr.)	1	%	92	83	79	76
D7-N-MeFOSE (surr.)	1	%	66	71	64	62
D9-N-EtFOSE (surr.)	1	%	66	68	54	57
D5-N-EtFOSAA (surr.)	1	%	77	84	86	77
D3-N-MeFOSAA (surr.)	1	%	72	86	77	74
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	77	99	99	100
13C2-6:2 FTSA (surr.)	1	%	90	109	106	98
13C2-8:2 FTSA (surr.)	1	%	91	99	98	93
13C2-10:2 FTSA (surr.)	1	%	76	97	107	83
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	85	106	98	96
18O2-PFHxS (surr.)	1	%	89	103	105	93
13C8-PFOS (surr.)	1	%	78	95	92	83

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073501	L24-Se0073502	L24-Se0073503	L24-Se0073504
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit				
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			GW11S	GW11D	GW12D	GW13S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073505	L24-Se0073506	L24-Se0073507	L24-Se0073508
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 25, 2024
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	82	84	86	85
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			GW11S	GW11D	GW12D	GW13S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073505	L24-Se0073506	L24-Se0073507	L24-Se0073508
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	0.04
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	69
Chloride	5	mg/L	26	33	370	170
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	170	220	1500	680
Dissolved Oxygen	0.1	mg/L	8.3	8.3	7.9	8.3
Nitrate (as N)	0.01	mg/L	3.7	2.6	2.0	7.7
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	0.05
NOx (as N)	0.01	mg/L	3.7	2.6	2.0	7.8
pH (at 25 °C)	0.1	pH Units	5.6	5.8	5.9	5.8
Redox Potential		mV	330	320	300	150
Sulfate (as SO4)	1	mg/L	6.2	10	47	10
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	100	130	900	410
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	0.6	< 0.2	10
Total Nitrogen	0.2	mg/L	3.8	3.2	2.0	18
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	6.9
Total Phosphorus	0.01	mg/L	0.02	0.03	0.04	0.08
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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

Client Sample ID			GW11S	GW11D	GW12D	GW13S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073505	L24-Se0073506	L24-Se0073507	L24-Se0073508
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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	%	53	83	89	50
p-Terphenyl-d14 (surr.)	1	%	50	71	94	69
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	103	84	62	146
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			GW11S	GW11D	GW12D	GW13S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073505	L24-Se0073506	L24-Se0073507	L24-Se0073508
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	6.0	16	20	7.3
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	6.0	16	20	7.3
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.001	0.001	< 0.001	0.001
Iron	0.01	mg/L	0.02	0.01	0.04	3.8
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.037	0.057	0.073	0.069
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.002	0.003	0.004	0.015
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	< 0.005	0.019	0.007	0.11
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	3.8	3.2	30	21
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	0.8	5.1	9.9	6.3
Magnesium	0.5	mg/L	3.5	3.0	35	23
Potassium	0.5	mg/L	< 0.5	0.6	5.9	1.4
Sodium	0.5	mg/L	25	33	270	99
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	0.09
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.17
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.13
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			GW11S	GW11D	GW12D	GW13S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073505	L24-Se0073506	L24-Se0073507	L24-Se0073508
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	88	78	53	68
13C5-PFPeA (surr.)	1	%	91	77	76	86
13C5-PFHxA (surr.)	1	%	82	71	78	89
13C4-PFHpA (surr.)	1	%	87	71	78	95
13C8-PFOA (surr.)	1	%	91	73	75	96
13C5-PFNA (surr.)	1	%	102	83	79	100
13C6-PFDA (surr.)	1	%	88	74	75	91
13C2-PFUnDA (surr.)	1	%	79	62	67	79
13C2-PFDoDA (surr.)	1	%	82	63	61	78
13C2-PFTeDA (surr.)	1	%	61	49	37	52
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	88	71	71	86
D3-N-MeFOSA (surr.)	1	%	89	71	70	86
D5-N-EtFOSA (surr.)	1	%	105	83	80	97
D7-N-MeFOSE (surr.)	1	%	74	57	57	69
D9-N-EtFOSE (surr.)	1	%	76	59	57	68
D5-N-EtFOSAA (surr.)	1	%	82	65	64	83
D3-N-MeFOSAA (surr.)	1	%	75	63	63	71
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	90	71	80	93
13C2-6:2 FTSA (surr.)	1	%	92	75	73	100
13C2-8:2 FTSA (surr.)	1	%	88	72	77	94
13C2-10:2 FTSA (surr.)	1	%	91	72	72	86

Client Sample ID			GW11S	GW11D	GW12D	GW13S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073505	L24-Se0073506	L24-Se0073507	L24-Se0073508
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 26, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.15
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	[N09]0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	79	73	79	95
18O2-PFHxS (surr.)	1	%	92	76	77	100
13C8-PFOS (surr.)	1	%	81	68	68	85
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	0.55
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	0.55

Client Sample ID			GW22S	GW22D	GW23S	GW23D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073509	L24-Se0073510	L24-Se0073511	L24-Se0073512
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 25, 2024	Sep 25, 2024
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
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	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
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
BTEX						
4-Bromofluorobenzene (surr.)	1	%	79	84	83	84
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			GW22S	GW22D	GW23S	GW23D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073509	L24-Se0073510	L24-Se0073511	L24-Se0073512
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 25, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	30	48	75	57
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	200	240	340	310
Dissolved Oxygen	0.1	mg/L	8.5	8.3	8.1	8.6
Nitrate (as N)	0.01	mg/L	3.8	0.88	2.4	0.05
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	3.8	0.88	2.4	0.06
pH (at 25 °C)	0.1	pH Units	5.7	5.7	5.8	6.7
Redox Potential		mV	310	360	350	300
Sulfate (as SO4)	1	mg/L	8.3	8.6	6.0	6.7
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	120	150	210	190
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	0.2	1.5	< 0.2
Total Nitrogen	0.2	mg/L	3.9	1.1	3.9	< 0.2
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.02	0.02	0.01	0.04
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002

Client Sample ID			GW22S	GW22D	GW23S	GW23D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073509	L24-Se0073510	L24-Se0073511	L24-Se0073512
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 25, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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
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	%	109	57	87	100
p-Terphenyl-d14 (surr.)	1	%	135	68	91	144
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	78	132	65	67
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			GW22S	GW22D	GW23S	GW23D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073509	L24-Se0073510	L24-Se0073511	L24-Se0073512
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 25, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
OCOP in Water						
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	8.9	< 5	6.5	36
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	8.9	< 5	6.5	36
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	0.07	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.001	0.001	0.001	< 0.001
Iron	0.01	mg/L	0.05	< 0.01	0.01	< 0.01
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.019	0.006	0.011	0.060
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.004	0.004	0.002	0.002
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	0.024	< 0.005	< 0.005	< 0.005

Client Sample ID			GW22S	GW22D	GW23S	GW23D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073509	L24-Se0073510	L24-Se0073511	L24-Se0073512
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 25, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	3.9	4.6	6.1	4.2
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	1.8	1.0	2.7	12
Magnesium	0.5	mg/L	4.0	4.4	7.4	3.9
Potassium	0.5	mg/L	< 0.5	0.5	< 0.5	2.5
Sodium	0.5	mg/L	33	38	66	42
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	87	108	72	84
13C5-PFPeA (surr.)	1	%	98	113	90	93
13C5-PFHxA (surr.)	1	%	91	110	92	95
13C4-PFHpA (surr.)	1	%	95	110	91	96
13C8-PFOA (surr.)	1	%	93	110	89	90
13C5-PFNA (surr.)	1	%	100	118	93	94
13C6-PFDA (surr.)	1	%	89	108	88	90
13C2-PFUnDA (surr.)	1	%	82	95	79	83
13C2-PFDoDA (surr.)	1	%	81	98	74	80
13C2-PFTeDA (surr.)	1	%	69	71	44	64
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	86	104	82	92
D3-N-MeFOSA (surr.)	1	%	88	107	79	94
D5-N-EtFOSA (surr.)	1	%	100	124	89	106
D7-N-MeFOSE (surr.)	1	%	73	84	67	74
D9-N-EtFOSE (surr.)	1	%	73	86	68	75
D5-N-EtFOSAA (surr.)	1	%	82	95	82	87
D3-N-MeFOSAA (surr.)	1	%	76	94	74	77

Client Sample ID			GW22S	GW22D	GW23S	GW23D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073509	L24-Se0073510	L24-Se0073511	L24-Se0073512
Date Sampled			Sep 25, 2024	Sep 25, 2024	Sep 25, 2024	Sep 25, 2024
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	91	101	89	97
13C2-6:2 FTSA (surr.)	1	%	92	113	86	93
13C2-8:2 FTSA (surr.)	1	%	84	109	90	94
13C2-10:2 FTSA (surr.)	1	%	88	118	78	94
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	95	117	90	93
18O2-PFHxS (surr.)	1	%	94	112	90	82
13C8-PFOS (surr.)	1	%	86	101	78	82
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			QC01	QC03	FB01	RS01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073513	L24-Se0073514	L24-Se0073515	L24-Se0073516
Date Sampled			Sep 24, 2024	Sep 25, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	-	-
TRH C10-C14	0.02	mg/L	< 0.02	< 0.02	-	-
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	-	-
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	-	-
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	-	-
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	-	-
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02	< 0.02	-	-
TRH >C10-C16	0.02	mg/L	< 0.02	< 0.02	-	-
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	< 0.02	< 0.02	-	-
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	-	-
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	-	-
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	-	-

Client Sample ID			QC01	QC03	FB01	RS01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073513	L24-Se0073514	L24-Se0073515	L24-Se0073516
Date Sampled			Sep 24, 2024	Sep 25, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.001	mg/L	< 0.001	< 0.001	-	-
Toluene	0.001	mg/L	< 0.001	< 0.001	-	-
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	-	-
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	-	-
o-Xylene	0.001	mg/L	< 0.001	< 0.001	-	-
Xylenes - Total*	0.003	mg/L	< 0.003	< 0.003	-	-
BTEX						
4-Bromofluorobenzene (surr.)	1	%	86	86	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	< 0.001	-	-
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	-	-
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	-	-
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	-	-
DCM	5	ug/L	< 5	< 5	-	-
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	-	-
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	-	-
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	-	-
Styrene	0.5	ug/L	< 0.5	< 0.5	-	-
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	-	-
Toluene	0.5	ug/L	< 0.5	< 0.5	-	-
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	-	-
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	-	-
Xylenes (Total)	3	ug/L	< 3	< 3	-	-
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	-	-
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	-	-
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	-	-
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	-	-
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	-	-
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	-	-
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	-	-
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	-	-
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	-	-
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	-	-
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	-	-
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	-	-
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	-	-
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	-	-
Atrazine	0.1	ug/L	< 0.1	< 0.1	-	-
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	60	27	< 5	< 5
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	270	170	< 10	< 10
Dissolved Oxygen	0.1	mg/L	8.2	8.2	8.4	8.4
Nitrate (as N)	0.01	mg/L	2.1	3.7	< 0.01	< 0.01
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	2.1	3.7	< 0.01	< 0.01

Client Sample ID			QC01	QC03	FB01	RS01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073513	L24-Se0073514	L24-Se0073515	L24-Se0073516
Date Sampled			Sep 24, 2024	Sep 25, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
pH (at 25 °C)	0.1	pH Units	5.7	5.6	4.9	4.9
Redox Potential		mV	320	320	330	340
Sulfate (as SO4)	1	mg/L	8.1	6.1	< 1	< 1
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	160	100	< 5	< 5
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	2.1	3.7	< 0.2	< 0.2
Total Organic Carbon	5	mg/L	< 5	< 5	< 5	< 5
Total Phosphorus	0.01	mg/L	0.02	0.02	< 0.01	< 0.01
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	-	-
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	%	77	82	-	-
p-Terphenyl-d14 (surr.)	1	%	118	124	-	-
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	-	-
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	-	-
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	-	-
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	-	-
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	-	-
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	-	-
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	-	-
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	-	-
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	-	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	-	-
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	-	-
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	-	-
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	-	-
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	-	-
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	-	-
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	-	-
Total cresols*	0.01	mg/L	< 0.01	< 0.01	-	-

Client Sample ID			QC01	QC03	FB01	RS01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073513	L24-Se0073514	L24-Se0073515	L24-Se0073516
Date Sampled			Sep 24, 2024	Sep 25, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	-	-
Dinoseb	0.002	mg/L	< 0.002	< 0.002	-	-
Phenol	0.001	mg/L	< 0.001	< 0.001	-	-
Phenol-d6 (surr.)	1	%	58	81	-	-
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	-	-
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	-	-
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	-	-
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	-	-
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	-	-
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	-	-
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	-	-
Chlordane	0.002	ug/L	< 0.002	< 0.002	-	-
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	-	-
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	-	-
Diazinon	0.01	ug/L	< 0.01	< 0.01	-	-
Dieldrin	0.001	ug/L	< 0.001	< 0.001	-	-
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	-	-
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	-	-
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	-	-
Endrin	0.01	ug/L	< 0.01	< 0.01	-	-
Ethion	0.01	ug/L	< 0.01	< 0.01	-	-
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	-	-
Fipronil	0.02	ug/L	< 0.02	< 0.02	-	-
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	-	-
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	-	-
Heptachlor	0.001	ug/L	< 0.001	< 0.001	-	-
Lindane	0.001	ug/L	< 0.001	< 0.001	-	-
Malathion	0.01	ug/L	< 0.01	< 0.01	-	-
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	-	-
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	-	-
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	-	-
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	-	-
p.p-DDE	0.001	ug/L	< 0.001	< 0.001	-	-
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	-	-
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	-	-
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	-	-
Trifluralin	0.01	ug/L	< 0.01	< 0.01	-	-
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	-	-
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	-	-
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	7.3	6.2	< 5	< 5
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	7.3	6.2	< 5	< 5

Client Sample ID			QC01	QC03	FB01	RS01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073513	L24-Se0073514	L24-Se0073515	L24-Se0073516
Date Sampled			Sep 24, 2024	Sep 25, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.002	< 0.001	< 0.001	< 0.001
Iron	0.01	mg/L	0.01	0.07	< 0.01	< 0.01
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.011	0.035	< 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	< 0.001	< 0.001	< 0.001	< 0.001
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (filtered)	0.005	mg/L	0.009	< 0.005	< 0.005	< 0.005
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	5.1	3.6	< 0.5	< 0.5
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	0.9	0.7	< 0.5	< 0.5
Magnesium	0.5	mg/L	3.7	3.2	< 0.5	< 0.5
Potassium	0.5	mg/L	0.7	< 0.5	< 0.5	< 0.5
Sodium	0.5	mg/L	32	24	< 0.5	< 0.5
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	77	94	80	77
13C5-PFPeA (surr.)	1	%	87	92	93	89
13C5-PFHxA (surr.)	1	%	85	85	82	82
13C4-PFHpA (surr.)	1	%	88	85	86	88
13C8-PFOA (surr.)	1	%	86	88	87	82
13C5-PFNA (surr.)	1	%	94	97	91	90
13C6-PFDA (surr.)	1	%	85	83	84	80
13C2-PFUnDA (surr.)	1	%	74	76	78	74
13C2-PFDoDA (surr.)	1	%	75	73	77	80
13C2-PFTeDA (surr.)	1	%	51	56	72	68
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			QC01	QC03	FB01	RS01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-Se0073513	L24-Se0073514	L24-Se0073515	L24-Se0073516
Date Sampled			Sep 24, 2024	Sep 25, 2024	Sep 24, 2024	Sep 24, 2024
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	85	82	80	80
D3-N-MeFOSA (surr.)	1	%	81	78	82	79
D5-N-EtFOSA (surr.)	1	%	94	94	96	89
D7-N-MeFOSE (surr.)	1	%	64	68	66	65
D9-N-EtFOSE (surr.)	1	%	66	66	69	67
D5-N-EtFOSAA (surr.)	1	%	77	81	81	78
D3-N-MeFOSAA (surr.)	1	%	75	76	74	73
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	91	86	79	83
13C2-6:2 FTSA (surr.)	1	%	97	87	88	86
13C2-8:2 FTSA (surr.)	1	%	90	84	91	92
13C2-10:2 FTSA (surr.)	1	%	88	86	87	84
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	88	86	85	82
18O2-PFHxS (surr.)	1	%	88	92	86	87
13C8-PFOS (surr.)	1	%	79	83	79	77
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			FB02	RS02	TB01
Sample Matrix			Water	Water	Water
Eurofins Sample No.			L24-Se0073517	L24-Se0073518	L24-Se0073519
Date Sampled			Sep 25, 2024	Sep 25, 2024	Not Provided[I12]
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons					
TRH C6-C9	0.02	mg/L	-	-	< 0.02
TRH C6-C10	0.02	mg/L	-	-	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	-	-	< 0.02
BTEX					
Benzene	0.001	mg/L	-	-	< 0.001
Toluene	0.001	mg/L	-	-	< 0.001
Ethylbenzene	0.001	mg/L	-	-	< 0.001
m&p-Xylenes	0.002	mg/L	-	-	< 0.002
o-Xylene	0.001	mg/L	-	-	< 0.001
Xylenes - Total*	0.003	mg/L	-	-	< 0.003
BTEX					
4-Bromofluorobenzene (surr.)	1	%	-	-	63
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	-
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	-
Chloride	5	mg/L	< 5	< 5	-
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	-
Conductivity (at 25 °C)	10	uS/cm	< 10	< 10	-
Dissolved Oxygen	0.1	mg/L	8.5	8.5	-
Nitrate (as N)	0.01	mg/L	< 0.01	< 0.01	-
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	-
NOx (as N)	0.01	mg/L	< 0.01	< 0.01	-
pH (at 25 °C)	0.1	pH Units	4.9	4.9	-
Redox Potential		mV	340	340	-
Sulfate (as SO4)	1	mg/L	< 1	< 1	-
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	< 5	< 5	-
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	-
Total Nitrogen	0.2	mg/L	< 0.2	< 0.2	-
Total Organic Carbon	5	mg/L	< 5	< 5	-
Total Phosphorus	0.01	mg/L	< 0.01	< 0.01	-
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	-
Naphthalene[N02]	0.001	mg/L	-	-	< 0.001
Alkalinity (speciated)					
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	-
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	-
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	-
Total Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	-
Heavy Metals					
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	-
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	-
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	-
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	-
Copper (filtered)	0.001	mg/L	< 0.001	< 0.001	-
Iron	0.01	mg/L	< 0.01	< 0.01	-
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	-
Manganese (filtered)	0.005	mg/L	< 0.005	< 0.005	-
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	-
Nickel (filtered)	0.001	mg/L	< 0.001	< 0.001	-
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	-

Client Sample ID			FB02	RS02	TB01
Sample Matrix			Water	Water	Water
Eurofins Sample No.			L24-Se0073517	L24-Se0073518	L24-Se0073519
Date Sampled			Sep 25, 2024	Sep 25, 2024	Not Provided[I12]
Test/Reference	LOR	Unit			
Heavy Metals					
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	-
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	-
Alkali Metals (filtered)					
Magnesium (filtered)	0.5	mg/L	< 0.5	< 0.5	-
Eurofins Suite B11C: Na/K/Ca/Mg					
Calcium	0.5	mg/L	< 0.5	< 0.5	-
Magnesium	0.5	mg/L	< 0.5	< 0.5	-
Potassium	0.5	mg/L	< 0.5	< 0.5	-
Sodium	0.5	mg/L	< 0.5	< 0.5	-
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	-
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	< 0.05	-
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
13C4-PFBA (surr.)	1	%	73	88	-
13C5-PFPeA (surr.)	1	%	84	92	-
13C5-PFHxA (surr.)	1	%	80	89	-
13C4-PFHpA (surr.)	1	%	80	91	-
13C8-PFOA (surr.)	1	%	80	90	-
13C5-PFNA (surr.)	1	%	90	103	-
13C6-PFDA (surr.)	1	%	83	90	-
13C2-PFUnDA (surr.)	1	%	69	79	-
13C2-PFDoDA (surr.)	1	%	70	88	-
13C2-PFTeDA (surr.)	1	%	72	77	-
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	-
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	-
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	-
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	-
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	-
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	-
13C8-FOSA (surr.)	1	%	78	88	-
D3-N-MeFOSA (surr.)	1	%	78	88	-
D5-N-EtFOSA (surr.)	1	%	93	99	-
D7-N-MeFOSE (surr.)	1	%	65	71	-
D9-N-EtFOSE (surr.)	1	%	66	70	-
D5-N-EtFOSAA (surr.)	1	%	71	81	-
D3-N-MeFOSAA (surr.)	1	%	68	80	-

Client Sample ID			FB02	RS02	TB01
Sample Matrix			Water	Water	Water
Eurofins Sample No.			L24-Se0073517	L24-Se0073518	L24-Se0073519
Date Sampled			Sep 25, 2024	Sep 25, 2024	Not Provided[I12]
Test/Reference	LOR	Unit			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	-
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	-
13C2-4:2 FTSA (surr.)	1	%	88	97	-
13C2-6:2 FTSA (surr.)	1	%	83	89	-
13C2-8:2 FTSA (surr.)	1	%	77	94	-
13C2-10:2 FTSA (surr.)	1	%	80	100	-
Perfluoroalkyl sulfonic acids (PFSAs)					
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	-
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	< 0.01	-
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	-
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	-
13C3-PFBS (surr.)	1	%	79	87	-
18O2-PFHxS (surr.)	1	%	80	91	-
13C8-PFOS (surr.)	1	%	75	82	-
PFASs Summations					
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	-
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	-
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	-
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	-

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
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 01, 2024	7 Days
Total Recoverable Hydrocarbons - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 03, 2024	7 Days
BTEX - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 03, 2024	14 Days
Naphthalene - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 03, 2024	14 Days
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 02, 2024	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 02, 2024	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Welshpool	Oct 01, 2024	7 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Welshpool	Oct 01, 2024	14 Day
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Welshpool	Oct 01, 2024	14 Day
VOCs in Water by GCMS - Method: ARL132 - Purgeable Volatile Organic Compounds in Water by GCMS	Welshpool	Oct 03, 2024	14 Days
Atrazine - Method: ARL042 - Base Neutral Pesticides in Water	Welshpool	Oct 03, 2024	7 Days
Chemical Oxygen Demand (COD) - Method: LTM-INO-4220 Determination of COD in Water	Melbourne	Oct 02, 2024	28 Days
Chromium (VI) - Method: ARL316 - Hexavalent Chromium in Water by Discrete Analyser	Welshpool	Oct 02, 2024	1 Day
pH (at 25 °C) - Method: LTM-GEN-7090 pH in water by ISE	Welshpool	Oct 02, 2024	6 Hours
Redox Potential - Method: ARL119 - Reduction/Oxidation Potential of Water	Welshpool	Oct 02, 2024	28 Day
Total Organic Carbon - Method: LTM-INO-4060 Total Organic Carbon in water and soil	Melbourne	Oct 02, 2024	28 Days
Chromium (III) (filtered)* - Method: ARL402/403 - Metals in Water by ICPOES/ICPMS	Welshpool	Sep 30, 2024	180 Days
OCOP in Water - Method: ARL No. 002 - OCOP and PCB in Water	Welshpool	Oct 02, 2024	7 Days
PCB in Water - Method: ARL002 - OCOP and PCB in Water	Welshpool	Oct 02, 2024	14 Days
Heavy Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 02, 2024	28 Days
Metals M8 filtered - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 07, 2024	28 Days
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 02, 2024	28 Days
Alkali Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 02, 2024	6 Months
Eurofins Suite B11C: Na/K/Ca/Mg - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 02, 2024	180 Days
Ammonia (as N) - Method: ARL303 - Ammonia in Water by Discrete Analyser	Welshpool	Oct 02, 2024	28 Days
Nitrate (as N)	Welshpool	Oct 02, 2024	28 Days

Description	Testing Site	Extracted	Holding Time
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Nitrite (as N)	Welshpool	Oct 03, 2024	2 Days
- Method: ARL311 - Nitrite in Water by Discrete Analyser			
NOx (as N)	Welshpool	Oct 02, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Total Kjeldahl Nitrogen	Welshpool	Oct 01, 2024	28 Day
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Nitrogen	Welshpool	Oct 02, 2024	28 Days
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Phosphorus	Welshpool	Oct 02, 2024	28 Days
- Method: ARL308 - Total Phosphorus in Water by Discrete Analyser			
Chloride	Welshpool	Oct 03, 2024	28 Days
- Method: ARL305 - Chloride in Water by Discrete Analyser			
Sulfate (as SO4)	Welshpool	Oct 02, 2024	28 Days
- Method: ARL301 - Sulfate in Water by Discrete Analyser			
Alkalinity (speciated)	Welshpool	Oct 03, 2024	14 Days
- Method: LTM-INO-4250 Alkalinity by Electrometric Titration			
Conductivity (at 25 °C)	Welshpool	Oct 02, 2024	28 Days
- Method: LTM-INO-4030 Conductivity			
Total Dissolved Solids Dried at 180 °C ± 2 °C	Welshpool	Oct 02, 2024	7 Days
- Method: ARL No. 017 - Total Dissolved Solids			
Perfluoroalkyl carboxylic acids (PFCAs)	Welshpool	Oct 02, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
Perfluoroalkyl sulfonamido substances	Welshpool	Oct 02, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Welshpool	Oct 02, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
Perfluoroalkyl sulfonic acids (PFSAs)	Welshpool	Oct 02, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
PFASs Summations	Welshpool	Oct 02, 2024	
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			

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Company Name: SLR Consulting Australia Pty Ltd - ENV
Address: Level 1, 500 Hay Street
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Project Name: BANKSIA LANDFILL SITE GME 2024
Project ID: 72519

Order No.:
Report #: 1144109
Phone: 08 9388 8360
Fax: 08 9381 2360

Received: Sep 30, 2024 3:00 PM
Due: Oct 7, 2024
Priority: 5 Day
Contact Name: *ALL RESULTS/SRA/COC"S

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Atrazine	Chemical Oxygen Demand (COD)	Chromium (III) (filtered)*	Chromium (VI)	Dissolved Oxygen	Iron	Magnesium (filtered)	Manganese (filtered)	pH (at 25 °C)	Redox Potential	Selenium (filtered)	Titanium (filtered)	Total Organic Carbon	Metals M8 filtered	Eurofins Suite B4A	BTEXN and Volatile TRH	Eurofins Suite B11C: Na/K/Ca/Mg	OCOP in Water	PCB in Water	VOCs in Water by GCMS	Total Dissolved Solids (TDS)	Eurofins Suite B19D	Eurofins Suite B11E	Per- and Polyfluoroalkyl Substances (PFASs)
Perth Laboratory - NATA # 2377 Site # 2370 & 2554						X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254								X											X											
External Laboratory																														
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**																									
1	GW1S	Sep 26, 2024		Water	L24-Se0073489	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
2	GW1D	Sep 26, 2024		Water	L24-Se0073490	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
3	SE3S-R	Sep 24, 2024		Water	L24-Se0073491	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
4	GW3D	Sep 24, 2024		Water	L24-Se0073492	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
5	SE34S-R	Sep 27, 2024		Water	L24-Se0073493	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
6	SE4D	Sep 24, 2024		Water	L24-Se0073494	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
7	GW5S	Sep 27, 2024		Water	L24-Se0073495	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
8	SE6S	Sep 25, 2024		Water	L24-Se0073496	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
9	GW6D	Sep 25, 2024		Water	L24-Se0073497	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
10	GW7S	Sep 24, 2024		Water	L24-Se0073498	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
11	GW7D-R	Sep 24, 2024		Water	L24-Se0073499	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
12	GW8D	Sep 24, 2024		Water	L24-Se0073500	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
13	GW9S	Sep 25, 2024		Water	L24-Se0073501	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X

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Project Name: BANKSIA LANDFILL SITE GME 2024
Project ID: 72519

Order No.:
Report #: 1144109
Phone: 08 9388 8360
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Received: Sep 30, 2024 3:00 PM
Due: Oct 7, 2024
Priority: 5 Day
Contact Name: *ALL RESULTS/SRA/COC"S

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Atrazine	Chemical Oxygen Demand (COD)	Chromium (III) (filtered)*	Chromium (VI)	Dissolved Oxygen	Iron	Magnesium (filtered)	Manganese (filtered)	pH (at 25 °C)	Redox Potential	Selenium (filtered)	Titanium (filtered)	Total Organic Carbon	Metals M8 filtered	Eurofins Suite B4A	BTEXN and Volatile TRH	Eurofins Suite B11C: Na/K/Ca/Mg	OCOP in Water	PCB in Water	VOCs in Water by GCMS	Total Dissolved Solids (TDS)	Eurofins Suite B19D	Eurofins Suite B11E	Per- and Polyfluoroalkyl Substances (PFASs)
Perth Laboratory - NATA # 2377 Site # 2370 & 2554						X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254								X											X											
External Laboratory																														
14	GW9D	Sep 25, 2024		Water	L24-Se0073502	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
15	SE10S	Sep 26, 2024		Water	L24-Se0073503	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
16	GW10D	Sep 26, 2024		Water	L24-Se0073504	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
17	GW11S	Sep 25, 2024		Water	L24-Se0073505	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
18	GW11D	Sep 25, 2024		Water	L24-Se0073506	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
19	GW12D	Sep 26, 2024		Water	L24-Se0073507	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
20	GW13S	Sep 25, 2024		Water	L24-Se0073508	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
21	GW22S	Sep 25, 2024		Water	L24-Se0073509	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
22	GW22D	Sep 25, 2024		Water	L24-Se0073510	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
23	GW23S	Sep 25, 2024		Water	L24-Se0073511	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
24	GW23D	Sep 25, 2024		Water	L24-Se0073512	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
25	QC01	Sep 24, 2024		Water	L24-Se0073513	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
26	QC03	Sep 25, 2024		Water	L24-Se0073514	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
27	FB01	Sep 24, 2024		Water	L24-Se0073515	X		X	X	X	X	X	X	X	X	X	X	X	X	X			X				X	X	X	X
28	RS01	Sep 24, 2024		Water	L24-Se0073516	X		X	X	X	X	X	X	X	X	X	X	X	X	X			X				X	X	X	X

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Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Atrazine	Chemical Oxygen Demand (COD)	Chromium (III) (filtered)*	Chromium (VI)	Dissolved Oxygen	Iron	Magnesium (filtered)	Manganese (filtered)	pH (at 25 °C)	Redox Potential	Selenium (filtered)	Titanium (filtered)	Total Organic Carbon	Metals M8 filtered	Eurofins Suite B4A	BTEXN and Volatile TRH	Eurofins Suite B11C: Na/K/Ca/Mg	OCOP in Water	PCB in Water	VOCs in Water by GCMS	Total Dissolved Solids (TDS)	Eurofins Suite B19D	Eurofins Suite B11E	Per- and Polyfluoroalkyl Substances (PFASs)
Perth Laboratory - NATA # 2377 Site # 2370 & 2554						X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254								X											X											
External Laboratory																														
29	FB02	Sep 25, 2024		Water	L24-Se0073517	X		X	X	X	X	X	X	X	X	X	X	X	X	X			X				X	X	X	X
30	RS02	Sep 25, 2024		Water	L24-Se0073518	X		X	X	X	X	X	X	X	X	X	X	X	X	X			X				X	X	X	X
31	TB01	Not Provided		Water	L24-Se0073519																	X								
Test Counts						30	26	30	30	30	30	30	30	30	30	30	30	30	30	30	26	1	30	26	26	26	30	30	30	30

Internal Quality Control Review and Glossary

General

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

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Atrazine	ug/L	< 0.1			0.1	Pass	
Ammonia (as N)	mg/L	< 0.02			0.02	Pass	
Chloride	mg/L	< 5			5	Pass	
Chromium (VI)	mg/L	< 0.002			0.002	Pass	
Nitrate (as N)	mg/L	< 0.01			0.01	Pass	
Nitrite (as N)	mg/L	< 0.01			0.01	Pass	
NOx (as N)	mg/L	< 0.01			0.01	Pass	
Sulfate (as SO4)	mg/L	< 1			1	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	mg/L	< 5			5	Pass	
Total Nitrogen	mg/L	< 0.2			0.2	Pass	
Total Phosphorus	mg/L	< 0.01			0.01	Pass	
Method Blank							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO3)	mg/L	< 5			5	Pass	
Hydroxide Alkalinity (as CaCO3)	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Heavy Metals							
Aluminium (filtered)	mg/L	< 0.05			0.05	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
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	
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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Chemical Oxygen Demand (COD)	mg/L	< 25			25	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Iron	mg/L	< 0.01			0.01	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Total Recoverable Hydrocarbons							
TRH C10-C14	mg/L	< 0.02			0.02	Pass	
TRH C15-C28	mg/L	< 0.04			0.04	Pass	
TRH C29-C36	mg/L	< 0.04			0.04	Pass	
TRH >C10-C16	mg/L	< 0.02			0.02	Pass	
TRH >C16-C34	mg/L	< 0.05			0.05	Pass	
TRH >C34-C40	mg/L	< 0.05			0.05	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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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							
Phenols (Halogenated)							
2-Chlorophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.5-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.6-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.001			0.001	Pass	
Pentachlorophenol	mg/L	< 0.001			0.001	Pass	
Tetrachlorophenols - Total	mg/L	< 0.001			0.001	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/L	< 0.003			0.003	Pass	
2-Methyl-4.6-dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Nitrophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dimethylphenol	mg/L	< 0.001			0.001	Pass	
2.4-Dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.001			0.001	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.001			0.001	Pass	
4-Nitrophenol	mg/L	< 0.001			0.001	Pass	
Dinoseb	mg/L	< 0.002			0.002	Pass	
Phenol	mg/L	< 0.001			0.001	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C10-C14	mg/L	< 0.02			0.02	Pass	
TRH C15-C28	mg/L	< 0.04			0.04	Pass	
TRH C29-C36	mg/L	< 0.04			0.04	Pass	
TRH >C10-C16	mg/L	< 0.02			0.02	Pass	
TRH >C16-C34	mg/L	< 0.05			0.05	Pass	
TRH >C34-C40	mg/L	< 0.05			0.05	Pass	
Method Blank							
VOCs in Water by GCMS							
Benzene	ug/L	< 0.5			0.5	Pass	
Carbon tetrachloride	ug/L	< 0.5			0.5	Pass	
Chlorobenzene	ug/L	< 0.5			0.5	Pass	
DCM	ug/L	< 5			5	Pass	
Ethylbenzene	ug/L	< 0.5			0.5	Pass	
Hexachlorobutadiene	ug/L	< 0.5			0.5	Pass	
Methyl tert Butyl Ether	ug/L	< 0.5			0.5	Pass	
Styrene	ug/L	< 0.5			0.5	Pass	
Perchloroethene (PCE)	ug/L	< 0.5			0.5	Pass	
Toluene	ug/L	< 0.5			0.5	Pass	
Trichloroethylene(TCE)	ug/L	< 0.5			0.5	Pass	
Vinyl Chloride	ug/L	< 0.2			0.2	Pass	
Xylenes (Total)	ug/L	< 3			3	Pass	
1.1-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.1-Dichloroethene	ug/L	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	ug/L	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	ug/L	< 2			2	Pass	
1.1.1-Trichloroethane	ug/L	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1.1.1.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3.5-Trichlorobenzene	ug/L	< 0.5			0.5	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
VOCs in Water by GCMS							
Benzene	ug/L	< 0.5			0.5	Pass	
Carbon tetrachloride	ug/L	< 0.5			0.5	Pass	
Chlorobenzene	ug/L	< 0.5			0.5	Pass	
DCM	ug/L	< 5			5	Pass	
Ethylbenzene	ug/L	< 0.5			0.5	Pass	
Hexachlorobutadiene	ug/L	< 0.5			0.5	Pass	
Methyl tert Butyl Ether	ug/L	< 0.5			0.5	Pass	
Styrene	ug/L	< 0.5			0.5	Pass	
Perchloroethene (PCE)	ug/L	< 0.5			0.5	Pass	
Toluene	ug/L	< 0.5			0.5	Pass	
Trichloroethylene(TCE)	ug/L	< 0.5			0.5	Pass	
Vinyl Chloride	ug/L	< 0.2			0.2	Pass	
Xylenes (Total)	ug/L	< 3			3	Pass	
1.1-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.1-Dichloroethene	ug/L	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	ug/L	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	ug/L	< 2			2	Pass	
1.1.1-Trichloroethane	ug/L	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3.5-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Atrazine	ug/L	< 0.1			0.1	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.05			0.05	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Total Organic Carbon	mg/L	< 5			5	Pass	
Method Blank							
OCOP in Water							
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	ug/L	< 0.001			0.001	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.05			0.05	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	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							
Phenols (Halogenated)							
2-Chlorophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.5-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.6-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.001			0.001	Pass	
Pentachlorophenol	mg/L	< 0.001			0.001	Pass	
Tetrachlorophenols - Total	mg/L	< 0.001			0.001	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/L	< 0.003			0.003	Pass	
2-Methyl-4.6-dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Nitrophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dimethylphenol	mg/L	< 0.001			0.001	Pass	
2.4-Dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.001			0.001	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.001			0.001	Pass	
4-Nitrophenol	mg/L	< 0.001			0.001	Pass	
Dinoseb	mg/L	< 0.002			0.002	Pass	
Phenol	mg/L	< 0.001			0.001	Pass	
LCS - % Recovery							
Atrazine	%	78			60-120	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	%	98			70-130	Pass	
LCS - % Recovery							
OCOP in Water							
Aldrin	%	110			60-120	Pass	
alpha-BHC (HCH)	%	89			60-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
beta-BHC (HCH)	%	86			60-120	Pass	
delta-BHC (HCH)	%	96			60-120	Pass	
Chlordane	%	83			60-120	Pass	
Chlorothalonil	%	97			60-120	Pass	
Dieldrin	%	91			60-120	Pass	
Endosulfan II	%	116			60-120	Pass	
Endosulfan Sulfate	%	104			60-120	Pass	
Endrin	%	99			60-120	Pass	
Hexachlorobenzene (HCB)	%	88			60-120	Pass	
Heptachlor Epoxide	%	100			60-120	Pass	
Heptachlor	%	95			60-120	Pass	
Lindane	%	83			60-120	Pass	
Methoxychlor	%	89			60-120	Pass	
Oxychlordane	%	81			60-120	Pass	
p.p-DDD	%	84			60-120	Pass	
p.p-DDE	%	90			60-120	Pass	
p.p-DDT	%	90			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	94			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	96			80-120	Pass	
Magnesium	%	98			80-120	Pass	
Potassium	%	96			80-120	Pass	
Sodium	%	95			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	95			80-120	Pass	
Arsenic (filtered)	%	100			80-120	Pass	
Cadmium (filtered)	%	98			80-120	Pass	
Chromium (filtered)	%	94			80-120	Pass	
Copper (filtered)	%	90			80-120	Pass	
Lead (filtered)	%	91			80-120	Pass	
Manganese (filtered)	%	92			80-120	Pass	
Mercury (filtered)	%	92			80-120	Pass	
Nickel (filtered)	%	90			80-120	Pass	
Selenium (filtered)	%	84			80-120	Pass	
Titanium (filtered)	%	96			80-120	Pass	
Zinc (filtered)	%	94			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	99			80-120	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	97			70-130	Pass	
TRH C6-C10	%	97			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	96			70-130	Pass	
Toluene	%	91			70-130	Pass	
Ethylbenzene	%	98			70-130	Pass	
m&p-Xylenes	%	92			70-130	Pass	
o-Xylene	%	91			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Xylenes - Total*	%	92			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	103			70-130	Pass	
LCS - % Recovery							
Chemical Oxygen Demand (COD)	%	98			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	107			80-120	Pass	
Arsenic (filtered)	%	108			80-120	Pass	
Cadmium (filtered)	%	107			80-120	Pass	
Chromium (filtered)	%	89			80-120	Pass	
Copper (filtered)	%	81			80-120	Pass	
Iron	%	94			80-120	Pass	
Lead (filtered)	%	89			80-120	Pass	
Manganese (filtered)	%	96			80-120	Pass	
Mercury (filtered)	%	99			80-120	Pass	
Nickel (filtered)	%	90			80-120	Pass	
Selenium (filtered)	%	110			80-120	Pass	
Titanium (filtered)	%	100			80-120	Pass	
Zinc (filtered)	%	97			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	103			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	103			80-120	Pass	
Magnesium	%	100			80-120	Pass	
Potassium	%	97			80-120	Pass	
Sodium	%	98			80-120	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C10-C14	%	95			70-130	Pass	
TRH >C10-C16	%	95			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	112			70-130	Pass	
Acenaphthylene	%	102			70-130	Pass	
Anthracene	%	102			70-130	Pass	
Benz(a)anthracene	%	108			70-130	Pass	
Benzo(a)pyrene	%	109			70-130	Pass	
Benzo(b&j)fluoranthene	%	103			70-130	Pass	
Benzo(g.h.i)perylene	%	102			70-130	Pass	
Benzo(k)fluoranthene	%	106			70-130	Pass	
Chrysene	%	104			70-130	Pass	
Dibenz(a.h)anthracene	%	102			70-130	Pass	
Fluoranthene	%	110			70-130	Pass	
Fluorene	%	102			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	103			70-130	Pass	
Naphthalene	%	101			70-130	Pass	
Phenanthrene	%	100			70-130	Pass	
Pyrene	%	101			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Chlorophenol	%	105			25-140	Pass	
2.4-Dichlorophenol	%	104			25-140	Pass	
2.4.5-Trichlorophenol	%	103			25-140	Pass	
2.4.6-Trichlorophenol	%	103			25-140	Pass	
2.6-Dichlorophenol	%	104			25-140	Pass	
4-Chloro-3-methylphenol	%	108			25-140	Pass	
Pentachlorophenol	%	95			25-140	Pass	
Tetrachlorophenols - Total	%	117			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	102			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	103			25-140	Pass	
2.4-Dimethylphenol	%	114			25-140	Pass	
2-Methylphenol (o-Cresol)	%	94			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	83			25-140	Pass	
Dinoseb	%	99			25-140	Pass	
Phenol	%	88			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Nitrophenol	%	112			25-140	Pass	
4-Nitrophenol	%	108			25-140	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C10-C14	%	113			70-130	Pass	
TRH >C10-C16	%	113			70-130	Pass	
LCS - % Recovery							
VOCs in Water by GCMS							
Benzene	%	106			60-120	Pass	
Ethylbenzene	%	105			60-120	Pass	
Toluene	%	101			60-120	Pass	
Trichloroethylene(TCE)	%	94			60-120	Pass	
Xylenes (Total)	%	97			60-120	Pass	
1.2-Dichloroethane	%	98			60-120	Pass	
1.1-Dichloroethene	%	81			60-120	Pass	
1.2-Dichlorobenzene	%	94			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	90			80-120	Pass	
Arsenic (filtered)	%	96			80-120	Pass	
Cadmium (filtered)	%	94			80-120	Pass	
Chromium (filtered)	%	93			80-120	Pass	
Copper (filtered)	%	91			80-120	Pass	
Lead (filtered)	%	96			80-120	Pass	
Manganese (filtered)	%	91			80-120	Pass	
Mercury (filtered)	%	98			80-120	Pass	
Nickel (filtered)	%	90			80-120	Pass	
Selenium (filtered)	%	86			80-120	Pass	
Titanium (filtered)	%	94			80-120	Pass	
Zinc (filtered)	%	91			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	98			80-120	Pass	
LCS - % Recovery							
VOCs in Water by GCMS							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzene	%	111			60-120	Pass	
Ethylbenzene	%	114			60-120	Pass	
Toluene	%	104			60-120	Pass	
Trichloroethylene(TCE)	%	98			60-120	Pass	
Xylenes (Total)	%	107			60-120	Pass	
1.2-Dichloroethane	%	104			60-120	Pass	
1.1-Dichloroethene	%	85			60-120	Pass	
1.2-Dichlorobenzene	%	92			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	97			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	95			80-120	Pass	
Magnesium	%	98			80-120	Pass	
Potassium	%	96			80-120	Pass	
Sodium	%	98			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	92			80-120	Pass	
Arsenic (filtered)	%	99			80-120	Pass	
Cadmium (filtered)	%	96			80-120	Pass	
Chromium (filtered)	%	97			80-120	Pass	
Copper (filtered)	%	98			80-120	Pass	
Lead (filtered)	%	92			80-120	Pass	
Manganese (filtered)	%	96			80-120	Pass	
Mercury (filtered)	%	92			80-120	Pass	
Nickel (filtered)	%	97			80-120	Pass	
Selenium (filtered)	%	88			80-120	Pass	
Titanium (filtered)	%	99			80-120	Pass	
Zinc (filtered)	%	97			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	97			80-120	Pass	
LCS - % Recovery							
Atrazine	%	106			60-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	78			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	75			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	84			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	79			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	83			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	74			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	81			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	90			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	82			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	73			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	75			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	79			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	80			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	85			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	81			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	76			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	79			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	89			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	80			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	84			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	81			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	76			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	82			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	%	62			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	%	72			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	78			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	80			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	84			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	78			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	71			50-150	Pass	
LCS - % Recovery							
Total Organic Carbon	%	92			70-130	Pass	
LCS - % Recovery							
OCOP in Water							
alpha-BHC (HCH)	%	93			60-120	Pass	
beta-BHC (HCH)	%	96			60-120	Pass	
delta-BHC (HCH)	%	97			60-120	Pass	
Bifenthrin	%	97			60-120	Pass	
Endosulfan I	%	97			60-120	Pass	
Endosulfan II	%	97			60-120	Pass	
Endosulfan Sulfate	%	88			60-120	Pass	
Endrin	%	96			60-120	Pass	
Heptachlor Epoxide	%	78			60-120	Pass	
Heptachlor	%	90			60-120	Pass	
o.p-DDT	%	78			60-120	Pass	
Oxychlordane	%	97			60-120	Pass	
p.p-DDD	%	96			60-120	Pass	
p.p-DDE	%	119			60-120	Pass	
p.p-DDT	%	96			60-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	107			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	92			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	116			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	107			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	108			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	89			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	112			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	115			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	109			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	105			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	103			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorooctane sulfonamide (FOSA)	%	113			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	98			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	111			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	117			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	108			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	103			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	114			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	117			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	109			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	100			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	104			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	%	83			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	%	98			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	100			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	107			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	110			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	102			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	93			50-150	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	91			80-120	Pass	
Arsenic (filtered)	%	100			80-120	Pass	
Cadmium (filtered)	%	96			80-120	Pass	
Chromium (filtered)	%	90			80-120	Pass	
Copper (filtered)	%	86			80-120	Pass	
Lead (filtered)	%	91			80-120	Pass	
Manganese (filtered)	%	89			80-120	Pass	
Mercury (filtered)	%	85			80-120	Pass	
Nickel (filtered)	%	85			80-120	Pass	
Selenium (filtered)	%	96			80-120	Pass	
Titanium (filtered)	%	93			80-120	Pass	
Zinc (filtered)	%	93			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	95			80-120	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	119			70-130	Pass	
Acenaphthylene	%	112			70-130	Pass	
Anthracene	%	113			70-130	Pass	
Benz(a)anthracene	%	100			70-130	Pass	
Benzo(a)pyrene	%	115			70-130	Pass	
Benzo(b&j)fluoranthene	%	113			70-130	Pass	
Benzo(g.h.i)perylene	%	118			70-130	Pass	
Benzo(k)fluoranthene	%	119			70-130	Pass	
Chrysene	%	103			70-130	Pass	
Dibenz(a.h)anthracene	%	113			70-130	Pass	
Fluoranthene	%	114			70-130	Pass	
Fluorene	%	100			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Indeno(1.2.3-cd)pyrene	%	111			70-130	Pass	
Naphthalene	%	116			70-130	Pass	
Phenanthrene	%	110			70-130	Pass	
Pyrene	%	116			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	111			25-140	Pass	
2.4-Dichlorophenol	%	110			25-140	Pass	
2.4.5-Trichlorophenol	%	111			25-140	Pass	
2.4.6-Trichlorophenol	%	119			25-140	Pass	
2.6-Dichlorophenol	%	107			25-140	Pass	
4-Chloro-3-methylphenol	%	112			25-140	Pass	
Pentachlorophenol	%	107			25-140	Pass	
Tetrachlorophenols - Total	%	108			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	118			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	101			25-140	Pass	
2.4-Dimethylphenol	%	105			25-140	Pass	
2.4-Dinitrophenol	%	115			25-140	Pass	
2-Methylphenol (o-Cresol)	%	107			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	109			25-140	Pass	
Dinoseb	%	117			25-140	Pass	
Phenol	%	108			25-140	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
VOCs in Water by GCMS				Result 1					
1.1-Dichloroethene	L24-Se0054316	NCP	%	101			60-120	Pass	
Spike - % Recovery									
				Result 1					
Atrazine	L24-Se0064804	NCP	%	100			60-120	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	L24-Oc0003540	NCP	%	97			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Oc0003540	NCP	%	95			75-125	Pass	
Magnesium	L24-Oc0003540	NCP	%	96			75-125	Pass	
Potassium	L24-Oc0003540	NCP	%	93			75-125	Pass	
Sodium	L24-Oc0003540	NCP	%	75			75-125	Pass	
Spike - % Recovery									
VOCs in Water by GCMS				Result 1					
Benzene	L24-Se0073490	CP	%	105			60-120	Pass	
Ethylbenzene	L24-Se0073490	CP	%	114			60-120	Pass	
Toluene	L24-Se0073490	CP	%	93			60-120	Pass	
Trichloroethylene(TCE)	L24-Se0073490	CP	%	92			60-120	Pass	
Xylenes (Total)	L24-Se0073490	CP	%	103			60-120	Pass	
1.2-Dichloroethane	L24-Se0073490	CP	%	96			60-120	Pass	
1.2-Dichlorobenzene	L24-Se0073490	CP	%	96			60-120	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	L24-Se0073490	CP	%	108			80-120	Pass	
Chloride	L24-Se0073490	CP	%	96			70-130	Pass	
Chromium (VI)	L24-Se0073490	CP	%	103			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nitrite (as N)	L24-Se0073490	CP	%	109			80-120	Pass	
Spike - % Recovery									
				Result 1					
Chemical Oxygen Demand (COD)	L24-Se0073491	CP	%	113			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Se0073495	CP	%	80			75-125	Pass	
Arsenic (filtered)	L24-Se0073495	CP	%	95			75-125	Pass	
Cadmium (filtered)	L24-Se0073495	CP	%	87			75-125	Pass	
Chromium (filtered)	L24-Se0073495	CP	%	78			75-125	Pass	
Copper (filtered)	L24-Se0073495	CP	%	79			75-125	Pass	
Lead (filtered)	L24-Se0073495	CP	%	82			75-125	Pass	
Mercury (filtered)	L24-Se0073495	CP	%	84			75-125	Pass	
Nickel (filtered)	L24-Se0073495	CP	%	75			75-125	Pass	
Selenium (filtered)	L24-Se0073495	CP	%	79			75-125	Pass	
Titanium (filtered)	L24-Se0073495	CP	%	83			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	L24-Se0073496	CP	%	124			70-130	Pass	
TRH >C10-C16	L24-Se0073496	CP	%	123			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	L24-Se0073496	CP	%	108			70-130	Pass	
Acenaphthylene	L24-Se0073496	CP	%	112			70-130	Pass	
Anthracene	L24-Se0073496	CP	%	101			70-130	Pass	
Benz(a)anthracene	L24-Se0073496	CP	%	107			70-130	Pass	
Benzo(a)pyrene	L24-Se0073496	CP	%	111			70-130	Pass	
Benzo(b&j)fluoranthene	L24-Se0073496	CP	%	112			70-130	Pass	
Benzo(g.h.i)perylene	L24-Se0073496	CP	%	99			70-130	Pass	
Benzo(k)fluoranthene	L24-Se0073496	CP	%	105			70-130	Pass	
Chrysene	L24-Se0073496	CP	%	111			70-130	Pass	
Dibenz(a.h)anthracene	L24-Se0073496	CP	%	99			70-130	Pass	
Fluoranthene	L24-Se0073496	CP	%	111			70-130	Pass	
Fluorene	L24-Se0073496	CP	%	103			70-130	Pass	
Indeno(1.2.3-cd)pyrene	L24-Se0073496	CP	%	99			70-130	Pass	
Naphthalene	L24-Se0073496	CP	%	110			70-130	Pass	
Phenanthrene	L24-Se0073496	CP	%	109			70-130	Pass	
Pyrene	L24-Se0073496	CP	%	104			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	L24-Se0073496	CP	%	75			30-130	Pass	
2.4-Dichlorophenol	L24-Se0073496	CP	%	76			30-130	Pass	
2.4.5-Trichlorophenol	L24-Se0073496	CP	%	109			30-130	Pass	
2.4.6-Trichlorophenol	L24-Se0073496	CP	%	81			30-130	Pass	
2.6-Dichlorophenol	L24-Se0073496	CP	%	76			30-130	Pass	
4-Chloro-3-methylphenol	L24-Se0073496	CP	%	81			30-130	Pass	
Pentachlorophenol	L24-Se0073496	CP	%	106			30-130	Pass	
Tetrachlorophenols - Total	L24-Se0073496	CP	%	105			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	L24-Se0073496	CP	%	91			30-130	Pass	
2-Methyl-4.6-dinitrophenol	L24-Se0073496	CP	%	98			30-130	Pass	
2.4-Dimethylphenol	L24-Se0073496	CP	%	84			30-130	Pass	
2-Methylphenol (o-Cresol)	L24-Se0073496	CP	%	101			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
3&4-Methylphenol (m&p-Cresol)	L24-Se0073496	CP	%	89			30-130	Pass	
Dinoseb	L24-Se0073496	CP	%	118			30-130	Pass	
Phenol	L24-Se0073496	CP	%	117			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Se0073497	CP	%	106			75-125	Pass	
Arsenic (filtered)	L24-Se0073497	CP	%	113			75-125	Pass	
Cadmium (filtered)	L24-Se0073497	CP	%	108			75-125	Pass	
Chromium (filtered)	L24-Se0073497	CP	%	87			75-125	Pass	
Copper (filtered)	L24-Se0073497	CP	%	79			75-125	Pass	
Lead (filtered)	L24-Se0073497	CP	%	85			75-125	Pass	
Mercury (filtered)	L24-Se0073497	CP	%	98			75-125	Pass	
Nickel (filtered)	L24-Se0073497	CP	%	85			75-125	Pass	
Selenium (filtered)	L24-Se0073497	CP	%	113			75-125	Pass	
Titanium (filtered)	L24-Se0073497	CP	%	99			75-125	Pass	
Zinc (filtered)	L24-Se0073497	CP	%	93			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-Se0073497	CP	%	101			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	L24-Se0073498	CP	%	86			70-130	Pass	
TRH >C10-C16	L24-Se0073498	CP	%	86			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	L24-Se0071482	NCP	%	105			70-130	Pass	
Acenaphthylene	L24-Se0071482	NCP	%	102			70-130	Pass	
Anthracene	L24-Se0071482	NCP	%	106			70-130	Pass	
Benz(a)anthracene	L24-Se0071482	NCP	%	101			70-130	Pass	
Benzo(a)pyrene	L24-Se0071482	NCP	%	108			70-130	Pass	
Benzo(b&j)fluoranthene	L24-Se0071482	NCP	%	105			70-130	Pass	
Benzo(g.h.i)perylene	L24-Se0071482	NCP	%	101			70-130	Pass	
Benzo(k)fluoranthene	L24-Se0071482	NCP	%	105			70-130	Pass	
Chrysene	L24-Se0071482	NCP	%	101			70-130	Pass	
Dibenz(a.h)anthracene	L24-Se0071482	NCP	%	108			70-130	Pass	
Fluoranthene	L24-Se0071482	NCP	%	92			70-130	Pass	
Fluorene	L24-Se0071482	NCP	%	100			70-130	Pass	
Indeno(1.2.3-cd)pyrene	L24-Se0071482	NCP	%	100			70-130	Pass	
Naphthalene	L24-Se0071482	NCP	%	102			70-130	Pass	
Phenanthrene	L24-Se0071482	NCP	%	91			70-130	Pass	
Pyrene	L24-Se0071482	NCP	%	106			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	L24-Se0071482	NCP	%	105			30-130	Pass	
2.4-Dichlorophenol	L24-Se0071482	NCP	%	101			30-130	Pass	
2.4.5-Trichlorophenol	L24-Se0071482	NCP	%	112			30-130	Pass	
2.4.6-Trichlorophenol	L24-Se0071482	NCP	%	115			30-130	Pass	
2.6-Dichlorophenol	L24-Se0071482	NCP	%	101			30-130	Pass	
4-Chloro-3-methylphenol	L24-Se0071482	NCP	%	109			30-130	Pass	
Pentachlorophenol	L24-Se0071482	NCP	%	109			30-130	Pass	
Tetrachlorophenols - Total	L24-Se0071482	NCP	%	110			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	L24-Se0071482	NCP	%	109			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Methyl-4.6-dinitrophenol	L24-Se0071482	NCP	%	103			30-130	Pass	
2-Nitrophenol	L24-Se0047258	NCP	%	115			30-130	Pass	
2.4-Dimethylphenol	L24-Se0071482	NCP	%	112			30-130	Pass	
2.4-Dinitrophenol	L24-Se0047258	NCP	%	105			30-130	Pass	
2-Methylphenol (o-Cresol)	L24-Se0071482	NCP	%	112			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Se0071482	NCP	%	118			30-130	Pass	
4-Nitrophenol	L24-Se0039538	NCP	%	108			30-130	Pass	
Dinoseb	L24-Se0071482	NCP	%	102			30-130	Pass	
Phenol	L24-Se0071482	NCP	%	117			30-130	Pass	
Spike - % Recovery									
VOCs in Water by GCMS				Result 1					
Benzene	L24-Se0073499	CP	%	118			60-120	Pass	
Toluene	L24-Se0073499	CP	%	112			60-120	Pass	
Trichloroethylene(TCE)	L24-Se0073499	CP	%	111			60-120	Pass	
Xylenes (Total)	L24-Se0073499	CP	%	116			60-120	Pass	
1.2-Dichloroethane	L24-Se0073499	CP	%	106			60-120	Pass	
1.2-Dichlorobenzene	L24-Se0073499	CP	%	102			60-120	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	L24-Se0073499	CP	%	89			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Se0073499	CP	%	83			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Se0073499	CP	%	94			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Se0073499	CP	%	91			50-150	Pass	
Perfluorooctanoic acid (PFOA)	L24-Se0073499	CP	%	95			50-150	Pass	
Perfluorononanoic acid (PFNA)	L24-Se0073499	CP	%	85			50-150	Pass	
Perfluorodecanoic acid (PFDA)	L24-Se0073499	CP	%	94			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Se0073499	CP	%	101			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Se0073499	CP	%	97			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Se0073499	CP	%	112			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Se0073499	CP	%	82			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	L24-Se0073499	CP	%	91			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Se0073499	CP	%	98			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Se0073499	CP	%	94			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Se0073499	CP	%	93			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Se0073499	CP	%	89			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Se0073499	CP	%	97			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Se0073499	CP	%	98			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Se0073499	CP	%	101			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Se0073499	CP	%	88			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Se0073499	CP	%	87			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Se0073499	CP	%	82			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	L24-Se0073499	CP	%	92			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Se0073499	CP	%	75			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Se0073499	CP	%	69			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Se0073499	CP	%	89			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Se0073499	CP	%	93			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Se0073499	CP	%	97			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Se0073499	CP	%	90			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Se0073499	CP	%	76			50-150	Pass	
Spike - % Recovery									
				Result 1					
Chemical Oxygen Demand (COD)	L24-Se0073503	CP	%	109			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	L24-Se0073504	CP	%	94			70-130	Pass	
TRH C6-C10	L24-Se0073504	CP	%	92			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	L24-Se0073504	CP	%	83			70-130	Pass	
Toluene	L24-Se0073504	CP	%	89			70-130	Pass	
Ethylbenzene	L24-Se0073504	CP	%	99			70-130	Pass	
m&p-Xylenes	L24-Se0073504	CP	%	93			70-130	Pass	
o-Xylene	L24-Se0073504	CP	%	92			70-130	Pass	
Xylenes - Total*	L24-Se0073504	CP	%	93			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	L24-Se0073504	CP	%	85			70-130	Pass	
Spike - % Recovery									
				Result 1					
Total Organic Carbon	L24-Se0073505	CP	%	99			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	L24-Se0073506	CP	%	95			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Se0073506	CP	%	91			75-125	Pass	
Magnesium	L24-Se0073506	CP	%	97			75-125	Pass	
Potassium	L24-Se0073506	CP	%	95			75-125	Pass	
Sodium	L24-Se0073506	CP	%	89			75-125	Pass	
Spike - % Recovery									
				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Nitrogen	L24-Se0073507	CP	%	100			70-130	Pass	
Total Phosphorus	L24-Se0073507	CP	%	90			80-120	Pass	
Spike - % Recovery									
				Result 1					
Chromium (VI)	L24-Se0073509	CP	%	100			80-120	Pass	
Nitrate (as N)	L24-Se0073509	CP	%	112			70-130	Pass	
Nitrite (as N)	L24-Se0073509	CP	%	100			80-120	Pass	
NOx (as N)	L24-Se0073509	CP	%	107			80-120	Pass	
Sulfate (as SO4)	L24-Se0073509	CP	%	93			70-130	Pass	
Spike - % Recovery									
OCOP in Water				Result 1					
alpha-BHC (HCH)	L24-Oc0008123	NCP	%	93			60-120	Pass	
beta-BHC (HCH)	L24-Oc0008123	NCP	%	96			60-120	Pass	
delta-BHC (HCH)	L24-Oc0008123	NCP	%	97			60-120	Pass	
Bifenthrin	L24-Oc0008123	NCP	%	97			60-120	Pass	
Endosulfan I	L24-Oc0008123	NCP	%	97			60-120	Pass	
Endosulfan II	L24-Oc0008123	NCP	%	97			60-120	Pass	
Endosulfan Sulfate	L24-Oc0008123	NCP	%	88			60-120	Pass	
Endrin	L24-Oc0008123	NCP	%	96			60-120	Pass	
Heptachlor Epoxide	L24-Oc0008123	NCP	%	78			60-120	Pass	
Heptachlor	L24-Oc0008123	NCP	%	90			60-120	Pass	
o.p-DDT	L24-Oc0008123	NCP	%	78			60-120	Pass	
Oxychlordane	L24-Oc0008123	NCP	%	97			60-120	Pass	
p.p-DDD	L24-Oc0008123	NCP	%	96			60-120	Pass	
p.p-DDE	L24-Oc0008123	NCP	%	119			60-120	Pass	
p.p-DDT	L24-Oc0008123	NCP	%	96			60-120	Pass	
Spike - % Recovery									
VOCs in Water by GCMS				Result 1					
Benzene	L24-Se0073510	CP	%	107			60-120	Pass	
Ethylbenzene	L24-Se0073510	CP	%	99			60-120	Pass	
Toluene	L24-Se0073510	CP	%	98			60-120	Pass	
Trichloroethylene(TCE)	L24-Se0073510	CP	%	89			60-120	Pass	
1.2-Dichloroethane	L24-Se0073510	CP	%	84			60-120	Pass	
1.2-Dichlorobenzene	L24-Se0073510	CP	%	86			60-120	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Se0073510	CP	%	91			75-125	Pass	
Arsenic (filtered)	L24-Se0073510	CP	%	96			75-125	Pass	
Cadmium (filtered)	L24-Se0073510	CP	%	95			75-125	Pass	
Chromium (filtered)	L24-Se0073510	CP	%	86			75-125	Pass	
Copper (filtered)	L24-Se0073510	CP	%	85			75-125	Pass	
Lead (filtered)	L24-Se0073510	CP	%	87			75-125	Pass	
Manganese (filtered)	L24-Se0073510	CP	%	87			75-125	Pass	
Mercury (filtered)	L24-Se0073510	CP	%	91			75-125	Pass	
Nickel (filtered)	L24-Se0073510	CP	%	83			75-125	Pass	
Selenium (filtered)	L24-Se0073510	CP	%	88			75-125	Pass	
Titanium (filtered)	L24-Se0073510	CP	%	89			75-125	Pass	
Zinc (filtered)	L24-Se0073510	CP	%	92			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-Se0073510	CP	%	93			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	L24-Se0073510	CP	%	73			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoropentanoic acid (PFPeA)	L24-Se0073510	CP	%	70			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Se0073510	CP	%	86			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Se0073510	CP	%	68			50-150	Pass	
Perfluorooctanoic acid (PFOA)	L24-Se0073510	CP	%	80			50-150	Pass	
Perfluorononanoic acid (PFNA)	L24-Se0073510	CP	%	74			50-150	Pass	
Perfluorodecanoic acid (PFDA)	L24-Se0073510	CP	%	79			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Se0073510	CP	%	88			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Se0073510	CP	%	84			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Se0073510	CP	%	84			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Se0073510	CP	%	66			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	L24-Se0073510	CP	%	75			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Se0073510	CP	%	81			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Se0073510	CP	%	84			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Se0073510	CP	%	75			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Se0073510	CP	%	72			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Se0073510	CP	%	82			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Se0073510	CP	%	78			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Se0073510	CP	%	75			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Se0073510	CP	%	75			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Se0073510	CP	%	73			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Se0073510	CP	%	75			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	L24-Se0073510	CP	%	75			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Se0073510	CP	%	62			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Se0073510	CP	%	68			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Se0073510	CP	%	74			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Se0073510	CP	%	77			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Se0073510	CP	%	84			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Se0073510	CP	%	77			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Se0073510	CP	%	62			50-150	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
				Result 1					
Total Organic Carbon	L24-Se0073514	CP	%	110			70-130	Pass	
Spike - % Recovery									
				Result 1					
Total Organic Carbon	L24-Se0073515	CP	%	109			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Se0073517	CP	%	104			75-125	Pass	
Arsenic (filtered)	L24-Se0073517	CP	%	103			75-125	Pass	
Cadmium (filtered)	L24-Se0073517	CP	%	106			75-125	Pass	
Chromium (filtered)	L24-Se0073517	CP	%	104			75-125	Pass	
Copper (filtered)	L24-Se0073517	CP	%	100			75-125	Pass	
Lead (filtered)	L24-Se0073517	CP	%	104			75-125	Pass	
Manganese (filtered)	L24-Se0073517	CP	%	104			75-125	Pass	
Mercury (filtered)	L24-Se0073517	CP	%	103			75-125	Pass	
Nickel (filtered)	L24-Se0073517	CP	%	100			75-125	Pass	
Selenium (filtered)	L24-Se0073517	CP	%	93			75-125	Pass	
Titanium (filtered)	L24-Se0073517	CP	%	105			75-125	Pass	
Zinc (filtered)	L24-Se0073517	CP	%	114			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-Se0073517	CP	%	112			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
VOCs in Water by GCMS				Result 1	Result 2	RPD			
Benzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Carbon tetrachloride	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
DCM	L24-Se0073489	CP	ug/L	< 5	< 5	<1	30%	Pass	
Ethylbenzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobutadiene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Styrene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perchloroethene (PCE)	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Toluene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethylene(TCE)	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Vinyl Chloride	L24-Se0073489	CP	ug/L	< 0.2	< 0.2	<1	30%	Pass	
Xylenes (Total)	L24-Se0073489	CP	ug/L	< 3	< 3	<1	30%	Pass	
1.1-Dichloroethane	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	L24-Se0073489	CP	ug/L	< 2	< 2	<1	30%	Pass	
1.1.1-Trichloroethane	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichlorobenzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trichlorobenzene	L24-Se0073489	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	L24-Se0073489	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-Se0073489	CP	mg/L	160	170	2.0	30%	Pass	
Nitrate (as N)	L24-Se0073489	CP	mg/L	2.1	2.6	22	30%	Pass	
Nitrite (as N)	L24-Se0073489	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
Sulfate (as SO4)	L24-Se0073489	CP	mg/L	17	17	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	L24-Se0067970	NCP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-Se0067970	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Magnesium	L24-Se0067970	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Potassium	L24-Se0067970	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Sodium	L24-Se0067970	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chemical Oxygen Demand (COD)	L24-Se0073490	CP	mg/L	< 25	< 25	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Atrazine	L24-Se0073491	CP	ug/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	L24-Se0073492	CP	uS/cm	740	750	<1	30%	Pass	
pH (at 25 °C)	L24-Se0073492	CP	pH Units	6.2	6.1	1.0	30%	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	L24-Se0073492	CP	mg/L	450	450	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Organic Carbon	L24-Se0073494	CP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Organic Carbon	L24-Se0073495	CP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	L24-Se0073495	CP	mg/L	41	44	8.0	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-Se0073495	CP	mg/L	2.8	2.6	6.0	30%	Pass	
Magnesium	L24-Se0073495	CP	mg/L	49	50	3.0	30%	Pass	
Potassium	L24-Se0073495	CP	mg/L	10	11	3.0	30%	Pass	
Sodium	L24-Se0073495	CP	mg/L	340	350	2.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chemical Oxygen Demand (COD)	L24-Se0073496	CP	mg/L	< 25	< 25	<1	30%	Pass	
Total Nitrogen	L24-Se0073496	CP	mg/L	6.7	6.0	<1	30%	Pass	
Total Phosphorus	L24-Se0073496	CP	mg/L	0.02	0.02	16	20%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Se0073496	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Arsenic (filtered)	L24-Se0073496	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	L24-Se0073496	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Se0073496	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Se0073496	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Lead (filtered)	L24-Se0073496	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Manganese (filtered)	L24-Se0073496	CP	mg/L	0.042	0.042	<1	30%	Pass	
Mercury (filtered)	L24-Se0073496	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Se0073496	CP	mg/L	0.002	0.002	<1	30%	Pass	
Selenium (filtered)	L24-Se0073496	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-Se0073496	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc (filtered)	L24-Se0073496	CP	mg/L	0.005	0.007	21	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Se0073496	CP	mg/L	9.1	9.1	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	L24-Se0073497	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C15-C28	L24-Se0073497	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C29-C36	L24-Se0073497	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH >C10-C16	L24-Se0073497	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C16-C34	L24-Se0073497	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C34-C40	L24-Se0073497	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dichlorophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.5-Trichlorophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.6-Trichlorophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.6-Dichlorophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chloro-3-methylphenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pentachlorophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachlorophenols - Total	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	L24-Se0073497	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Nitrophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dimethylphenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dinitrophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Methylphenol (o-Cresol)	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
4-Nitrophenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dinoseb	L24-Se0073497	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Phenol	L24-Se0073497	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	L24-Se0073498	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C6-C10	L24-Se0073498	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	L24-Se0073498	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	L24-Se0073498	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	L24-Se0073498	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	L24-Se0073498	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	L24-Se0073498	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	L24-Se0073498	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	L24-Se0073498	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Se0073498	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Se0073498	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	L24-Se0073499	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C15-C28	L24-Se0073499	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C29-C36	L24-Se0073499	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH >C10-C16	L24-Se0073499	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C16-C34	L24-Se0073499	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C34-C40	L24-Se0073499	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
VOCs in Water by GCMS				Result 1	Result 2	RPD			
Benzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Carbon tetrachloride	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
DCM	L24-Se0073499	CP	ug/L	< 5	< 5	<1	30%	Pass	
Ethylbenzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobutadiene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Styrene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perchloroethene (PCE)	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Toluene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethylene(TCE)	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Vinyl Chloride	L24-Se0073499	CP	ug/L	< 0.2	< 0.2	<1	30%	Pass	
Xylenes (Total)	L24-Se0073499	CP	ug/L	< 3	< 3	<1	30%	Pass	
1.1-Dichloroethane	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	L24-Se0073499	CP	ug/L	< 2	< 2	<1	30%	Pass	
1.1.1-Trichloroethane	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
VOCs in Water by GCMS				Result 1	Result 2	RPD			
1.1.2.2-Tetrachloroethane	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichlorobenzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trichlorobenzene	L24-Se0073499	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	L24-Se0073499	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-Se0073499	CP	mg/L	59	61	3.0	30%	Pass	
Chromium (VI)	L24-Se0073499	CP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Nitrate (as N)	L24-Se0073499	CP	mg/L	2.2	1.9	15	30%	Pass	
Nitrite (as N)	L24-Se0073499	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx (as N)	L24-Se0073499	CP	mg/L	2.2	1.9	15	20%	Pass	
Sulfate (as SO4)	L24-Se0073499	CP	mg/L	8.0	8.1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	L24-Se0073500	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chemical Oxygen Demand (COD)	L24-Se0073501	CP	mg/L	< 25	< 25	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Atrazine	L24-Se0073502	CP	ug/L	< 0.1	< 0.1	<1	30%	Pass	
Conductivity (at 25 °C)	L24-Se0073502	CP	uS/cm	320	320	<1	30%	Pass	
pH (at 25 °C)	L24-Se0073502	CP	pH Units	6.0	5.8	4.0	30%	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	L24-Se0073502	CP	mg/L	190	190	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Se0073503	CP	mg/L	0.05	< 0.05	10	30%	Pass	
Arsenic (filtered)	L24-Se0073503	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	L24-Se0073503	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Se0073503	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Se0073503	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Lead (filtered)	L24-Se0073503	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Se0073503	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Mercury (filtered)	L24-Se0073503	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Se0073503	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Selenium (filtered)	L24-Se0073503	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-Se0073503	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc (filtered)	L24-Se0073503	CP	mg/L	0.014	0.014	5.0	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Se0073503	CP	mg/L	6.8	6.9	1.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorodecanoic acid (PFDA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Se0073504	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Se0073504	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	L24-Se0073505	CP	mg/L	0.02	0.02	<1	30%	Pass	

Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-Se0073505	CP	mg/L	0.8	0.8	1.0	30%	Pass	
Magnesium	L24-Se0073505	CP	mg/L	3.5	3.5	1.0	30%	Pass	
Potassium	L24-Se0073505	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Sodium	L24-Se0073505	CP	mg/L	25	25	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Nitrogen	L24-Se0073506	CP	mg/L	3.2	3.1	5.0	30%	Pass	
Total Phosphorus	L24-Se0073506	CP	mg/L	0.03	0.04	17	20%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	L24-Se0073508	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C15-C28	L24-Se0073508	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C29-C36	L24-Se0073508	CP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH >C10-C16	L24-Se0073508	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C16-C34	L24-Se0073508	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C34-C40	L24-Se0073508	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dichlorophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.5-Trichlorophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.6-Trichlorophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.6-Dichlorophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chloro-3-methylphenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pentachlorophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachlorophenols - Total	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	L24-Se0073508	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Nitrophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dimethylphenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dinitrophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Methylphenol (o-Cresol)	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Nitrophenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
Dinoseb	L24-Se0073508	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Phenol	L24-Se0073508	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
OCOP in Water				Result 1	Result 2	RPD			
alpha-BHC (HCH)	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
beta-BHC (HCH)	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
delta-BHC (HCH)	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Bifenthrin	L24-Oc0002195	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Endosulfan II	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Endosulfan Sulfate	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Endrin	L24-Oc0002195	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Heptachlor Epoxide	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Heptachlor	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
o.p-DDT	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Oxychlordane	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
p.p-DDD	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
p.p-DDE	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
p.p-DDT	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Se0073509	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Se0073509	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	L24-Se0073512	CP	uS/cm	310	320	1.0	30%	Pass	
pH (at 25 °C)	L24-Se0073512	CP	pH Units	6.7	6.5	3.0	30%	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	L24-Se0073512	CP	mg/L	190	190	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Nitrogen	L24-Se0073516	CP	mg/L	< 0.2	3.4	11	30%	Pass	
Total Phosphorus	L24-Se0073516	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dichlorophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.5-Trichlorophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.6-Trichlorophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.6-Dichlorophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chloro-3-methylphenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pentachlorophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachlorophenols - Total	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	L24-Se0073516	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Nitrophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dimethylphenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dinitrophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Methylphenol (o-Cresol)	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Nitrophenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dinoseb	L24-Se0073516	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Phenol	L24-Se0073516	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Se0065832	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Arsenic (filtered)	L24-Se0065832	NCP	mg/L	0.002	0.002	3.0	30%	Pass	
Cadmium (filtered)	L24-Se0065832	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Se0065832	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Se0065832	NCP	mg/L	0.012	0.010	19	30%	Pass	
Lead (filtered)	L24-Se0065832	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Se0065832	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Mercury (filtered)	L24-Se0065832	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Se0065832	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Selenium (filtered)	L24-Se0065832	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-Se0065832	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc (filtered)	L24-Se0065832	NCP	mg/L	0.006	0.006	<1	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Se0065832	NCP	mg/L	12	12	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	L24-Se0073518	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-Se0073518	CP	mg/L	< 5	< 5	<1	30%	Pass	
Nitrate (as N)	L24-Se0073518	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Nitrite (as N)	L24-Se0073518	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx (as N)	L24-Se0073518	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
Sulfate (as SO4)	L24-Se0073518	CP	mg/L	< 1	< 1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Se0073518	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Arsenic (filtered)	L24-Se0073518	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	L24-Se0073518	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Se0073518	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Se0073518	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Lead (filtered)	L24-Se0073518	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Se0073518	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Mercury (filtered)	L24-Se0073518	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-Se0073518	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Selenium (filtered)	L24-Se0073518	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-Se0073518	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc (filtered)	L24-Se0073518	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Se0073518	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	N/A
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
N09	Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Natalie Hill	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Inorganic
Douglas Todd	Senior Analyst-Metal
Mary Makarios	Senior Analyst-Inorganic
Patrick Patfield	Senior Analyst-Organic
Patrick Patfield	Senior Analyst-PFAS
Patrick Patfield	Senior Analyst-Volatile
Sam Becker	Senior Analyst-Inorganic

Kim Rodgers
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request

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CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN 50 005 085 521

☐ **Sydney Laboratory** Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066 02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory** Unit 1 21 Smallwood Place Murarrie QLD 4172 07 3902 4600 EnviroSampleQLD@eurofins.com

☑ **Perth Laboratory** Unit 2 91 Leach Highway Kewdale WA 6105 08 9251 9600 EnviroSampleWA@eurofins.com

☐ **Melbourne Laboratory** 6 Monterey Road Dandenong South VIC 3175 03 8564 5000 EnviroSampleVic@eurofins.com

Company	SLR Consulting Australia Pty Ltd	**Project №**	72519	**Project Manager**	Phuntsho Wangdi	**Sampler(s)**	Pema Dorji, Kavindi Sahabandu
Address	Level 1/500 Hay Street, Subiaco, WA	**Project Name**	Banksia Landfill site GME 2024	**EDD Format** ESdat, EQuIS etc	ESdat	**Handed over by**	Pema Dorji, Kavindi Sahabandu
						Email for Invoice	AccountsPayableAU@slrconsulting.com
Contact Name	Phuntsho Wangdi					**Email for Results**	pwangdi@slrconsulting.com, pdorji@slrconsulting.com
Phone №	0433 907 756						
Special Directions							
Purchase Order							
Quote ID №	SLR 050324 -Suite 2 Inc PFAS and Organics						

Analysis (When metals are requested, please specify "Total" or "Filtered". SLR to confirm lab level if volume is not specified)

Containers (Change container type & size if necessary.)

Required Turnaround Time (TAT) (Default will be 5 days if not ticked. ♦Surcharge will apply)

☐ Overnight (reporting by 9am)♦ ☐ Same day♦ ☐ 1 day♦ ☐ 2 days♦ ☐ 3 days♦ ☑ 5 days (Standard) ☐ Other( )

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Physio-chemical – pH, EC, Eh, DO	Nutrients – COD, NH3, nitrate, total nitrogen, total phosphorus, TDS, TOC	Major ions – Ca, Mg, K, Na, Cl, bicarbonate, sulfate	Dissolved metals – Al, As, Cd, Cr (III+IV), Cu, Pb, Mn, Mg, Hg, Ni, Ti, Se, Zn	Total Metals – Fe	PFAS/PFOA - 28 Suite Standard LOR	BTEX, TPH/TRH, PHENOLS, PAH, ATRIZINE, PCB,UT OCP/OPP, TCE/PCE	HOLD								500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964; WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	GW1S	26-09-2024	W	X	X	X	X	X	X	X																
2	GW1D	26-09-2024	W	X	X	X	X	X	X	X																
3	SE3S-R	24-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved metals
4	GW3D	24-09-2024	W	X	X	X	X	X	X	X																
5	SE4S-R	27-09-2024	W	X	X	X	X	X	X	X	X															Advise if the water is enough for analysis. Lab filter required for dissolved metals
6	SE4D	24-09-2024	W	X	X	X	X	X	X	X																
7	GW5S	27-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved metals
8	GW5D	26-09-2024	W																							Dry (No sample collected)
9	SE6S	25-09-2024	W	X	X	X	X	X	X	X																
10	GW6D	25-09-2024	W	X	X	X	X	X	X	X																
11	GW7S	24-09-2024	W	X	X	X	X	X	X	X																
12	GW7D-R	24-09-2024	W	X	X	X	X	X	X	X																
13	GW8D	24-09-2024	W	X	X	X	X	X	X	X																
14	GW9S	25-09-2024	W	X	X	X	X	X	X	X																
15	GW9D	25-09-2024	W	X	X	X	X	X	X	X																
16	SE10S	26-09-2024	W	X	X	X	X	X	X	X																
17	GW10D	26-09-2024	W	X	X	X	X	X	X	X																
18	GW11S	25-09-2024	W	X	X	X	X	X	X	X																
19	GW11D	25-09-2024	W	X	X	X	X	X	X	X																
20	GW12S	26-09-2024	W																							Dry (No sample collected)
21	GW12D	26-09-2024	W	X	X	X	X	X	X	X																
22	GW13S	25-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved metals
23	GW13D	26-09-2024	W																							Dry (No sample collected)
24	GW22S	25-09-2024	W	X	X	X	X	X	X	X																
25	GW22D	25-09-2024	W	X	X	X	X	X	X	X																
26	GW23S	25-09-2024	W	X	X	X	X	X	X	X																
27	GW23D	25-09-2024	W	X	X	X	X	X	X	X																
34	QC01	24-09-2024	W	X	X	X	X	X	X	X																
35	QC03	25-09-2024	W	X	X	X	X	X	X	X																
36	FB01	24-09-2024	W	X	X	X	X	X	X																	
37	RS01	24-09-2024	W	X	X	X	X	X	X																	
38	FB02	25-09-2024	W	X	X	X	X	X	X																	
39	RS02	25-09-2024	W	X	X	X	X	X	X																	
40	TB01		W							X																
41																										
42																										
	Total Counts			30	30	30	30	30	30	27	1															

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

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | mgt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins | mgt Standard Terms and Conditions is available on request.

SLR Consulting Australia Pty Ltd
Level 1, 500 Hay Street
Subiaco
WA 6008

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Accreditation Number 2377
Site Number 2370 & 2554

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: **Pema Dorji**

Report **1144222-W**
Project name BANKSIA LANDFILL SITE GME 2024
Project ID 72519
Received Date Sep 30, 2024

Client Sample ID			**TDS LEACHATE CELL 1**	**PLP1**	**PSD1**	**PSD2**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Se0074122**	**L24-Se0074123**	**L24-Se0074124**	**L24-Se0074125**
Date Sampled			**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	0.02	mg/L	< 0.02	[G01]< 1	< 0.02	< 0.02
TRH C10-C14	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04	< 0.04
TRH C6-C10	0.02	mg/L	< 0.02	[G01]< 1	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02	< 1	< 0.02	< 0.02
TRH >C10-C16	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
BTEX						
Benzene	0.001	mg/L	< 0.001	[G01]< 0.05	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	[G01]< 0.05	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	[G01]< 0.05	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	[G01]< 0.1	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	[G01]< 0.05	< 0.001	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003	[G01]< 0.15	< 0.003	< 0.003
BTEX						
4-Bromofluorobenzene (surr.)	1	%	82	83	89	82
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.001	mg/L	< 0.001	[G01]< 0.05	< 0.001	< 0.001
VOCs in Water by GCMS						
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TDS LEACHATE CELL 1	PLP1	PSD1	PSD2
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Se0074122**	**L24-Se0074123**	**L24-Se0074124**	**L24-Se0074125**
Date Sampled			**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**
Test/Reference	LOR	Unit				
VOCs in Water by GCMS						
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.02	mg/L	1.1	1100	0.14	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	680	4700	54	< 25
Chloride	5	mg/L	9200	6200	48	32
Chromium (VI)	0.002	mg/L	0.1	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	34000	28000	440	330
Dissolved Oxygen	0.1	mg/L	8.3	< 0.1	5.7	8.5
Nitrate (as N)	0.01	mg/L	< 0.01	2.5	2.4	1.4
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	0.18	< 0.01
NOx (as N)	0.01	mg/L	< 0.01	2.5	2.6	1.4
pH (at 25 °C)	0.1	pH Units	6.0	7.9	6.5	6.5
Redox Potential		mV	250	-243.9	150	160
Sulfate (as SO4)	1	mg/L	730	24	31	28
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	20000	17000	270	200
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	1200	3.3	1.5
Total Nitrogen	0.2	mg/L	< 0.2	1200	5.9	2.9
Total Organic Carbon	5	mg/L	8.5	3700	12	5.2
Total Phosphorus	0.01	mg/L	< 0.01	11	0.15	< 0.01
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	0.45	< 0.002	< 0.002
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
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

Client Sample ID			TDS LEACHATE CELL 1	PLP1	PSD1	PSD2
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Se0074122**	**L24-Se0074123**	**L24-Se0074124**	**L24-Se0074125**
Date Sampled			**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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
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	%	76	82	57	87
p-Terphenyl-d14 (surr.)	1	%	122	124	68	91
Phenols (Halogenated)						
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	77	81	132	65
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
OCOP in Water						
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001

Client Sample ID			TDS LEACHATE CELL 1	PLP1	PSD1	PSD2
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Se0074122**	**L24-Se0074123**	**L24-Se0074124**	**L24-Se0074125**
Date Sampled			**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**
Test/Reference	LOR	Unit				
OCOP in Water						
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	0.003	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
PCB in Water						
PCB	0.02	ug/L	< 0.02	< 0.02	< 0.02	< 0.02
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	21	5200	85	59
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	21	5200	85	59
Heavy Metals						
Aluminium	0.05	mg/L	< 0.05	0.60	3.6	1.7
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.5	0.57	0.32
Arsenic	0.001	mg/L	0.002	0.10	0.004	0.001
Arsenic (filtered)	0.001	mg/L	0.002	0.051	< 0.001	< 0.001
Barium (filtered)	0.01	mg/L	0.47	0.75	0.04	0.04
Beryllium (filtered)	0.001	mg/L	< 0.001	< 0.01	< 0.001	< 0.001
Boron (filtered)	0.05	mg/L	0.54	18	0.08	< 0.05
Cadmium	0.0001	mg/L	0.0001	0.0003	< 0.0001	< 0.0001
Cadmium (filtered)	0.0001	mg/L	0.0001	< 0.002	< 0.0001	< 0.0001
Chromium	0.001	mg/L	0.10	0.47	0.005	0.003
Chromium (filtered)	0.001	mg/L	0.10	0.45	< 0.001	< 0.001
Cobalt	0.001	mg/L	< 0.001	0.035	< 0.001	< 0.001
Cobalt (filtered)	0.001	mg/L	< 0.001	0.035	< 0.001	< 0.001
Copper	0.001	mg/L	< 0.001	0.008	0.015	0.002
Copper (filtered)	0.001	mg/L	< 0.001	0.008	0.012	0.002
Iron	0.01	mg/L	0.02	6.6	1.7	0.56
Lead	0.001	mg/L	< 0.001	0.015	0.008	0.001
Lead (filtered)	0.001	mg/L	< 0.001	0.013	0.006	< 0.001
Manganese	0.005	mg/L	1.5	0.14	0.009	< 0.005
Manganese (filtered)	0.005	mg/L	1.3	0.14	0.008	< 0.005

Client Sample ID			TDS LEACHATE CELL 1	PLP1	PSD1	PSD2
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Se0074122**	**L24-Se0074123**	**L24-Se0074124**	**L24-Se0074125**
Date Sampled			**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**
Test/Reference	LOR	Unit				
Heavy Metals						
Mercury	0.0001	mg/L	< 0.0001	< 0.001	< 0.0001	< 0.0001
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.001	< 0.0001	< 0.0001
Molybdenum	0.001	mg/L	0.73	0.055	0.002	0.001
Molybdenum (filtered)	0.001	mg/L	0.45	0.055	0.001	< 0.001
Nickel	0.001	mg/L	0.021	0.46	0.005	0.001
Nickel (filtered)	0.001	mg/L	0.020	0.46	0.003	< 0.001
Selenium	0.001	mg/L	0.001	< 0.01	< 0.001	< 0.001
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.01	< 0.001	< 0.001
Silver (filtered)	0.001	mg/L	< 0.001	< 0.05	< 0.001	< 0.001
Titanium	0.005	mg/L	< 0.005	0.31	0.016	0.010
Titanium (filtered)	0.005	mg/L	< 0.005	0.31	< 0.005	< 0.005
Vanadium (filtered)	0.005	mg/L	0.015	< 0.05	< 0.005	< 0.005
Zinc	0.005	mg/L	< 0.005	0.25	0.15	0.023
Zinc (filtered)	0.005	mg/L	< 0.005	0.24	0.14	0.018
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	740	120	6.3	4.8
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	5200	86	30	26
Magnesium	0.5	mg/L	740	120	6.0	4.6
Potassium	0.5	mg/L	34	1100	20	11
Sodium	0.5	mg/L	2800	4000	39	27
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	2.1	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	1.9	0.09	0.07
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	3.5	0.10	0.06
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	< 0.05	[N09]0.43	< 0.05	< 0.05
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	[N09]1.1	[N09]0.03	[N09]0.02
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	0.09	0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	0.05	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	34	20	66	88
13C5-PFPeA (surr.)	1	%	61	39	69	99
13C5-PFHxA (surr.)	1	%	62	43	73	102
13C4-PFHpA (surr.)	1	%	62	58	72	105
13C8-PFOA (surr.)	1	%	63	50	73	97
13C5-PFNA (surr.)	1	%	62	26	73	107
13C6-PFDA (surr.)	1	%	62	26	72	96
13C2-PFUnDA (surr.)	1	%	57	15	69	94
13C2-PFDoDA (surr.)	1	%	52	INT	64	93
13C2-PFTeDA (surr.)	1	%	32	INT	46	79

Client Sample ID			TDS LEACHATE CELL 1	PLP1	PSD1	PSD2
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-Se0074122**	**L24-Se0074123**	**L24-Se0074124**	**L24-Se0074125**
Date Sampled			**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**	**Sep 26, 2024**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	0.10	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	58	26	68	95
D3-N-MeFOSA (surr.)	1	%	73	29	72	116
D5-N-EtFOSA (surr.)	1	%	89	30	81	121
D7-N-MeFOSE (surr.)	1	%	48	INT	47	70
D9-N-EtFOSE (surr.)	1	%	47	INT	45	65
D5-N-EtFOSAA (surr.)	1	%	57	22	67	92
D3-N-MeFOSAA (surr.)	1	%	51	22	59	90
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	0.02	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	3.6	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	0.09	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	59	34	75	105
13C2-6:2 FTSA (surr.)	1	%	58	115	71	104
13C2-8:2 FTSA (surr.)	1	%	54	86	75	106
13C2-10:2 FTSA (surr.)	1	%	53	12	71	93
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	14	0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	< 0.01	0.70	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	[N09]0.08	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	[N09]0.56	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	[N09]0.02	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	[N09]0.73	[N09]0.06	[N09]0.02
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	57	58	79	108
18O2-PFHxS (surr.)	1	%	59	64	76	103
13C8-PFOS (surr.)	1	%	59	62	73	98
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	1.29	0.06	0.02
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	29.07	0.3	0.17
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	1.83	0.09	0.04
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	2.39	0.09	0.04
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	28.01	0.29	0.17

Client Sample ID			LEP1	LEP3
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Se0074126	L24-Se0074127
Date Sampled			Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons				
TRH C6-C9	0.02	mg/L	[G01]< 1	[G01]< 1
TRH C10-C14	0.02	mg/L	< 0.02	5.5
TRH C15-C28	0.04	mg/L	< 0.04	4.9
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	10.4
TRH C6-C10	0.02	mg/L	[G01]< 1	[G01]< 1
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 1	< 1
TRH >C10-C16	0.02	mg/L	< 0.02	8.6
TRH >C10-C16 less Naphthalene (F2)*[N01]	0.02	mg/L	< 0.02	8.6
TRH >C16-C34	0.05	mg/L	< 0.05	2.9
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	11.5
BTEX				
Benzene	0.001	mg/L	[G01]< 0.05	[G01]< 0.05
Toluene	0.001	mg/L	[G01]< 0.05	[G01]< 0.05
Ethylbenzene	0.001	mg/L	[G01]< 0.05	[G01]< 0.05
m&p-Xylenes	0.002	mg/L	[G01]< 0.1	[G01]< 0.1
o-Xylene	0.001	mg/L	[G01]< 0.05	[G01]< 0.05
Xylenes - Total*	0.003	mg/L	[G01]< 0.15	[G01]< 0.15
BTEX				
4-Bromofluorobenzene (surr.)	1	%	89	84
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.001	mg/L	[G01]< 0.05	[G01]< 0.05
VOCs in Water by GCMS				
Benzene	0.5	ug/L	< 0.5	< 0.5
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5
DCM	5	ug/L	< 5	< 5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5
Methyl tert Butyl Ether	0.5	ug/L	< 0.5	< 0.5
Styrene	0.5	ug/L	< 0.5	< 0.5
Perchloroethene (PCE)	0.5	ug/L	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5
Trichloroethylene(TCE)	0.5	ug/L	< 0.5	< 0.5
Vinyl Chloride	0.2	ug/L	< 0.2	< 0.2
Xylenes (Total)	3	ug/L	< 3	< 3
1.1-Dichloroethane	0.5	ug/L	< 0.5	< 0.5
1.2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5
1.1-Dichloroethene	0.5	ug/L	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	ug/L	< 0.5	< 0.5
trans-1.2-Dichloroethene	2	ug/L	< 2	< 2
1.1.1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	ug/L	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5

Client Sample ID			LEP1	LEP3
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Se0074126	L24-Se0074127
Date Sampled			Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit		
VOCs in Water by GCMS				
1.2.4-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5
1.3.5-Trichlorobenzene	0.5	ug/L	< 0.5	< 0.5
Atrazine	0.1	ug/L	< 0.1	< 0.1
Ammonia (as N)	0.02	mg/L	420	370
Chemical Oxygen Demand (COD)	25	mg/L	3300	3800
Chloride	5	mg/L	20000	21000
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	54000	59000
Dissolved Oxygen	0.1	mg/L	0.3	0.6
Nitrate (as N)	0.01	mg/L	4.0	< 0.01
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	4.0	< 0.01
pH (at 25 °C)	0.1	pH Units	7.4	7.5
Redox Potential		mV	-36.6	54
Sulfate (as SO4)	1	mg/L	190	170
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	32000	36000
Total Kjeldahl Nitrogen	0.2	mg/L	510	500
Total Nitrogen	0.2	mg/L	510	500
Total Organic Carbon	5	mg/L	2100	2400
Total Phosphorus	0.01	mg/L	8.0	8.8
Chromium (III) (filtered)*	0.002	mg/L	0.31	0.31
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001
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	%	87	134
p-Terphenyl-d14 (surr.)	1	%	97	105
Phenols (Halogenated)				
2-Chlorophenol	0.001	mg/L	< 0.001	< 0.001
2.4-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001
2.4.5-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001
2.4.6-Trichlorophenol	0.001	mg/L	< 0.001	< 0.001
2.6-Dichlorophenol	0.001	mg/L	< 0.001	< 0.001

Client Sample ID			LEP1	LEP3
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Se0074126	L24-Se0074127
Date Sampled			Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit		
Phenols (Halogenated)				
4-Chloro-3-methylphenol	0.001	mg/L	< 0.001	< 0.001
Pentachlorophenol	0.001	mg/L	< 0.001	< 0.001
Tetrachlorophenols - Total	0.001	mg/L	< 0.001	< 0.001
Total Halogenated Phenol*	0.01	mg/L	< 0.001	< 0.001
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	0.003	mg/L	< 0.003	< 0.003
2-Methyl-4.6-dinitrophenol	0.001	mg/L	< 0.001	< 0.001
2-Nitrophenol	0.001	mg/L	< 0.001	< 0.001
2.4-Dimethylphenol	0.001	mg/L	< 0.001	< 0.001
2.4-Dinitrophenol	0.001	mg/L	< 0.001	< 0.001
2-Methylphenol (o-Cresol)	0.001	mg/L	< 0.001	< 0.001
3&4-Methylphenol (m&p-Cresol)	0.001	mg/L	< 0.001	< 0.001
Total cresols*	0.01	mg/L	< 0.01	< 0.01
4-Nitrophenol	0.001	mg/L	< 0.001	< 0.001
Dinoseb	0.002	mg/L	< 0.002	< 0.002
Phenol	0.001	mg/L	< 0.001	< 0.001
Phenol-d6 (surr.)	1	%	62	110
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1
OCOP in Water				
Aldrin	0.001	ug/L	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02
o.p-DDT	0.001	ug/L	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001
p.p-DDD	0.001	ug/L	< 0.001	< 0.001
p.p-DDE	0.001	ug/L	< 0.001	< 0.001
p.p-DDT	0.001	ug/L	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02

Client Sample ID			LEP1	LEP3
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Se0074126	L24-Se0074127
Date Sampled			Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit		
OCOP in Water				
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02
PCB in Water				
PCB	0.02	ug/L	< 0.02	< 0.02
Alkalinity (speciated)				
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	1200	960
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	1200	960
Heavy Metals				
Aluminium	0.05	mg/L	< 0.5	< 0.5
Aluminium (filtered)	0.05	mg/L	< 0.5	< 0.5
Arsenic	0.001	mg/L	0.041	0.038
Arsenic (filtered)	0.001	mg/L	0.018	0.015
Barium (filtered)	0.01	mg/L	0.95	0.98
Beryllium (filtered)	0.001	mg/L	< 0.01	< 0.01
Boron (filtered)	0.05	mg/L	39	44
Cadmium	0.0001	mg/L	< 0.002	< 0.002
Cadmium (filtered)	0.0001	mg/L	< 0.002	< 0.002
Chromium	0.001	mg/L	0.31	0.31
Chromium (filtered)	0.001	mg/L	0.31	0.31
Cobalt	0.001	mg/L	0.020	0.020
Cobalt (filtered)	0.001	mg/L	0.020	0.020
Copper	0.001	mg/L	0.002	0.002
Copper (filtered)	0.001	mg/L	0.002	0.002
Iron	0.01	mg/L	2.5	2.5
Lead	0.001	mg/L	< 0.01	< 0.01
Lead (filtered)	0.001	mg/L	< 0.01	< 0.01
Manganese	0.005	mg/L	0.36	0.39
Manganese (filtered)	0.005	mg/L	0.36	0.39
Mercury	0.0001	mg/L	< 0.001	< 0.001
Mercury (filtered)	0.0001	mg/L	< 0.001	< 0.001
Molybdenum	0.001	mg/L	0.029	0.027
Molybdenum (filtered)	0.001	mg/L	0.029	0.027
Nickel	0.001	mg/L	0.60	0.64
Nickel (filtered)	0.001	mg/L	0.60	0.64
Selenium	0.001	mg/L	< 0.01	< 0.01
Selenium (filtered)	0.001	mg/L	< 0.01	< 0.01
Silver (filtered)	0.001	mg/L	< 0.05	< 0.05
Titanium	0.005	mg/L	0.12	0.10
Titanium (filtered)	0.005	mg/L	0.12	0.10
Vanadium (filtered)	0.005	mg/L	< 0.05	< 0.05
Zinc	0.005	mg/L	0.082	0.079
Zinc (filtered)	0.005	mg/L	0.082	0.079
Alkali Metals (filtered)				
Magnesium (filtered)	0.5	mg/L	300	330

Client Sample ID			LEP1	LEP3
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Se0074126	L24-Se0074127
Date Sampled			Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit		
Eurofins Suite B11C: Na/K/Ca/Mg				
Calcium	0.5	mg/L	330	370
Magnesium	0.5	mg/L	350	380
Potassium	0.5	mg/L	2800	3000
Sodium	0.5	mg/L	12000	13000
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	5.9	7.2
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	3.1	4.0
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	3.7	4.5
Perfluoroheptanoic acid (PFHpA)[N11]	0.05	ug/L	[N09]0.37	[N09]0.57
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	[N09]0.49	[N09]0.70
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	0.03	0.06
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	0.01	0.04
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	32	30
13C5-PFPeA (surr.)	1	%	40	40
13C5-PFHxA (surr.)	1	%	46	46
13C4-PFHpA (surr.)	1	%	54	52
13C8-PFOA (surr.)	1	%	42	48
13C5-PFNA (surr.)	1	%	19	20
13C6-PFDA (surr.)	1	%	16	14
13C2-PFUnDA (surr.)	1	%	14	13
13C2-PFDoDA (surr.)	1	%	INT	INT
13C2-PFTeDA (surr.)	1	%	INT	INT
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	19	18
D3-N-MeFOSA (surr.)	1	%	26	16
D5-N-EtFOSA (surr.)	1	%	25	17
D7-N-MeFOSE (surr.)	1	%	INT	INT
D9-N-EtFOSE (surr.)	1	%	INT	INT
D5-N-EtFOSAA (surr.)	1	%	15	13
D3-N-MeFOSAA (surr.)	1	%	14	13

Client Sample ID			LEP1	LEP3
Sample Matrix			Water	Water
Eurofins Sample No.			L24-Se0074126	L24-Se0074127
Date Sampled			Sep 26, 2024	Sep 26, 2024
Test/Reference	LOR	Unit		
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	0.02	0.03
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	1.9	2.7
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	0.03	0.10
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	28	31
13C2-6:2 FTSA (surr.)	1	%	80	97
13C2-8:2 FTSA (surr.)	1	%	22	37
13C2-10:2 FTSA (surr.)	1	%	12	INT
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	27	23
Perfluorononanesulfonic acid (PFNS)*[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)*[N15]	0.01	ug/L	0.62	0.35
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	[N09]0.15	[N09]0.13
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	[N09]0.39	[N09]0.64
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	[N09]< 0.01	[N09]0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	[N09]0.17	[N09]0.50
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	40	46
18O2-PFHxS (surr.)	1	%	54	57
13C8-PFOS (surr.)	1	%	29	32
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	0.56	1.14
Sum of PFASs (n=30)*	0.1	ug/L	43.88	44.53
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	0.66	1.2
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	1.05	1.84
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	43.05	43.91

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
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 01, 2024	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 01, 2024	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 01, 2024	7 Days
BTEX - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Oct 01, 2024	14 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Welshpool	Oct 01, 2024	7 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Welshpool	Oct 01, 2024	14 Day
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Welshpool	Oct 01, 2024	14 Day
VOCs in Water by GCMS - Method: ARL132 - Purgeable Volatile Organic Compounds in Water by GCMS	Welshpool	Oct 03, 2024	14 Days
Atrazine - Method: ARL042 - Base Neutral Pesticides in Water	Welshpool	Oct 03, 2024	7 Days
Chemical Oxygen Demand (COD) - Method: LTM-INO-4220 Determination of COD in Water	Melbourne	Oct 16, 2024	28 Days
Chromium (VI) - Method: ARL316 - Hexavalent Chromium in Water by Discrete Analyser	Welshpool	Oct 01, 2024	1 Day
pH (at 25 °C) - Method: LTM-GEN-7090 pH in water by ISE	Welshpool	Oct 01, 2024	6 Hours
Redox Potential - Method: ARL119 - Reduction/Oxidation Potential of Water	Welshpool	Oct 01, 2024	28 Day
Total Organic Carbon - Method: LTM-INO-4060 Total Organic Carbon in water and soil	Melbourne	Oct 16, 2024	28 Days
Chromium (III) (filtered)* - Method: ARL402/403 - Metals in Water by ICPOES/ICPMS	Welshpool	Sep 30, 2024	180 Days
OCOP in Water - Method: ARL No. 002 - OCOP and PCB in Water	Welshpool	Oct 01, 2024	7 Days
PCB in Water - Method: ARL002 - OCOP and PCB in Water	Welshpool	Oct 01, 2024	14 Days
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 03, 2024	28 Days
Heavy Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 03, 2024	28 Days
Metals M8 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 01, 2024	28 Days
Metals M8 filtered - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 01, 2024	28 Days
Alkali Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 01, 2024	6 Months
Eurofins Suite B11C: Na/K/Ca/Mg - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Oct 03, 2024	180 Days
Ammonia (as N) - Method: ARL303 - Ammonia in Water by Discrete Analyser	Welshpool	Oct 01, 2024	28 Days
Nitrate (as N) - Method: ARL313/319 - NOx in Water by Discrete Analyser	Welshpool	Oct 01, 2024	28 Days
Nitrite (as N)	Welshpool	Oct 01, 2024	2 Days

Description	Testing Site	Extracted	Holding Time
- Method: ARL311 - Nitrite in Water by Discrete Analyser			
NOx (as N)	Welshpool	Oct 01, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Total Kjeldahl Nitrogen	Welshpool	Sep 30, 2024	28 Day
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Nitrogen	Welshpool	Oct 01, 2024	28 Days
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Phosphorus	Welshpool	Oct 01, 2024	28 Days
- Method: ARL308 - Total Phosphorus in Water by Discrete Analyser			
Chloride	Welshpool	Oct 01, 2024	28 Days
- Method: ARL305 - Chloride in Water by Discrete Analyser			
Sulfate (as SO4)	Welshpool	Oct 01, 2024	28 Days
- Method: ARL301 - Sulfate in Water by Discrete Analyser			
Alkalinity (speciated)	Welshpool	Oct 01, 2024	14 Days
- Method: LTM-INO-4250 Alkalinity by Electrometric Titration			
Conductivity (at 25 °C)	Welshpool	Oct 03, 2024	28 Days
- Method: LTM-INO-4030 Conductivity			
Total Dissolved Solids Dried at 180 °C ± 2 °C	Welshpool	Oct 03, 2024	7 Days
- Method: ARL No. 017 - Total Dissolved Solids			
Perfluoroalkyl carboxylic acids (PFCAs)	Welshpool	Oct 01, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
Perfluoroalkyl sulfonamido substances	Welshpool	Oct 01, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Welshpool	Oct 01, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
Perfluoroalkyl sulfonic acids (PFSAs)	Welshpool	Oct 01, 2024	28 Days
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			
PFASs Summations	Welshpool	Oct 01, 2024	
- Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS			

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Project Name: BANKSIA LANDFILL SITE GME 2024
Project ID: 72519

Order No.:
Report #: 1144222
Phone: 08 9388 8360
Fax: 08 9381 2360

Received: Sep 30, 2024 3:00 PM
Due: Oct 7, 2024
Priority: 5 Day
Contact Name: *ALL RESULTS/SRA/COC"S

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail	Aluminium	Aluminium (filtered)	Atrazine	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Chemical Oxygen Demand (COD)	Chromium (III) (filtered)*	Chromium (VI)	Cobalt	Cobalt (filtered)	Dissolved Oxygen	Iron	Magnesium (filtered)	Manganese	Manganese (filtered)	Molybdenum	Molybdenum (filtered)	pH (at 25 °C)	Redox Potential	Selenium	Selenium (filtered)	Silver (filtered)	Titanium	Titanium (filtered)	Total Organic Carbon	Vanadium (filtered)	Metals M8	Metals M8 filtered	Eurofins Suite B4A	Eurofins Suite B11C: Na/K/Ca/Mg	OCOP in Water	PCB in Water	VOCs in Water by GCMS	Total Dissolved Solids (TDS)	Eurofins Suite B19D	Eurofins Suite B11E	Per- and Polyfluoroalkyl Substances (PFASs)
Perth Laboratory - NATA # 2377 Site # 2370 & 2554	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254							X																			X													
External Laboratory																																							

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID																																				
1	TDS LEACHATE CELL 1	Sep 26, 2024		Water	L24-Se0074122	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	PLP1	Sep 26, 2024		Water	L24-Se0074123	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	PSD1	Sep 26, 2024		Water	L24-Se0074124	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	PSD2	Sep 26, 2024		Water	L24-Se0074125	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	LEP1	Sep 26, 2024		Water	L24-Se0074126	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	LEP3	Sep 26, 2024		Water	L24-Se0074127	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Test Counts						6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	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 (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

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

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.02			0.02	Pass	
TRH C15-C28	mg/L	< 0.04			0.04	Pass	
TRH C29-C36	mg/L	< 0.04			0.04	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.02			0.02	Pass	
TRH >C16-C34	mg/L	< 0.05			0.05	Pass	
TRH >C34-C40	mg/L	< 0.05			0.05	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.001			0.001	Pass	
Method Blank							
VOCs in Water by GCMS							
Benzene	ug/L	< 0.5			0.5	Pass	
Carbon tetrachloride	ug/L	< 0.5			0.5	Pass	
Chlorobenzene	ug/L	< 0.5			0.5	Pass	
DCM	ug/L	< 5			5	Pass	
Ethylbenzene	ug/L	< 0.5			0.5	Pass	
Hexachlorobutadiene	ug/L	< 0.5			0.5	Pass	
Methyl tert Butyl Ether	ug/L	< 0.5			0.5	Pass	
Styrene	ug/L	< 0.5			0.5	Pass	
Perchloroethene (PCE)	ug/L	< 0.5			0.5	Pass	
Toluene	ug/L	< 0.5			0.5	Pass	
Trichloroethylene(TCE)	ug/L	< 0.5			0.5	Pass	
Vinyl Chloride	ug/L	< 0.2			0.2	Pass	
Xylenes (Total)	ug/L	< 3			3	Pass	
1.1-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichloroethane	ug/L	< 0.5			0.5	Pass	
1.1-Dichloroethene	ug/L	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	ug/L	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	ug/L	< 2			2	Pass	
1.1.1-Trichloroethane	ug/L	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	ug/L	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
1.3.5-Trichlorobenzene	ug/L	< 0.5			0.5	Pass	
Method Blank							
Atrazine	ug/L	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Ammonia (as N)	mg/L	< 0.02			0.02	Pass	
Chemical Oxygen Demand (COD)	mg/L	< 25			25	Pass	
Chloride	mg/L	< 5			5	Pass	
Chromium (VI)	mg/L	< 0.002			0.002	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	mg/L	< 5			5	Pass	
Total Nitrogen	mg/L	< 0.2			0.2	Pass	
Total Phosphorus	mg/L	< 0.01			0.01	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							
Phenols (Halogenated)							
2-Chlorophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.5-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.001			0.001	Pass	
2.6-Dichlorophenol	mg/L	< 0.001			0.001	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.001			0.001	Pass	
Pentachlorophenol	mg/L	< 0.001			0.001	Pass	
Tetrachlorophenols - Total	mg/L	< 0.001			0.001	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/L	< 0.003			0.003	Pass	
2-Methyl-4.6-dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Nitrophenol	mg/L	< 0.001			0.001	Pass	
2.4-Dimethylphenol	mg/L	< 0.001			0.001	Pass	
2.4-Dinitrophenol	mg/L	< 0.001			0.001	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.001			0.001	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.001			0.001	Pass	
4-Nitrophenol	mg/L	< 0.001			0.001	Pass	
Dinoseb	mg/L	< 0.002			0.002	Pass	
Phenol	mg/L	< 0.001			0.001	Pass	
Method Blank							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO3)	mg/L	< 5			5	Pass	
Hydroxide Alkalinity (as CaCO3)	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Aluminium	mg/L	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0001			0.0001	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Cobalt	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Manganese	mg/L	< 0.005			0.005	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Molybdenum	mg/L	< 0.001			0.001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Selenium	mg/L	< 0.001			0.001	Pass	
Titanium	mg/L	< 0.005			0.005	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Heavy Metals							
Aluminium (filtered)	mg/L	< 0.05			0.05	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Barium (filtered)	mg/L	< 0.01			0.01	Pass	
Beryllium (filtered)	mg/L	< 0.001			0.001	Pass	
Boron (filtered)	mg/L	< 0.05			0.05	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Cobalt (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Iron	mg/L	< 0.01			0.01	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	
Molybdenum (filtered)	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Silver (filtered)	mg/L	< 0.001			0.001	Pass	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Vanadium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.05			0.05	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/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	
Barium (filtered)	mg/L	< 0.01			0.01	Pass	
Beryllium (filtered)	mg/L	< 0.001			0.001	Pass	
Boron (filtered)	mg/L	< 0.05			0.05	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Cobalt (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Molybdenum (filtered)	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Silver (filtered)	mg/L	< 0.001			0.001	Pass	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Vanadium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.05			0.05	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/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	
Barium (filtered)	mg/L	< 0.01			0.01	Pass	
Beryllium (filtered)	mg/L	< 0.001			0.001	Pass	
Boron (filtered)	mg/L	< 0.05			0.05	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Cobalt (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Molybdenum (filtered)	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Silver (filtered)	mg/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Vanadium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Total Organic Carbon	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Aluminium (filtered)	mg/L	< 0.05			0.05	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Barium (filtered)	mg/L	< 0.01			0.01	Pass	
Beryllium (filtered)	mg/L	< 0.001			0.001	Pass	
Boron (filtered)	mg/L	< 0.05			0.05	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Cobalt (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Molybdenum (filtered)	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Silver (filtered)	mg/L	< 0.001			0.001	Pass	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Vanadium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Nitrate (as N)	mg/L	< 0.01			0.01	Pass	
Nitrite (as N)	mg/L	< 0.01			0.01	Pass	
NOx (as N)	mg/L	< 0.01			0.01	Pass	
Sulfate (as SO4)	mg/L	< 1			1	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o.p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p.p-DDD	ug/L	< 0.001			0.001	Pass	
p.p-DDE	ug/L	< 0.001			0.001	Pass	
p.p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
PCB in Water							
PCB	ug/L	< 0.02			0.02	Pass	
Method Blank							
Heavy Metals							
Aluminium (filtered)	mg/L	< 0.05			0.05	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Barium (filtered)	mg/L	< 0.01			0.01	Pass	
Beryllium (filtered)	mg/L	< 0.001			0.001	Pass	
Boron (filtered)	mg/L	< 0.05			0.05	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Cobalt (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Molybdenum (filtered)	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Silver (filtered)	mg/L	< 0.001			0.001	Pass	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Vanadium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	108			70-130	Pass	
TRH C10-C14	%	93			70-130	Pass	
TRH C6-C10	%	104			70-130	Pass	
TRH >C10-C16	%	93			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	95			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Toluene	%	101			70-130	Pass	
Ethylbenzene	%	108			70-130	Pass	
m&p-Xylenes	%	101			70-130	Pass	
o-Xylene	%	101			70-130	Pass	
Xylenes - Total*	%	101			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	107			70-130	Pass	
LCS - % Recovery							
VOCs in Water by GCMS							
Benzene	%	105			60-120	Pass	
Ethylbenzene	%	97			60-120	Pass	
Toluene	%	97			60-120	Pass	
Trichloroethylene(TCE)	%	87			60-120	Pass	
Xylenes (Total)	%	87			60-120	Pass	
1.2-Dichloroethane	%	84			60-120	Pass	
1.1-Dichloroethene	%	81			60-120	Pass	
1.2-Dichlorobenzene	%	85			60-120	Pass	
LCS - % Recovery							
Atrazine	%	106			60-120	Pass	
Chemical Oxygen Demand (COD)	%	117			70-130	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	%	98			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	119			70-130	Pass	
Acenaphthylene	%	112			70-130	Pass	
Anthracene	%	113			70-130	Pass	
Benz(a)anthracene	%	100			70-130	Pass	
Benzo(a)pyrene	%	115			70-130	Pass	
Benzo(b&j)fluoranthene	%	113			70-130	Pass	
Benzo(g.h.i)perylene	%	118			70-130	Pass	
Benzo(k)fluoranthene	%	119			70-130	Pass	
Chrysene	%	103			70-130	Pass	
Dibenz(a.h)anthracene	%	113			70-130	Pass	
Fluoranthene	%	114			70-130	Pass	
Fluorene	%	100			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	111			70-130	Pass	
Naphthalene	%	116			70-130	Pass	
Phenanthrene	%	110			70-130	Pass	
Pyrene	%	116			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	111			25-140	Pass	
2.4-Dichlorophenol	%	110			25-140	Pass	
2.4.5-Trichlorophenol	%	111			25-140	Pass	
2.4.6-Trichlorophenol	%	119			25-140	Pass	
2.6-Dichlorophenol	%	107			25-140	Pass	
4-Chloro-3-methylphenol	%	112			25-140	Pass	
Pentachlorophenol	%	107			25-140	Pass	
Tetrachlorophenols - Total	%	108			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	118			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	101			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Nitrophenol	%	112			25-140	Pass	
2.4-Dimethylphenol	%	105			25-140	Pass	
2.4-Dinitrophenol	%	115			25-140	Pass	
2-Methylphenol (o-Cresol)	%	107			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	109			25-140	Pass	
4-Nitrophenol	%	108			25-140	Pass	
Dinoseb	%	117			25-140	Pass	
Phenol	%	108			25-140	Pass	
LCS - % Recovery							
OCOP in Water							
Aldrin	%	110			60-120	Pass	
alpha-BHC (HCH)	%	89			60-120	Pass	
beta-BHC (HCH)	%	86			60-120	Pass	
delta-BHC (HCH)	%	96			60-120	Pass	
Chlordane	%	83			60-120	Pass	
Chlorothalonil	%	97			60-120	Pass	
Dieldrin	%	91			60-120	Pass	
Endosulfan II	%	116			60-120	Pass	
Endosulfan Sulfate	%	104			60-120	Pass	
Endrin	%	99			60-120	Pass	
Hexachlorobenzene (HCB)	%	88			60-120	Pass	
Heptachlor Epoxide	%	100			60-120	Pass	
Heptachlor	%	95			60-120	Pass	
Lindane	%	83			60-120	Pass	
Methoxychlor	%	89			60-120	Pass	
Oxychlordane	%	81			60-120	Pass	
p.p-DDD	%	84			60-120	Pass	
p.p-DDE	%	90			60-120	Pass	
p.p-DDT	%	90			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium	%	98			80-120	Pass	
Arsenic	%	102			80-120	Pass	
Cadmium	%	101			80-120	Pass	
Chromium	%	98			80-120	Pass	
Cobalt	%	93			80-120	Pass	
Copper	%	90			80-120	Pass	
Lead	%	94			80-120	Pass	
Manganese	%	94			80-120	Pass	
Mercury	%	94			80-120	Pass	
Molybdenum	%	103			80-120	Pass	
Nickel	%	89			80-120	Pass	
Selenium	%	94			80-120	Pass	
Titanium	%	97			80-120	Pass	
Zinc	%	93			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	98			80-120	Pass	
Magnesium	%	101			80-120	Pass	
Potassium	%	97			80-120	Pass	
Sodium	%	106			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	96			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Arsenic (filtered)	%	104			80-120	Pass	
Barium (filtered)	%	101			80-120	Pass	
Beryllium (filtered)	%	93			80-120	Pass	
Boron (filtered)	%	94			80-120	Pass	
Cadmium (filtered)	%	100			80-120	Pass	
Chromium (filtered)	%	94			80-120	Pass	
Cobalt (filtered)	%	94			80-120	Pass	
Copper (filtered)	%	91			80-120	Pass	
Iron	%	95			80-120	Pass	
Lead (filtered)	%	96			80-120	Pass	
Manganese (filtered)	%	94			80-120	Pass	
Mercury (filtered)	%	96			80-120	Pass	
Molybdenum (filtered)	%	101			80-120	Pass	
Nickel (filtered)	%	90			80-120	Pass	
Selenium (filtered)	%	97			80-120	Pass	
Silver (filtered)	%	91			80-120	Pass	
Titanium (filtered)	%	99			80-120	Pass	
Vanadium (filtered)	%	93			80-120	Pass	
Zinc (filtered)	%	94			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	101			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	112			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	100			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	104			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	102			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	118			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	112			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	110			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	114			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	110			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	118			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	110			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	114			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	114			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	110			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	112			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	106			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	104			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	98			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	100			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	114			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	108			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	104			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	%	106			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoropropanesulfonic acid (PFPrS)*	%	104			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	104			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	114			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	108			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	108			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	90			50-150	Pass	
LCS - % Recovery							
OCOP in Water							
Bifenthrin	%	97			60-120	Pass	
Endosulfan I	%	97			60-120	Pass	
o.p-DDT	%	78			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	98			80-120	Pass	
Arsenic (filtered)	%	103			80-120	Pass	
Barium (filtered)	%	101			80-120	Pass	
Beryllium (filtered)	%	92			80-120	Pass	
Boron (filtered)	%	95			80-120	Pass	
Cadmium (filtered)	%	99			80-120	Pass	
Chromium (filtered)	%	96			80-120	Pass	
Cobalt (filtered)	%	95			80-120	Pass	
Copper (filtered)	%	92			80-120	Pass	
Lead (filtered)	%	97			80-120	Pass	
Manganese (filtered)	%	96			80-120	Pass	
Mercury (filtered)	%	98			80-120	Pass	
Molybdenum (filtered)	%	101			80-120	Pass	
Nickel (filtered)	%	91			80-120	Pass	
Selenium (filtered)	%	96			80-120	Pass	
Silver (filtered)	%	90			80-120	Pass	
Titanium (filtered)	%	102			80-120	Pass	
Vanadium (filtered)	%	96			80-120	Pass	
Zinc (filtered)	%	95			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	102			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	102			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	92			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	106			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	112			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	106			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	88			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	96			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	92			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	82			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	104			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	96			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	100			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	98			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	98			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	98			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	94			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	76			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	92			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	88			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	114			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	102			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	94			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	98			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	%	96			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	%	96			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	98			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	98			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	100			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	90			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	84			50-150	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	98			80-120	Pass	
Arsenic (filtered)	%	103			80-120	Pass	
Barium (filtered)	%	101			80-120	Pass	
Beryllium (filtered)	%	90			80-120	Pass	
Boron (filtered)	%	92			80-120	Pass	
Cadmium (filtered)	%	100			80-120	Pass	
Chromium (filtered)	%	97			80-120	Pass	
Cobalt (filtered)	%	97			80-120	Pass	
Copper (filtered)	%	95			80-120	Pass	
Lead (filtered)	%	94			80-120	Pass	
Manganese (filtered)	%	96			80-120	Pass	
Mercury (filtered)	%	95			80-120	Pass	
Molybdenum (filtered)	%	101			80-120	Pass	
Nickel (filtered)	%	94			80-120	Pass	
Selenium (filtered)	%	89			80-120	Pass	
Silver (filtered)	%	92			80-120	Pass	
Titanium (filtered)	%	102			80-120	Pass	
Vanadium (filtered)	%	103			80-120	Pass	
Zinc (filtered)	%	97			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	103			80-120	Pass	
LCS - % Recovery							
Total Organic Carbon	%	98			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	95			80-120	Pass	
Arsenic (filtered)	%	101			80-120	Pass	
Barium (filtered)	%	100			80-120	Pass	
Beryllium (filtered)	%	90			80-120	Pass	
Boron (filtered)	%	92			80-120	Pass	
Cadmium (filtered)	%	99			80-120	Pass	
Chromium (filtered)	%	95			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Cobalt (filtered)	%	94			80-120	Pass	
Copper (filtered)	%	93			80-120	Pass	
Lead (filtered)	%	94			80-120	Pass	
Manganese (filtered)	%	94			80-120	Pass	
Mercury (filtered)	%	97			80-120	Pass	
Molybdenum (filtered)	%	100			80-120	Pass	
Nickel (filtered)	%	91			80-120	Pass	
Selenium (filtered)	%	100			80-120	Pass	
Silver (filtered)	%	91			80-120	Pass	
Titanium (filtered)	%	98			80-120	Pass	
Vanadium (filtered)	%	96			80-120	Pass	
Zinc (filtered)	%	95			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	100			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	99			80-120	Pass	
Arsenic (filtered)	%	103			80-120	Pass	
Barium (filtered)	%	100			80-120	Pass	
Beryllium (filtered)	%	99			80-120	Pass	
Boron (filtered)	%	96			80-120	Pass	
Cadmium (filtered)	%	101			80-120	Pass	
Chromium (filtered)	%	99			80-120	Pass	
Cobalt (filtered)	%	99			80-120	Pass	
Copper (filtered)	%	97			80-120	Pass	
Lead (filtered)	%	97			80-120	Pass	
Manganese (filtered)	%	98			80-120	Pass	
Mercury (filtered)	%	100			80-120	Pass	
Molybdenum (filtered)	%	101			80-120	Pass	
Nickel (filtered)	%	95			80-120	Pass	
Selenium (filtered)	%	97			80-120	Pass	
Silver (filtered)	%	94			80-120	Pass	
Titanium (filtered)	%	101			80-120	Pass	
Vanadium (filtered)	%	101			80-120	Pass	
Zinc (filtered)	%	100			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	105			80-120	Pass	
CRM - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	80			70-130	Pass	
TRH C6-C10	%	77			70-130	Pass	
CRM - % Recovery							
BTEX							
Benzene	%	94			70-130	Pass	
Toluene	%	102			70-130	Pass	
Ethylbenzene	%	95			70-130	Pass	
m&p-Xylenes	%	94			70-130	Pass	
o-Xylene	%	97			70-130	Pass	
Xylenes - Total*	%	95			70-130	Pass	
CRM - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	99			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
CRM - % Recovery							
Heavy Metals							
Cadmium	%	108			80-120	Pass	
Chromium	%	106			80-120	Pass	
Cobalt	%	104			80-120	Pass	
Copper	%	103			80-120	Pass	
Iron	%	96			80-120	Pass	
Lead	%	105			80-120	Pass	
Manganese	%	105			80-120	Pass	
Selenium	%	107			80-120	Pass	
Zinc	%	103			90-110	Pass	
CRM - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	109			70-130	Pass	
CRM - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	99			70-130	Pass	
Perfluoropentanoic acid (PFPeA)	%	105			70-130	Pass	
Perfluorohexanoic acid (PFHxA)	%	112			70-130	Pass	
Perfluoroheptanoic acid (PFHpA)	%	103			70-130	Pass	
Perfluorooctanoic acid (PFOA)	%	108			70-130	Pass	
Perfluorononanoic acid (PFNA)	%	112			70-130	Pass	
Perfluorodecanoic acid (PFDA)	%	105			70-130	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	111			70-130	Pass	
Perfluorododecanoic acid (PFDoDA)	%	111			70-130	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	113			70-130	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	109			70-130	Pass	
CRM - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	100			70-130	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	109			70-130	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	104			70-130	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	104			70-130	Pass	
CRM - % Recovery							
Heavy Metals							
Cadmium	%	103			80-120	Pass	
Chromium	%	101			80-120	Pass	
Cobalt	%	95			80-120	Pass	
Copper	%	105			80-120	Pass	
Iron	%	97			80-120	Pass	
Lead	%	104			80-120	Pass	
Manganese	%	105			80-120	Pass	
Nickel	%	97			80-120	Pass	
Zinc	%	100			90-110	Pass	
CRM - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	104			70-130	Pass	
Magnesium	%	91			70-130	Pass	
CRM - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	106			70-130	Pass	
Perfluoropentanoic acid (PFPeA)	%	109			70-130	Pass	
Perfluorohexanoic acid (PFHxA)	%	114			70-130	Pass	
Perfluoroheptanoic acid (PFHpA)	%	106			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorooctanoic acid (PFOA)	%	113			70-130	Pass	
Perfluorononanoic acid (PFNA)	%	114			70-130	Pass	
Perfluorodecanoic acid (PFDA)	%	107			70-130	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	109			70-130	Pass	
Perfluorododecanoic acid (PFDoDA)	%	106			70-130	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	105			70-130	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	111			70-130	Pass	
CRM - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	96			70-130	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	106			70-130	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	105			70-130	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	109			70-130	Pass	
CRM - % Recovery							
Heavy Metals							
Lead	%	103			80-120	Pass	
Molybdenum	%	110			80-120	Pass	
CRM - % Recovery							
Ammonia (as N)	%	101			80-120	Pass	
Nitrate (as N)	%	94			80-120	Pass	
NOx (as N)	%	94			80-120	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	L24-Se0074122	CP	%	88			70-130	Pass	
TRH C10-C14	L24-Oc0013053	NCP	%	90			70-130	Pass	
TRH C6-C10	L24-Oc0001936	NCP	%	88			70-130	Pass	
TRH >C10-C16	L24-Oc0013053	NCP	%	90			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	L24-Oc0001936	NCP	%	89			70-130	Pass	
Toluene	L24-Oc0001936	NCP	%	95			70-130	Pass	
Ethylbenzene	L24-Oc0001936	NCP	%	100			70-130	Pass	
m&p-Xylenes	L24-Oc0001936	NCP	%	94			70-130	Pass	
o-Xylene	L24-Oc0001936	NCP	%	95			70-130	Pass	
Xylenes - Total*	L24-Oc0001936	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	L24-Oc0001936	NCP	%	107			70-130	Pass	
Spike - % Recovery									
VOCs in Water by GCMS				Result 1					
Benzene	L24-Se0073510	NCP	%	107			60-120	Pass	
Ethylbenzene	L24-Se0073510	NCP	%	99			60-120	Pass	
Toluene	L24-Se0073510	NCP	%	98			60-120	Pass	
Trichloroethylene(TCE)	L24-Se0073510	NCP	%	89			60-120	Pass	
Xylenes (Total)	L24-Se0073490	NCP	%	103			60-120	Pass	
1.2-Dichloroethane	L24-Se0073510	NCP	%	84			60-120	Pass	
1.1-Dichloroethene	L24-Se0054316	NCP	%	101			60-120	Pass	
1.2-Dichlorobenzene	L24-Se0073510	NCP	%	86			60-120	Pass	
Spike - % Recovery									
				Result 1					
Atrazine	L24-Se0064804	NCP	%	100			60-120	Pass	
Ammonia (as N)	L24-Se0073490	NCP	%	108			80-120	Pass	
Chemical Oxygen Demand (COD)	M24-Oc0032650	NCP	%	105			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chloride	L24-Se0073490	NCP	%	96			70-130	Pass	
Chromium (VI)	L24-Se0073509	NCP	%	100			80-120	Pass	
Nitrate (as N)	L24-Se0073509	NCP	%	112			70-130	Pass	
Nitrite (as N)	L24-Se0073509	NCP	%	100			80-120	Pass	
NOx (as N)	L24-Se0073509	NCP	%	107			80-120	Pass	
Sulfate (as SO4)	L24-Se0073509	NCP	%	93			70-130	Pass	
Total Organic Carbon	L24-Oc0035218	NCP	%	74			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	L24-Se0071482	NCP	%	105			70-130	Pass	
Acenaphthylene	L24-Se0071482	NCP	%	102			70-130	Pass	
Anthracene	L24-Se0071482	NCP	%	106			70-130	Pass	
Benz(a)anthracene	L24-Se0071482	NCP	%	101			70-130	Pass	
Benzo(a)pyrene	L24-Se0071482	NCP	%	108			70-130	Pass	
Benzo(b&j)fluoranthene	L24-Se0071482	NCP	%	105			70-130	Pass	
Benzo(g.h.i)perylene	L24-Se0071482	NCP	%	101			70-130	Pass	
Benzo(k)fluoranthene	L24-Se0071482	NCP	%	105			70-130	Pass	
Chrysene	L24-Se0071482	NCP	%	101			70-130	Pass	
Dibenz(a.h)anthracene	L24-Se0071482	NCP	%	108			70-130	Pass	
Fluoranthene	L24-Se0071482	NCP	%	92			70-130	Pass	
Fluorene	L24-Se0071482	NCP	%	100			70-130	Pass	
Indeno(1.2.3-cd)pyrene	L24-Se0071482	NCP	%	100			70-130	Pass	
Naphthalene	L24-Se0071482	NCP	%	102			70-130	Pass	
Phenanthrene	L24-Se0071482	NCP	%	91			70-130	Pass	
Pyrene	L24-Se0071482	NCP	%	106			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	L24-Se0071482	NCP	%	105			30-130	Pass	
2.4-Dichlorophenol	L24-Se0071482	NCP	%	101			30-130	Pass	
2.4.5-Trichlorophenol	L24-Se0071482	NCP	%	112			30-130	Pass	
2.4.6-Trichlorophenol	L24-Se0071482	NCP	%	115			30-130	Pass	
2.6-Dichlorophenol	L24-Se0071482	NCP	%	101			30-130	Pass	
4-Chloro-3-methylphenol	L24-Se0071482	NCP	%	109			30-130	Pass	
Pentachlorophenol	L24-Se0071482	NCP	%	109			30-130	Pass	
Tetrachlorophenols - Total	L24-Se0071482	NCP	%	110			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	L24-Se0071482	NCP	%	109			30-130	Pass	
2-Methyl-4.6-dinitrophenol	L24-Se0071482	NCP	%	103			30-130	Pass	
2-Nitrophenol	L24-Se0047258	NCP	%	115			30-130	Pass	
2.4-Dimethylphenol	L24-Se0071482	NCP	%	112			30-130	Pass	
2.4-Dinitrophenol	L24-Se0047258	NCP	%	105			30-130	Pass	
2-Methylphenol (o-Cresol)	L24-Se0071482	NCP	%	112			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Se0071482	NCP	%	118			30-130	Pass	
4-Nitrophenol	L24-Se0039538	NCP	%	108			30-130	Pass	
Dinoseb	L24-Se0071482	NCP	%	102			30-130	Pass	
Phenol	L24-Se0071482	NCP	%	117			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-Se0073510	NCP	%	91			75-125	Pass	
Arsenic (filtered)	L24-Se0073510	NCP	%	96			75-125	Pass	
Barium (filtered)	L24-Se0073510	NCP	%	92			75-125	Pass	
Beryllium (filtered)	L24-Se0073510	NCP	%	92			75-125	Pass	
Cadmium (filtered)	L24-Se0073510	NCP	%	95			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chromium (filtered)	L24-Se0073510	NCP	%	86			75-125	Pass	
Cobalt (filtered)	L24-Se0073510	NCP	%	88			75-125	Pass	
Copper (filtered)	L24-Se0073510	NCP	%	85			75-125	Pass	
Lead (filtered)	L24-Se0073510	NCP	%	87			75-125	Pass	
Manganese (filtered)	L24-Se0073510	NCP	%	87			75-125	Pass	
Mercury (filtered)	L24-Se0073510	NCP	%	91			75-125	Pass	
Nickel (filtered)	L24-Se0073510	NCP	%	83			75-125	Pass	
Selenium (filtered)	L24-Se0073510	NCP	%	88			75-125	Pass	
Titanium (filtered)	L24-Se0073510	NCP	%	89			75-125	Pass	
Vanadium (filtered)	L24-Se0073510	NCP	%	82			75-125	Pass	
Zinc (filtered)	L24-Se0073510	NCP	%	92			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-Se0073510	NCP	%	93			75-125	Pass	
Spike - % Recovery									
OCOP in Water				Result 1					
alpha-BHC (HCH)	L24-Oc0008123	NCP	%	93			60-120	Pass	
beta-BHC (HCH)	L24-Oc0008123	NCP	%	96			60-120	Pass	
delta-BHC (HCH)	L24-Oc0008123	NCP	%	97			60-120	Pass	
Bifenthrin	L24-Oc0008123	NCP	%	97			60-120	Pass	
Endosulfan I	L24-Oc0008123	NCP	%	97			60-120	Pass	
Endosulfan II	L24-Oc0008123	NCP	%	97			60-120	Pass	
Endosulfan Sulfate	L24-Oc0008123	NCP	%	88			60-120	Pass	
Endrin	L24-Oc0008123	NCP	%	96			60-120	Pass	
Heptachlor Epoxide	L24-Oc0008123	NCP	%	78			60-120	Pass	
Heptachlor	L24-Oc0008123	NCP	%	90			60-120	Pass	
o.p-DDT	L24-Oc0008123	NCP	%	78			60-120	Pass	
Oxychlordane	L24-Oc0008123	NCP	%	97			60-120	Pass	
p.p-DDD	L24-Oc0008123	NCP	%	96			60-120	Pass	
p.p-DDE	L24-Oc0008123	NCP	%	119			60-120	Pass	
p.p-DDT	L24-Oc0008123	NCP	%	96			60-120	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	L24-Se0074124	CP	%	100			75-125	Pass	
Cadmium	L24-Se0074124	CP	%	95			75-125	Pass	
Chromium	L24-Se0074124	CP	%	88			75-125	Pass	
Cobalt	L24-Se0074124	CP	%	89			75-125	Pass	
Copper	L24-Se0074124	CP	%	85			75-125	Pass	
Iron	L24-Se0074124	CP	%	77			75-125	Pass	
Lead	L24-Se0074124	CP	%	91			75-125	Pass	
Manganese	L24-Se0074124	CP	%	89			75-125	Pass	
Mercury	L24-Se0074124	CP	%	92			75-125	Pass	
Molybdenum	L24-Se0074124	CP	%	95			75-125	Pass	
Nickel	L24-Se0074124	CP	%	84			75-125	Pass	
Selenium	L24-Se0074124	CP	%	80			75-125	Pass	
Titanium	L24-Se0074124	CP	%	86			75-125	Pass	
Zinc	L24-Se0074124	CP	%	75			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-Se0074124	CP	%	93			75-125	Pass	
Magnesium	L24-Se0074124	CP	%	92			75-125	Pass	
Potassium	L24-Se0074124	CP	%	95			75-125	Pass	
Sodium	L24-Se0074124	CP	%	84			75-125	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
				Result 1					
Total Nitrogen	L24-Se0074127	CP	%	90			70-130	Pass	
Total Phosphorus	L24-Se0074127	CP	%	99			80-120	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	L24-Oc0000721	NCP	mg/L	< 1	< 1	<1	30%	Pass	
TRH C10-C14	L24-Oc0013063	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C15-C28	L24-Oc0006491	NCP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C29-C36	L24-Oc0006491	NCP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C6-C10	L24-Oc0000721	NCP	mg/L	< 1	< 1	<1	30%	Pass	
TRH >C10-C16	L24-Oc0013063	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C16-C34	L24-Oc0006491	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C34-C40	L24-Oc0006491	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	L24-Oc0000721	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Toluene	L24-Oc0000721	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Ethylbenzene	L24-Oc0000721	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
m&p-Xylenes	L24-Oc0000721	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
o-Xylene	L24-Oc0000721	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Xylenes - Total*	L24-Oc0000721	NCP	mg/L	< 0.15	< 0.15	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	L24-Oc0000721	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
VOCs in Water by GCMS				Result 1	Result 2	RPD			
Benzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Carbon tetrachloride	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
DCM	L24-Se0074122	CP	ug/L	< 5	< 5	<1	30%	Pass	
Ethylbenzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobutadiene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Styrene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perchloroethene (PCE)	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Toluene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethylene(TCE)	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Vinyl Chloride	L24-Se0074122	CP	ug/L	< 0.2	< 0.2	<1	30%	Pass	
Xylenes (Total)	L24-Se0074122	CP	ug/L	< 3	< 3	<1	30%	Pass	
1.1-Dichloroethane	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	L24-Se0074122	CP	ug/L	< 2	< 2	<1	30%	Pass	
1.1.1-Trichloroethane	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichlorobenzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trichlorobenzene	L24-Se0074122	CP	ug/L	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
Atrazine	L24-Se0073491	NCP	ug/L	< 0.1	< 0.1	<1	30%	Pass	
Ammonia (as N)	L24-Se0073518	NCP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chemical Oxygen Demand (COD)	M24-Oc0035320	NCP	mg/L	12000	12000	1.0	30%	Pass	
Chloride	L24-Se0073518	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Chromium (VI)	L24-Se0073499	NCP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Conductivity (at 25 °C)	L24-Oc0007618	NCP	uS/cm	310	310	1.0	30%	Pass	
Nitrate (as N)	L24-Se0073518	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Nitrite (as N)	L24-Se0073518	NCP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx (as N)	L24-Se0073518	NCP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
pH (at 25 °C)	L24-Oc0007618	NCP	pH Units	5.4	5.6	2.0	30%	Pass	
Sulfate (as SO4)	L24-Se0073518	NCP	mg/L	< 1	< 1	<1	30%	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	L24-Oc0007618	NCP	mg/L	190	180	1.0	30%	Pass	
Total Organic Carbon	M24-Oc0038337	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dichlorophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.5-Trichlorophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4.6-Trichlorophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.6-Dichlorophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chloro-3-methylphenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pentachlorophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachlorophenols - Total	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	L24-Se0064664	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Nitrophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dimethylphenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2.4-Dinitrophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Methylphenol (o-Cresol)	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Nitrophenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dinoseb	L24-Se0064664	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Phenol	L24-Se0064664	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-Se0070221	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Arsenic (filtered)	L24-Se0070221	NCP	mg/L	0.005	0.005	1.0	30%	Pass	
Barium (filtered)	L24-Se0070221	NCP	mg/L	0.07	0.06	13	30%	Pass	
Beryllium (filtered)	L24-Se0070221	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Boron (filtered)	L24-Oc0031601	NCP	mg/L	0.48	0.49	3.0	30%	Pass	
Cadmium (filtered)	L24-Se0070221	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chromium (filtered)	L24-Se0070221	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cobalt (filtered)	L24-Se0070221	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-Se0070221	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Lead (filtered)	L24-Se0070221	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Manganese (filtered)	L24-Se0070221	NCP	mg/L	0.012	0.009	27	30%	Pass	
Mercury (filtered)	L24-Se0070221	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Molybdenum (filtered)	L24-Se0070221	NCP	mg/L	0.009	0.009	<1	30%	Pass	
Nickel (filtered)	L24-Se0070221	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Selenium (filtered)	L24-Se0070221	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Silver (filtered)	L24-Se0070221	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-Se0070221	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Vanadium (filtered)	L24-Se0070221	NCP	mg/L	0.006	0.006	5.0	30%	Pass	
Zinc (filtered)	L24-Se0070221	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-Se0070221	NCP	mg/L	110	110	2.0	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Potassium	L24-Oc0007727	NCP	mg/L	0.8	0.8	1.0	30%	Pass	
Sodium	L24-Oc0029516	NCP	mg/L	48	47	1.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Se0074122	CP	ug/L	< 0.01	0.01	11	30%	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Se0074122	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Se0074122	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
OCOP in Water				Result 1	Result 2	RPD			
alpha-BHC (HCH)	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
beta-BHC (HCH)	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
delta-BHC (HCH)	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Bifenthrin	L24-Oc0002195	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Endosulfan II	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Endosulfan Sulfate	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Endrin	L24-Oc0002195	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Heptachlor Epoxide	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Heptachlor	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
o.p-DDT	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Oxychlordane	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
p.p-DDD	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
p.p-DDE	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
p.p-DDT	L24-Oc0002195	NCP	ug/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	L24-Se0074124	CP	ug/L	0.09	0.10	8.0	30%	Pass	
Perfluorohexanoic acid (PFHxA)	L24-Se0074124	CP	ug/L	0.10	0.10	4.0	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorooctanoic acid (PFOA)	L24-Se0074124	CP	ug/L	0.03	0.03	10	30%	Pass	
Perfluorononanoic acid (PFNA)	L24-Se0074124	CP	ug/L	0.01	0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	L24-Se0074124	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	L24-Se0074124	CP	ug/L	0.01	0.01	1.0	30%	Pass	
Perfluorononanesulfonic acid (PFNS)*	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	L24-Se0074124	CP	ug/L	0.06	0.06	2.0	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	L24-Se0074124	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Nitrogen	L24-Se0074126	CP	mg/L	510	500	3.0	30%	Pass	
Total Phosphorus	L24-Se0074126	CP	mg/L	8.0	7.9	1.0	20%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N09	Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q05	The matrix spike concentration is less than five times the background concentration in the sample - therefore the spike recovery cannot be determined
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Natalie Hill	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Inorganic
Douglas Todd	Senior Analyst-Metal
Patrick Patfield	Senior Analyst-Organic
Patrick Patfield	Senior Analyst-PFAS
Patrick Patfield	Senior Analyst-Volatile
Sam Becker	Senior Analyst-Inorganic

Kim Rodgers
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN 50 005 085 521

☐ **Sydney Laboratory** Unit F3 Bld F 16 Mars Road Lane Cove West NSW 2066 02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory** Unit 1 21 Smallwood Place Murarrie QLD 4172 07 3902 4600 EnviroSampleQLD@eurofins.com

☑ **Perth Laboratory** Unit 2 91 Leach Highway Kewdale WA 6105 08 9251 9600 EnviroSamplePA@eurofins.com

☐ **Melbourne Laboratory** 6 Monterey Road Dandenong South VIC 3175 03 8564 5000 EnviroSampleVic@eurofins.com

Company	SLR Consulting Australia Pty Ltd	Project №	72519	Project Manager	Phuntsho Wangdi
Address	Level 1/500 Hay Street, Subiaco, WA	Project Name	Banksia Landfill site GME 2024	EDD Format (Excel, EQuIS etc)	ESdat
Contact Name	Phuntsho Wangdi				
Phone №	0433 907 756				
Special Directions					
Purchase Order					
Quote ID №	SLR 050324 -Suite 2 inc PFAS and Organics				

Sampler(s)	Pema Dorji, Kavindi Sahabandu	
Handed over by	Pema Dorji, Kavindi Sahabandu	
Email for Invoice	AccountsPayableAU@slrconsulting.com	
Email for Results	pwangdi@slrconsulting.com, pdorji@slrconsulting.com	

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

*Surcharge will apply

☐ Overnight (reporting by 9am)* ☐ Same day* ☐ 1 day* ☐ 2 days* ☐ 3 days* ☑ 5 days (Standard) ☐ Other(

Analyses Where metals are required, please specify "Total" or "Filtered". SUITE codes must be listed to ensure correct testing.

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Physio-chemical – pH, EC, Eh, DO	Nutrients – COD, NH3, nitrate, total nitrogen, total phosphorus, TDS, TOC	Major ions – Ca, Mg, K, Na, Cl, bicarbonate, sulfate	Dissolved metals – Al, As, Ba, Be, B, Cd, Cr (III+IV), Co, Cu, Pb, Mn, Mg, Mo, Hg, Ni, Se, Ag, V, Zn, Tl	TOTAL metals – Al, As, Cd, Cr (III+IV), Cu, Fe, Pb, Mn, Hg, Ni, Se, Zn, Tl	BTEX, TPH/TRH, PHENOLS, PAH, ATRIZINE, PCB, UT OCP/OPP, TCE/PCE	PFAS/PFOA - 28 Suite Standard LOR								Containers Change container type & size if necessary: 500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964 WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warnin
1	TDS Leachate Cell 1	26-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved met
2	PLP1	26-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved met
3	PSD1	26-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved met
4	PSD2	26-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved met
5	LEP1	26-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved met
6	LEP3	26-09-2024	W	X	X	X	X	X	X	X																Lab filter required for dissolved met
7																										
8																										
9																										
10																										
11																										
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17																										
18																										
19																										
20																										
30																										
41																										
42																										
		Total Counts		6	6	6	6	6	6	6																

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Name		Signature		Date		Time	
Eurofins | mgt Laboratory Use Only	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW		Signature		Date	27/09/24	Time	15 00
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW		Signature		Date		Time	

Temperature 9.9

Report №

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | mgt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins | mgt Standard Terms and Conditions is available on req

1144222

CERTIFICATE OF ANALYSIS

Work Order	: **EP2414023**	Page	: 1 of 15
Client	: **SLR CONSULTING AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Perth
Contact	: Phuntsho Wangdi	Contact	: Georgina Nearygrant
Address	: 503 MURRAY STREET PERTH 6000	Address	: 26 Rigali Way Wangara WA Australia 6065
Telephone	: ----	Telephone	: +61-8-9406 1301
Project	: Banksia Landill Site GME 2024	Date Samples Received	: 27-Sep-2024 15:45
Order number	: ----	Date Analysis Commenced	: 28-Sep-2024
C-O-C number	: ----	Issue Date	: 10-Oct-2024 19:42
Sampler	: Kavindi Sahabandu/Pema Dorji		
Site	: ----		
Quote number	: EN-000		
No. of samples received	: 2		
No. of samples analysed	: 2		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Canhuang Ke	Inorganics Supervisor	Perth Inorganics, Wangara, WA
Chris Lemaitre	Laboratory Manager (Perth)	Perth Inorganics, Wangara, WA
Daniel Fisher	Inorganics Analyst	Perth Inorganics, Wangara, WA
David Viner	SENIOR LAB TECH	Perth Organics, Wangara, WA
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Efua Wilson	Metals Chemist	Perth Inorganics, Wangara, WA
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Thomas Donovan	Senior Organic Chemist	Perth Organics, Wangara, WA

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP066 / EP068: High LCS recovery deemed acceptable as all associated analyte results are less than LOR.
- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20mL or 125mL bottles have been tested in accordance with the QSM5.4 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP131A: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- As per QWI – EN55-3 Data Interpreting Procedures, Ionic balances are typically calculated using Major Anions - Chloride, Alkalinity and Sulfate; and Major Cations - Calcium, Magnesium, Potassium and Sodium. Where applicable and dependent upon sample matrix, the Ionic Balance may also include the additional contribution of Ammonia, Dissolved Metals by ICPMS and H+ to the Cations and Nitrate, SiO2 and Fluoride to the Anions.
- EP005: Total Organic Carbon result may bias low for sample EP2410156-001 due to the presence of rapidly settling solids. Please scrutinise the result accordingly.
  EP005, EP026SP: It has been noted that the result for Total Organic Carbon (EP005) is higher than Chemical Oxygen Demand (EP026SP) for sample EP2410156-001. However, the difference is within the limits of experimental variation for the methods.
- EP231X-SUT: LOR raised for analyte "PFBS" due to matrix interferences.
- EP074: High failing LCS deemed acceptable as all associated analyte results are less than LOR.
- EP066: Elevated surrogate reported as sample <LOR.
- EP234: Poor matrix spike recovery for various compounds due to matrix interferences and high matrix spike recovery has been noted for various compounds due to ion enhancement.
- EP071: Poor matrix spike recovery due to suspected matrix interferences.
- ED093: LCS recovery for Mg falls outside ALS Dynamic Control Limit. However, it is within the acceptance criteria based on ALS DQO. No further action is required.
- EP075(SIM): Sample EP2414023-002 required re-extraction and re-analysis to confirm results. There was insufficient volume remaining for standard analysis. where applicable LOR values have been raised accordingly.

- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration or as per tables in USEPA 1633 where listed. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS and also conform to QSM 5.4 (US DoD) requirements.
- ED045G: The presence of Thiocyanate, Thiosulfate and Sulfite can positively contribute to the chloride result, thereby may bias results higher than expected. Results should be scrutinised accordingly.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	QC02	QC04	----	----	----
			Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EP2414023-001	EP2414023-002	--------	--------	--------
				Result	Result	----	----	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**5.88**	**5.95**	----	----	----
EA010P: Conductivity by PC Titrator								
Electrical Conductivity @ 25°C	----	1	µS/cm	**254**	**162**	----	----	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**133**	**93**	----	----	----
EA075: Redox Potential								
ø Redox Potential	----	0.1	mV	**245**	**250**	----	----	----
ø pH Redox	----	0.01	pH Unit	**5.55**	**6.06**	----	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	**6**	**4**	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L	**6**	**4**	----	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	**8**	**6**	----	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	**62**	**34**	----	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	<1	<1	----	----	----
Magnesium	7439-95-4	1	mg/L	**4**	**3**	----	----	----
Sodium	7440-23-5	1	mg/L	**40**	**26**	----	----	----
Potassium	7440-09-7	1	mg/L	**1**	<1	----	----	----
EG020F: Dissolved Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	**0.02**	**0.01**	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	QC02	QC04	----	----	----
				Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EP2414023-001	EP2414023-002	--------	--------	--------
					Result	Result	----	----	----
EG020F: Dissolved Metals by ICP-MS - Continued									
Copper	7440-50-8	0.001	mg/L		**0.002**	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	**0.002**	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		**0.022**	<0.005	----	----	----
Manganese	7439-96-5	0.001	mg/L		**0.011**	**0.034**	----	----	----
Selenium	7782-49-2	0.01	mg/L		<0.01	<0.01	----	----	----
Thallium	7440-28-0	0.001	mg/L		<0.001	<0.001	----	----	----
EG020T: Total Metals by ICP-MS									
Iron	7439-89-6	0.05	mg/L		<0.05	<0.05	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EG049F: Dissolved Trivalent Chromium									
Trivalent Chromium	16065-83-1	0.01	mg/L		<0.01	<0.01	----	----	----
EG050F: Dissolved Hexavalent Chromium									
Hexavalent Chromium	18540-29-9	0.01	mg/L		<0.01	<0.01	----	----	----
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		<0.01	<0.01	----	----	----
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	<0.01	----	----	----
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L		**1.80**	**3.68**	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**1.80**	**3.68**	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**0.4**	**0.6**	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ **Total Nitrogen as N**	----	0.1	mg/L		**2.2**	**4.3**	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	QC02	QC04	----	----	----
			Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EP2414023-001	EP2414023-002	--------	--------	--------
				Result	Result	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser - Continued								
Total Phosphorus as P	----	0.01	mg/L	<0.01	<0.01	----	----	----
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	----	**1.43**	----	----	----
ø Total Anions	----	0.01	meq/L	**2.04**	----	----	----	----
ø Total Cations	----	0.01	meq/L	**2.09**	**1.38**	----	----	----
ø Ionic Balance	----	0.01	%	----	**1.74**	----	----	----
ø Ionic Balance	----	0.01	%	**1.44**	----	----	----	----
EP005: Total Organic Carbon (TOC)								
Total Organic Carbon	----	1	mg/L	**1**	**1**	----	----	----
EP025: Oxygen - Dissolved (DO)								
Dissolved Oxygen	----	0.1	mg/L	**7.2**	**7.7**	----	----	----
EP026SP: Chemical Oxygen Demand (Spectrophotometric)								
Chemical Oxygen Demand	----	10	mg/L	**10**	<10	----	----	----
EP068C: Triazines								
Atrazine	1912-24-9	0.5	µg/L	<0.5	<0.5	----	----	----
EP074E: Halogenated Aliphatic Compounds								
Trichloroethene	79-01-6	5	µg/L	<5	<5	----	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	----	----	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	1.0	µg/L	<1.0	<1.0	----	----	----
2-Chlorophenol	95-57-8	1.0	µg/L	<1.0	<1.0	----	----	----
2-Methylphenol	95-48-7	1.0	µg/L	<1.0	<1.0	----	----	----
3- & 4-Methylphenol	1319-77-3	2.0	µg/L	<2.0	<2.0	----	----	----
2-Nitrophenol	88-75-5	1.0	µg/L	<1.0	<1.0	----	----	----
2.4-Dimethylphenol	105-67-9	1.0	µg/L	<1.0	<1.0	----	----	----
2.4-Dichlorophenol	120-83-2	1.0	µg/L	<1.0	<1.0	----	----	----
2.6-Dichlorophenol	87-65-0	1.0	µg/L	<1.0	<1.0	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	QC02	QC04	----	----	----
				Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EP2414023-001	EP2414023-002	--------	--------	--------
					Result	Result	----	----	----
EP075(SIM)A: Phenolic Compounds - Continued									
4-Chloro-3-methylphenol	59-50-7	1.0	µg/L		<1.0	<1.0	----	----	----
2.4.6-Trichlorophenol	88-06-2	1.0	µg/L		<1.0	<1.0	----	----	----
2.4.5-Trichlorophenol	95-95-4	1.0	µg/L		<1.0	<1.0	----	----	----
Pentachlorophenol	87-86-5	2.0	µg/L		<2.0	<2.0	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.6	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	----	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	µg/L		<0.5	<0.6	----	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	µg/L		<0.5	<0.6	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	<100	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	QC02	QC04	----	----	----
				Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EP2414023-001	EP2414023-002	--------	--------	--------
					Result	Result	----	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
C29 - C36 Fraction	----	50	µg/L		<50	<50	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	----	----
Toluene	108-88-3	2	µg/L		<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	----	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	----	----	----
EP131A: Organochlorine Pesticides									
Aldrin	309-00-2	0.010	µg/L		<0.010	<0.010	----	----	----
alpha-BHC	319-84-6	0.010	µg/L		<0.010	<0.010	----	----	----
beta-BHC	319-85-7	0.010	µg/L		<0.010	<0.010	----	----	----
delta-BHC	319-86-8	0.010	µg/L		<0.010	<0.010	----	----	----
4.4`-DDD	72-54-8	0.010	µg/L		<0.010	<0.010	----	----	----
4.4`-DDE	72-55-9	0.010	µg/L		<0.010	<0.010	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	QC02	QC04	----	----	----
				Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EP2414023-001	EP2414023-002	--------	--------	--------
					Result	Result	----	----	----
EP131A: Organochlorine Pesticides - Continued									
4.4`-DDT	50-29-3	0.010	µg/L		<0.010	<0.010	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.010	µg/L		<0.010	<0.010	----	----	----
Dieldrin	60-57-1	0.010	µg/L		<0.010	<0.010	----	----	----
alpha-Endosulfan	959-98-8	0.010	µg/L		<0.010	<0.010	----	----	----
beta-Endosulfan	33213-65-9	0.010	µg/L		<0.010	<0.010	----	----	----
Endosulfan sulfate	1031-07-8	0.010	µg/L		<0.010	<0.010	----	----	----
^ Endosulfan (sum)	115-29-7	0.010	µg/L		<0.010	<0.010	----	----	----
Endrin	72-20-8	0.010	µg/L		<0.010	<0.010	----	----	----
Endrin aldehyde	7421-93-4	0.010	µg/L		<0.010	<0.010	----	----	----
Endrin ketone	53494-70-5	0.010	µg/L		<0.010	<0.010	----	----	----
Heptachlor	76-44-8	0.005	µg/L		<0.005	<0.005	----	----	----
Heptachlor epoxide	1024-57-3	0.010	µg/L		<0.010	<0.010	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.010	µg/L		<0.010	<0.010	----	----	----
gamma-BHC - (Lindane)	58-89-9	0.010	µg/L		<0.010	<0.010	----	----	----
Methoxychlor	72-43-5	0.010	µg/L		<0.010	<0.010	----	----	----
cis-Chlordane	5103-71-9	0.010	µg/L		<0.010	<0.010	----	----	----
trans-Chlordane	5103-74-2	0.010	µg/L		<0.010	<0.010	----	----	----
^ Total Chlordane (sum)	----	0.010	µg/L		<0.010	<0.010	----	----	----
Oxychlordane	27304-13-8	0.010	µg/L		<0.010	<0.010	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.010	µg/L		<0.010	<0.010	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	QC02	QC04	----	----	----
			Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EP2414023-001	EP2414023-002	--------	--------	--------
				Result	Result	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids - Continued								
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.02	µg/L	<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	QC02	QC04	----	----	----
				Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EP2414023-001	EP2414023-002	--------	--------	--------
					Result	Result	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	----	----	----
EP234A: OP Pesticides									
Azinphos-ethyl	2642-71-9	0.02	µg/L		<0.02	<0.02	----	----	----
Azinphos-methyl	86-50-0	0.02	µg/L		<0.02	<0.02	----	----	----
Bromophos-ethyl	4824-78-6	0.10	µg/L		<0.10	<0.10	----	----	----
Carbofenothion	786-19-6	0.02	µg/L		<0.02	<0.02	----	----	----
Chlorfenvinphos	470-90-6	0.02	µg/L		<0.02	<0.02	----	----	----
Chlorpyrifos	2921-88-2	0.02	µg/L		<0.02	<0.02	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.2	µg/L		<0.2	<0.2	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	QC02	QC04	----	----	----
			Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EP2414023-001	EP2414023-002	--------	--------	--------
				Result	Result	----	----	----
EP234A: OP Pesticides - Continued								
Coumaphos	56-72-4	0.01	µg/L	<0.01	<0.01	----	----	----
Demeton-O & Demeton-S	298-03-3/126-75-0	0.02	µg/L	<0.02	<0.02	----	----	----
Demeton-S-methyl	919-86-8	0.02	µg/L	<0.02	<0.02	----	----	----
Demeton-O	298-03-3	0.02	µg/L	<0.02	<0.02	----	----	----
Demeton-S	126-75-0	0.02	µg/L	<0.02	<0.02	----	----	----
Diazinon	333-41-5	0.01	µg/L	<0.01	<0.01	----	----	----
Dichlorvos	62-73-7	0.20	µg/L	<0.20	<0.20	----	----	----
Dimethoate	60-51-5	0.02	µg/L	<0.02	<0.02	----	----	----
Disulfoton	298-04-4	0.05	µg/L	<0.05	<0.05	----	----	----
Ethion	563-12-2	0.02	µg/L	<0.02	<0.02	----	----	----
EPN	2104-64-5	0.05	µg/L	<0.05	<0.05	----	----	----
Ethoprophos	13194-48-4	0.01	µg/L	<0.01	<0.01	----	----	----
Fenamiphos	22224-92-6	0.01	µg/L	<0.01	<0.01	----	----	----
Fenchlorphos (Ronnel)	299-84-3	10	µg/L	<10	<10	----	----	----
Fenitrothion	122-14-5	2	µg/L	<2	<2	----	----	----
Fensulfothion	115-90-2	0.01	µg/L	<0.01	<0.01	----	----	----
Fenthion	55-38-9	0.05	µg/L	<0.05	<0.05	----	----	----
Malathion	121-75-5	0.02	µg/L	<0.02	<0.02	----	----	----
Mevinphos	7786-34-7	0.02	µg/L	<0.02	<0.02	----	----	----
Monocrotophos	6923-22-4	0.02	µg/L	<0.02	<0.02	----	----	----
Omethoate	1113-02-6	0.01	µg/L	<0.01	<0.01	----	----	----
Parathion	56-38-2	0.2	µg/L	<0.2	<0.2	----	----	----
Parathion-methyl	298-00-0	0.5	µg/L	<0.5	<0.5	----	----	----
Phorate	298-02-2	0.1	µg/L	<0.1	<0.1	----	----	----
Pirimiphos-ethyl	23505-41-1	0.01	µg/L	<0.01	<0.01	----	----	----
Pirimiphos-methyl	29232-93-7	0.01	µg/L	<0.01	<0.01	----	----	----
Profenofos	41198-08-7	0.01	µg/L	<0.01	<0.01	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	QC02	QC04	----	----	----
				Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EP2414023-001	EP2414023-002	--------	--------	--------
					Result	Result	----	----	----
EP234A: OP Pesticides - Continued									
Prothiofos	34643-46-4	0.1	µg/L		<0.1	<0.1	----	----	----
Sulfotep	3689-24-5	0.005	µg/L		<0.005	<0.005	----	----	----
Sulprofos	35400-43-2	0.05	µg/L		<0.05	<0.05	----	----	----
Terbufos	13071-79-9	0.01	µg/L		<0.01	<0.01	----	----	----
Temephos	3383-96-8	0.02	µg/L		<0.02	<0.02	----	----	----
Tetrachlorvinphos	22248-79-9	0.01	µg/L		<0.01	<0.01	----	----	----
Triazophos	24017-47-8	0.005	µg/L		<0.005	<0.005	----	----	----
Trichlorfon	52-68-6	0.02	µg/L		<0.02	<0.02	----	----	----
Trichloronate	327-98-0	0.5	µg/L		<0.5	<0.5	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	1	%		**59.4**	**147**	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**57.4**	**110**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**34.8**	**84.4**	----	----	----
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	5	%		**108**	**110**	----	----	----
Toluene-D8	2037-26-5	5	%		**97.1**	**97.4**	----	----	----
4-Bromofluorobenzene	460-00-4	5	%		**95.6**	**96.7**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		**11.1**	**64.2**	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		**47.4**	**85.9**	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		**42.4**	**49.0**	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		**62.8**	**71.0**	----	----	----
Anthracene-d10	1719-06-8	1.0	%		**66.6**	**59.7**	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		**71.2**	**86.1**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	QC02	QC04	----	----	----
			Sampling date / time	24-Sep-2024 00:00	25-Sep-2024 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EP2414023-001	EP2414023-002	--------	--------	--------
				Result	Result	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**102**	**105**	**----**	**----**	**----**
Toluene-D8	2037-26-5	2	%	**99.6**	**99.3**	**----**	**----**	**----**
4-Bromofluorobenzene	460-00-4	2	%	**99.4**	**99.7**	**----**	**----**	**----**
EP131S: OC Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.010	%	**98.7**	**97.9**	**----**	**----**	**----**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**97.0**	**98.2**	**----**	**----**	**----**
13C8-PFOA	----	0.02	%	**99.4**	**105**	**----**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	27	136
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	50	146
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	27	153
EP074S: VOC Surrogates			
1.2-Dichloroethane-D4	17060-07-0	62	134
Toluene-D8	2037-26-5	75	124
4-Bromofluorobenzene	460-00-4	64	118
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	67
2-Chlorophenol-D4	93951-73-6	29	120
2.4.6-Tribromophenol	118-79-6	10	131
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	34	131
Anthracene-d10	1719-06-8	43	126
4-Terphenyl-d14	1718-51-0	41	142
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	61	141
Toluene-D8	2037-26-5	73	126
4-Bromofluorobenzene	460-00-4	60	125
EP131S: OC Pesticide Surrogate			
Dibromo-DDE	21655-73-2	14	166
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Inter-Laboratory Testing

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry / Biology).

(WATER) EP026SP: Chemical Oxygen Demand (Spectrophotometric)

(WATER) EP131A: Organochlorine Pesticides

(WATER) EP131S: OC Pesticide Surrogate

(WATER) EP234A: OP Pesticides

QUALITY CONTROL REPORT

Work Order	: **EP2414023**	Page	: 1 of 20
Client	: **SLR CONSULTING AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Perth
Contact	: Phuntsho Wangdi	Contact	: Georgina Nearygrant
Address	: 503 MURRAY STREET PERTH 6000	Address	: 26 Rigali Way Wangara WA Australia 6065
Telephone	: ----	Telephone	: +61-8-9406 1301
Project	: Banksia Landill Site GME 2024	Date Samples Received	: 27-Sep-2024
Order number	: ----	Date Analysis Commenced	: 28-Sep-2024
C-O-C number	: ----	Issue Date	: 10-Oct-2024
Sampler	: Kavindi Sahabandu/Pema Dorji		
Site	: ----		
Quote number	: EN-000		
No. of samples received	: 2		
No. of samples analysed	: 2		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Canhuang Ke	Inorganics Supervisor	Perth Inorganics, Wangara, WA
Chris Lemaitre	Laboratory Manager (Perth)	Perth Inorganics, Wangara, WA
Daniel Fisher	Inorganics Analyst	Perth Inorganics, Wangara, WA
David Viner	SENIOR LAB TECH	Perth Organics, Wangara, WA
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Efua Wilson	Metals Chemist	Perth Inorganics, Wangara, WA
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Thomas Donovan	Senior Organic Chemist	Perth Organics, Wangara, WA

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EA005P: pH by PC Titrator (QC Lot: 6104525)									
EP2413663-006	Anonymous	EA005-P: pH Value	----	0.01	pH Unit	8.02	8.11	1.1	0% - 20%
EP2414224-002	Anonymous	EA005-P: pH Value	----	0.01	pH Unit	6.73	6.68	0.7	0% - 20%
EA010P: Conductivity by PC Titrator (QC Lot: 6104526)									
EP2413663-006	Anonymous	EA010-P: Electrical Conductivity @ 25°C	----	1	µS/cm	734	751	2.3	0% - 20%
EP2414224-002	Anonymous	EA010-P: Electrical Conductivity @ 25°C	----	1	µS/cm	94	94	0.0	0% - 20%
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 6089866)									
EP2413938-001	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	636	619	2.6	0% - 20%
EP2414023-002	QC04	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	93	92	1.4	No Limit
EA075: Redox Potential (QC Lot: 6086361)									
EP2414023-001	QC02	EA075: Redox Potential	----	0.1	mV	245	248	1.2	0% - 20%
		EA075: pH Redox	----	0.01	pH Unit	5.55	5.51	0.7	0% - 20%
ED037P: Alkalinity by PC Titrator (QC Lot: 6104527)									
EP2413663-006	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	150	148	1.1	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	150	148	1.1	0% - 20%
EP2414224-002	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	8	7	0.0	No Limit
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	8	7	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 6088047)									
EP2414022-002	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	29	29	0.0	0% - 20%
EP2414037-004	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	75	74	1.6	0% - 20%
ED045G: Chloride by Discrete Analyser (QC Lot: 6088048)									
EP2414022-002	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	96	89	7.5	0% - 20%
EP2414037-004	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	594	584	1.7	0% - 20%
ED093F: Dissolved Major Cations (QC Lot: 6105450)									
EP2414023-001	QC02	ED093F: Calcium	7440-70-2	1	mg/L	<1	<1	0.0	No Limit
		ED093F: Magnesium	7439-95-4	1	mg/L	4	4	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	40	41	0.0	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	1	1	0.0	No Limit
EP2414248-006	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	285	319	11.4	0% - 20%
		ED093F: Magnesium	7439-95-4	1	mg/L	311	348	11.1	0% - 20%
		ED093F: Sodium	7440-23-5	1	mg/L	2670	2930	9.4	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	205	229	11.4	0% - 20%
EG020F: Dissolved Metals by ICP-MS (QC Lot: 6105452)									
EP2414023-001	QC02	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	0.002	0.002	0.0	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Manganese	7439-96-5	0.001	mg/L	0.011	0.012	0.0	0% - 50%
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Thallium	7440-28-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.022	0.023	0.0	No Limit
		EG020A-F: Aluminium	7429-90-5	0.01	mg/L	0.02	0.02	0.0	No Limit
		EG020A-F: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EG020T: Total Metals by ICP-MS (QC Lot: 6102300)									
EP2414023-001	QC02	EG020A-T: Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	0.0	No Limit
EP2414286-001	Anonymous	EG020A-T: Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	0.0	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 6105451)									
EP2414110-007	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EG050F: Dissolved Hexavalent Chromium (QC Lot: 6091688)									
EP2413664-001	Anonymous	EG050G-F: Hexavalent Chromium	18540-29-9	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EP2414012-008	Anonymous	EG050G-F: Hexavalent Chromium	18540-29-9	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 6088285)									
EP2413951-002	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EP2414012-007	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 6088046)									
EP2414022-002	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EP2414037-004	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 6088286)									
EP2413951-002	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.19	0.20	0.0	0% - 50%
EP2414012-007	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 6087474)									
EP2413779-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.3	0.3	0.0	No Limit
EP2413813-004	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1 (0.2)*	mg/L	2.7	2.6	5.1	0% - 50%
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 6087473)									
EP2413779-001	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	0.04	0.06	31.6	No Limit
EP2413813-004	Anonymous	EK067G: Total Phosphorus as P	----	0.01 (0.02)*	mg/L	0.96	0.91	5.4	0% - 20%
EP005: Total Organic Carbon (TOC) (QC Lot: 6088144)									
EP2414001-001	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	1	1	0.0	No Limit
EP025: Oxygen - Dissolved (DO) (QC Lot: 6086360)									
EP2414023-001	QC02	EP025: Dissolved Oxygen	----	0.1	mg/L	7.2	7.2	0.0	0% - 20%
EP026SP: Chemical Oxygen Demand (Spectrophotometric) (QC Lot: 6103622)									
EP2414023-001	QC02	EP026SP: Chemical Oxygen Demand	----	10	mg/L	10	12	18.2	0% - 20%
ES2432179-001	Anonymous	EP026SP: Chemical Oxygen Demand	----	10	mg/L	1250	1250	0.0	0% - 20%
EP074E: Halogenated Aliphatic Compounds (QC Lot: 6087275)									
EP2414029-010	Anonymous	EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
EP2413911-003	Anonymous	EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
EP075(SIM)A: Phenolic Compounds (QC Lot: 6088792)									
EP2414008-001	Anonymous	EP075(SIM): Phenol	108-95-2	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	2	µg/L	<2.0	<2.0	0.0	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	µg/L	<2.0	<2.0	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6088792)									
EP2414008-001	Anonymous	EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	<1.0	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6087274)									
EP2413911-003	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6088791)									
EP2414008-002	Anonymous	EP071: C15 - C28 Fraction	----	100	µg/L	110	150	30.2	No Limit
		EP071: C10 - C14 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
		EP071: C29 - C36 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
EP2414008-001	Anonymous	EP071: C15 - C28 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
		EP071: C29 - C36 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6087274)									
EP2413911-003	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6088791)									
EP2414008-002	Anonymous	EP071: >C10 - C16 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C16 - C34 Fraction	----	100	µg/L	<100	140	29.9	No Limit
		EP071: >C34 - C40 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
EP2414008-001	Anonymous	EP071: >C10 - C16 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C16 - C34 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	µg/L	<100	<100	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 6087274)									
EP2413911-003	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit
EP131A: Organochlorine Pesticides (QC Lot: 6092697)									
EP2413999-013	Anonymous	EP131A: Heptachlor	76-44-8	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP131A: Aldrin	309-00-2	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: alpha-BHC	319-84-6	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: beta-BHC	319-85-7	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: delta-BHC	319-86-8	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: 4.4`-DDD	72-54-8	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: 4.4`-DDE	72-55-9	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: 4.4`-DDT	50-29-3	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Dieldrin	60-57-1	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: alpha-Endosulfan	959-98-8	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: beta-Endosulfan	33213-65-9	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Endosulfan sulfate	1031-07-8	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Endrin	72-20-8	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Endosulfan (sum)	115-29-7	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Endrin aldehyde	7421-93-4	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Endrin ketone	53494-70-5	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Heptachlor epoxide	1024-57-3	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Hexachlorobenzene (HCB)	118-74-1	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: gamma-BHC - (Lindane)	58-89-9	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Methoxychlor	72-43-5	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: cis-Chlordane	5103-71-9	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: trans-Chlordane	5103-74-2	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Total Chlordane (sum)	----	0.01	µg/L	<0.010	<0.010	0.0	No Limit
		EP131A: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.01	µg/L	<0.010	<0.010	0.0	No Limit
EP234A: OP Pesticides (QC Lot: 6095688)									
EP2414121-010	Anonymous	EP234-1: Sulfotep	3689-24-5	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP234-1: Triazophos	24017-47-8	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP234-1: Coumaphos	56-72-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Diazinon	333-41-5	0.01	µg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP234A: OP Pesticides (QC Lot: 6095688) - continued									
EP2414121-010	Anonymous	EP234-1: Ethoprophos	13194-48-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Fenamiphos	22224-92-6	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Fensulfothion	115-90-2	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Omethoate	1113-02-6	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Pirimiphos-ethyl	23505-41-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Pirimiphos-methyl	29232-93-7	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Profenofos	41198-08-7	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Terbufos	13071-79-9	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Tetrachlorvinphos	22248-79-9	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Azinphos-methyl	86-50-0	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Azinphos-ethyl	2642-71-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Carbofenothion	786-19-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Chlorfenvinphos	470-90-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Chlorpyrifos	2921-88-2	0.02	µg/L	<0.00002 mg/L	<0.02	0.0	No Limit
		EP234-1: Demeton-O	298-03-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Demeton-O & Demeton-S	298-03-3/126-75-0	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Demeton-S	126-75-0	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Demeton-S-methyl	919-86-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Dimethoate	60-51-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Ethion	563-12-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Malathion	121-75-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Mevinphos	7786-34-7	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Monocrotophos	6923-22-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Temephos	3383-96-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Trichlorfon	52-68-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Disulfoton	298-04-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP234-1: EPN	2104-64-5	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP234-1: Fenthion	55-38-9	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP234-1: Sulprofos	35400-43-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP234-1: Bromophos-ethyl	4824-78-6	0.1	µg/L	<0.10	<0.10	0.0	No Limit
		EP234-1: Phorate	298-02-2	0.1	µg/L	<0.1	<0.1	0.0	No Limit
		EP234-1: Prothiofos	34643-46-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
		EP234-1: Chlorpyrifos-methyl	5598-13-0	0.2	µg/L	<0.2	<0.2	0.0	No Limit
		EP234-1: Dichlorvos	62-73-7	0.2	µg/L	<0.20	<0.20	0.0	No Limit
		EP234-1: Parathion	56-38-2	0.2	µg/L	<0.2	<0.2	0.0	No Limit
		EP234-1: Parathion-methyl	298-00-0	0.5 (2.0)*	µg/L	<2.0	<2.0	0.0	No Limit
		EP234-1: Trichloronate	327-98-0	0.5	µg/L	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP234A: OP Pesticides (QC Lot: 6095688) - continued									
EP2414121-010	Anonymous	EP234-1: Fenchlorphos (Ronnel)	299-84-3	10	µg/L	<10	<10	0.0	No Limit
		EP234-1: Fenitrothion	122-14-5	2	µg/L	<2	<2	0.0	No Limit
EP2414121-007	Anonymous	EP234-1: Sulfotep	3689-24-5	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP234-1: Triazophos	24017-47-8	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP234-1: Coumaphos	56-72-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Diazinon	333-41-5	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Ethoprophos	13194-48-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Fenamiphos	22224-92-6	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Fensulfothion	115-90-2	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Omethoate	1113-02-6	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Pirimiphos-ethyl	23505-41-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Pirimiphos-methyl	29232-93-7	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Profenofos	41198-08-7	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Terbufos	13071-79-9	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Tetrachlorvinphos	22248-79-9	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP234-1: Azinphos-methyl	86-50-0	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Azinphos-ethyl	2642-71-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Carbofenothion	786-19-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Chlorfenvinphos	470-90-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Chlorpyrifos	2921-88-2	0.02	µg/L	<0.00002 mg/L	<0.02	0.0	No Limit
		EP234-1: Demeton-O	298-03-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Demeton-O & Demeton-S	298-03-3/126-75-0	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Demeton-S	126-75-0	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Demeton-S-methyl	919-86-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Dimethoate	60-51-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Ethion	563-12-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Malathion	121-75-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Mevinphos	7786-34-7	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Monocrotophos	6923-22-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Temephos	3383-96-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Trichlorfon	52-68-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP234-1: Disulfoton	298-04-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP234-1: EPN	2104-64-5	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP234-1: Fenthion	55-38-9	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP234-1: Sulprofos	35400-43-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP234-1: Bromophos-ethyl	4824-78-6	0.1	µg/L	<0.10	<0.10	0.0	No Limit
		EP234-1: Phorate	298-02-2	0.1	µg/L	<0.1	<0.1	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP234A: OP Pesticides (QC Lot: 6095688) - continued									
EP2414121-007	Anonymous	EP234-1: Prothiofos	34643-46-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
		EP234-1: Chlorpyrifos-methyl	5598-13-0	0.2	µg/L	<0.2	<0.2	0.0	No Limit
		EP234-1: Dichlorvos	62-73-7	0.2	µg/L	<0.20	<0.20	0.0	No Limit
		EP234-1: Parathion	56-38-2	0.2	µg/L	<0.2	<0.2	0.0	No Limit
		EP234-1: Parathion-methyl	298-00-0	0.5 (2.0)*	µg/L	<2.0	<2.0	0.0	No Limit
		EP234-1: Trichloronate	327-98-0	0.5	µg/L	<0.5	<0.5	0.0	No Limit
		EP234-1: Fenchlorphos (Ronnel)	299-84-3	10	µg/L	<10	<10	0.0	No Limit
		EP234-1: Fenitrothion	122-14-5	2	µg/L	<2	<2	0.0	No Limit

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EA005P: pH by PC Titrator (QCLot: 6104525)								
EA005-P: pH Value	----	----	pH Unit	----	4 pH Unit	100	98.5	102
				----	7 pH Unit	100	98.5	102
EA010P: Conductivity by PC Titrator (QCLot: 6104526)								
EA010-P: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	24800 µS/cm	96.3	92.1	105
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 6089866)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	100	80.0	120
				<10	293 mg/L	95.9	80.0	120
				<10	2410 mg/L	103	80.0	120
EA075: Redox Potential (QCLot: 6086361)								
EA075: Redox Potential	----	----	mV	----	234 mV	100	90.0	110
ED037P: Alkalinity by PC Titrator (QCLot: 6104527)								
ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	----	----	----	----
ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	----	----	----	----
ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	----	----	----	----
ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	<1	20 mg/L	103	85.1	126
				<1	200 mg/L	93.5	90.5	111
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 6088047)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	101	89.9	112
				<1	500 mg/L	95.4	89.9	112
ED045G: Chloride by Discrete Analyser (QCLot: 6088048)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	108	88.6	113
				<1	1000 mg/L	104	88.6	113
ED093F: Dissolved Major Cations (QCLot: 6105450)								
ED093F: Calcium	7440-70-2	1	mg/L	<1	50 mg/L	106	86.5	117
ED093F: Magnesium	7439-95-4	1	mg/L	<1	50 mg/L	# 113	88.4	110
ED093F: Sodium	7440-23-5	1	mg/L	<1	50 mg/L	109	91.4	113
ED093F: Potassium	7440-09-7	1	mg/L	<1	50 mg/L	102	84.6	108
EG020F: Dissolved Metals by ICP-MS (QCLot: 6105452)								
EG020A-F: Aluminium	7429-90-5	0.01	mg/L	<0.01	0.5 mg/L	106	90.2	111
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	103	90.3	113

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG020F: Dissolved Metals by ICP-MS (QCLot: 6105452) - continued								
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	99.0	89.7	108
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	100	87.3	107
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	96.3	88.9	108
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	99.9	89.4	106
EG020A-F: Manganese	7439-96-5	0.001	mg/L	<0.001	0.1 mg/L	98.2	87.6	106
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	97.7	87.2	108
EG020A-F: Selenium	7782-49-2	0.01	mg/L	<0.01	0.1 mg/L	93.8	83.8	102
EG020A-F: Thallium	7440-28-0	0.001	mg/L	<0.001	0.1 mg/L	101	89.4	106
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	104	89.5	112
EG020T: Total Metals by ICP-MS (QCLot: 6102300)								
EG020A-T: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	108	95.0	132
EG035F: Dissolved Mercury by FIMS (QCLot: 6105451)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.005 mg/L	110	85.6	120
EG050F: Dissolved Hexavalent Chromium (QCLot: 6091688)								
EG050G-F: Hexavalent Chromium	18540-29-9	0.01	mg/L	<0.01	0.5 mg/L	99.3	92.9	108
EK055G: Ammonia as N by Discrete Analyser (QCLot: 6088285)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	103	86.2	111
EK057G: Nitrite as N by Discrete Analyser (QCLot: 6088046)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	99.4	88.7	113
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 6088286)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	106	90.5	110
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 6087474)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	97.5	80.0	115
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 6087473)								
EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	4.42 mg/L	85.8	70.0	110
EP005: Total Organic Carbon (TOC) (QCLot: 6088144)								
EP005: Total Organic Carbon	----	1	mg/L	<1	10 mg/L	93.3	87.2	116
				<1	100 mg/L	98.8	87.2	116
EP026SP: Chemical Oxygen Demand (Spectrophotometric) (QCLot: 6103622)								
EP026SP: Chemical Oxygen Demand	----	10	mg/L	<10	50 mg/L	92.0	82.0	112
				<10	500 mg/L	98.0	83.0	113
EP068C: Triazines (QCLot: 6088796)								
EP068: Atrazine	1912-24-9	0.5	µg/L	<0.5	5 µg/L	78.3	42.5	117
EP074E: Halogenated Aliphatic Compounds (QCLot: 6087275)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP074E: Halogenated Aliphatic Compounds (QCLot: 6087275) - continued								
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	# 113	86.4	112
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	112	78.9	121
EP075(SIM)A: Phenolic Compounds (QCLot: 6088792)								
EP075(SIM): Phenol	108-95-2	1	µg/L	<1.0	10 µg/L	30.6	9.07	46.0
EP075(SIM): 2-Chlorophenol	95-57-8	1	µg/L	<1.0	10 µg/L	68.0	34.3	96.6
EP075(SIM): 2-Methylphenol	95-48-7	1	µg/L	<1.0	10 µg/L	58.0	24.9	92.6
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	2	µg/L	<2.0	20 µg/L	54.2	21.8	83.4
EP075(SIM): 2-Nitrophenol	88-75-5	1	µg/L	<1.0	10 µg/L	44.1	33.9	104
EP075(SIM): 2.4-Dimethylphenol	105-67-9	1	µg/L	<1.0	10 µg/L	49.3	33.9	102
EP075(SIM): 2.4-Dichlorophenol	120-83-2	1	µg/L	<1.0	10 µg/L	58.7	34.3	104
EP075(SIM): 2.6-Dichlorophenol	87-65-0	1	µg/L	<1.0	10 µg/L	65.2	38.4	102
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	1	µg/L	<1.0	10 µg/L	58.9	29.8	106
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	1	µg/L	<1.0	10 µg/L	57.6	31.9	109
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	1	µg/L	<1.0	10 µg/L	63.6	34.2	110
EP075(SIM): Pentachlorophenol	87-86-5	2	µg/L	<2.0	10 µg/L	42.0	13.6	104
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6088792)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	10 µg/L	64.1	41.9	99.1
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	10 µg/L	62.2	36.1	113
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	10 µg/L	74.4	35.8	102
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	10 µg/L	78.3	33.5	113
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	10 µg/L	78.6	36.5	115
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	10 µg/L	79.0	46.4	109
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	10 µg/L	81.4	40.4	124
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	10 µg/L	82.7	40.2	123
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	10 µg/L	83.6	40.2	126
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	10 µg/L	83.4	45.6	121
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	10 µg/L	80.8	43.2	123
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	10 µg/L	81.7	47.3	121
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	10 µg/L	72.1	44.8	123
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	10 µg/L	62.8	38.8	120
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	10 µg/L	67.3	39.4	119
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	10 µg/L	72.5	40.1	123
EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	----	----	----	----

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6087274)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	360 µg/L	106	73.6	113
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6088791)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	5676 µg/L	89.4	39.3	103
EP071: C15 - C28 Fraction	----	100	µg/L	<100	10740 µg/L	104	47.2	122
EP071: C29 - C36 Fraction	----	50	µg/L	<50	3044 µg/L	102	42.5	119
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6087274)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	450 µg/L	107	73.9	115
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6088791)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	7710 µg/L	95.2	47.0	100
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	10930 µg/L	104	46.2	116
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	1050 µg/L	104	24.7	137
EP080: BTEXN (QCLot: 6087274)								
EP080: Benzene	71-43-2	1	µg/L	<1	20 µg/L	106	84.1	114
EP080: Toluene	108-88-3	2	µg/L	<2	20 µg/L	110	81.0	115
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	113	84.4	113
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	40 µg/L	111	84.3	114
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	108	86.5	111
EP080: Naphthalene	91-20-3	5	µg/L	<5	5 µg/L	105	77.0	118
EP131A: Organochlorine Pesticides (QCLot: 6092697)								
EP131A: Aldrin	309-00-2	0.01	µg/L	<0.010	1.1 µg/L	90.6	34.0	145
EP131A: alpha-BHC	319-84-6	0.01	µg/L	<0.010	1.1 µg/L	102	27.2	131
EP131A: beta-BHC	319-85-7	0.01	µg/L	<0.010	1.1 µg/L	71.6	28.6	133
EP131A: delta-BHC	319-86-8	0.01	µg/L	<0.010	1.1 µg/L	92.0	36.0	131
EP131A: 4.4`-DDD	72-54-8	0.01	µg/L	<0.010	1.1 µg/L	88.2	36.0	142
EP131A: 4.4`-DDE	72-55-9	0.01	µg/L	<0.010	1.1 µg/L	98.6	30.4	112
EP131A: 4.4`-DDT	50-29-3	0.01	µg/L	<0.010	1.1 µg/L	72.2	29.5	142
EP131A: Dieldrin	60-57-1	0.01	µg/L	<0.010	1.1 µg/L	93.6	28.1	122
EP131A: alpha-Endosulfan	959-98-8	0.01	µg/L	<0.010	1.1 µg/L	100	34.0	119
EP131A: beta-Endosulfan	33213-65-9	0.01	µg/L	<0.010	1.1 µg/L	102	31.6	128
EP131A: Endosulfan sulfate	1031-07-8	0.01	µg/L	<0.010	1.1 µg/L	76.4	35.0	159
EP131A: Endrin	72-20-8	0.01	µg/L	<0.010	1.1 µg/L	120	21.5	165
EP131A: Endosulfan (sum)	115-29-7	0.01	µg/L	<0.010	----	----	----	----
EP131A: Endrin aldehyde	7421-93-4	0.01	µg/L	<0.010	1.1 µg/L	80.7	22.7	123

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP131A: Organochlorine Pesticides (QCLot: 6092697) - continued								
EP131A: Endrin ketone	53494-70-5	0.01	µg/L	<0.010	1.1 µg/L	79.1	16.3	144
EP131A: Heptachlor	76-44-8	0.005	µg/L	<0.005	1.1 µg/L	74.5	33.0	160
EP131A: Heptachlor epoxide	1024-57-3	0.01	µg/L	<0.010	1.1 µg/L	95.1	33.0	117
EP131A: Hexachlorobenzene (HCB)	118-74-1	0.01	µg/L	<0.010	1.1 µg/L	102	23.6	126
EP131A: gamma-BHC - (Lindane)	58-89-9	0.01	µg/L	<0.010	1.1 µg/L	83.8	28.7	134
EP131A: Methoxychlor	72-43-5	0.01	µg/L	<0.010	1.1 µg/L	74.9	29.5	150
EP131A: cis-Chlordane	5103-71-9	0.01	µg/L	<0.010	1.1 µg/L	109	27.0	116
EP131A: trans-Chlordane	5103-74-2	0.01	µg/L	<0.010	1.1 µg/L	114	31.2	119
EP131A: Total Chlordane (sum)	----	0.01	µg/L	<0.010	----	----	----	----
EP131A: Sum of DDD + DDE + DDT	72-54-8/72-5 5-9/50-2	0.01	µg/L	<0.010	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6091511)								
EP231X: Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.02	µg/L	<0.02	----	----	----	----
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.2218 µg/L	95.8	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.2352 µg/L	94.8	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.2373 µg/L	93.3	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.238 µg/L	104	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	96.3	65.0	140
EP231X: Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.02	µg/L	<0.02	0.24 µg/L	97.5	70.0	135
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	103	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6091511)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	96.8	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	93.4	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	98.4	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	92.4	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	99.6	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	91.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	99.6	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	101	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	109	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.25 µg/L	105	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6091511)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	101	67.0	137

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6091511) - continued								
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	117	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	100	60.5	138
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	122	68.3	134
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	101	62.2	138
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	99.2	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	107	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6091511)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.2343 µg/L	104	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.2378 µg/L	103	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	104	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.241 µg/L	95.8	64.2	133
EP231P: PFAS Sums (QCLot: 6091511)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP234A: OP Pesticides (QCLot: 6095688)								
EP234-1: Azinphos-methyl	86-50-0	0.02	µg/L	<0.02	0.2 µg/L	95.6	77.0	129
EP234-1: Azinphos-ethyl	2642-71-9	0.02	µg/L	<0.02	0.2 µg/L	110	75.0	135
EP234-1: Bromophos-ethyl	4824-78-6	0.1	µg/L	<0.10	1 µg/L	91.3	70.0	130
EP234-1: Carbofenothion	786-19-6	0.02	µg/L	<0.02	0.2 µg/L	94.0	70.0	130
EP234-1: Chlorfenvinphos	470-90-6	0.02	µg/L	<0.02	0.2 µg/L	104	74.0	134
EP234-1: Chlorpyrifos	2921-88-2	0.02	µg/L	<0.02	0.2 µg/L	105	70.0	130
EP234-1: Chlorpyrifos-methyl	5598-13-0	0.2	µg/L	<0.2	2 µg/L	93.9	70.0	130
EP234-1: Coumaphos	56-72-4	0.01	µg/L	<0.01	0.1 µg/L	100	70.0	130
EP234-1: Demeton-O	298-03-3	0.02	µg/L	<0.02	0.05 µg/L	97.4	64.0	134
EP234-1: Demeton-O & Demeton-S	298-03-3/126-75-0	0.02	µg/L	<0.02	0.1 µg/L	99.5	79.0	127
EP234-1: Demeton-S	126-75-0	0.02	µg/L	<0.02	0.05 µg/L	102	63.0	135
EP234-1: Demeton-S-methyl	919-86-8	0.02	µg/L	<0.02	0.2 µg/L	107	70.0	128
EP234-1: Diazinon	333-41-5	0.01	µg/L	<0.01	0.1 µg/L	102	68.0	138
EP234-1: Dichlorvos	62-73-7	0.2	µg/L	<0.20	2 µg/L	113	76.0	128

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP234A: OP Pesticides (QCLot: 6095688) - continued								
EP234-1: Dimethoate	60-51-5	0.02	µg/L	<0.02	0.2 µg/L	107	75.0	127
EP234-1: Disulfoton	298-04-4	0.05	µg/L	<0.05	0.5 µg/L	100	72.0	134
EP234-1: EPN	2104-64-5	0.05	µg/L	<0.05	0.5 µg/L	90.5	70.0	130
EP234-1: Ethion	563-12-2	0.02	µg/L	<0.02	0.2 µg/L	106	70.0	130
EP234-1: Ethoprophos	13194-48-4	0.01	µg/L	<0.01	0.1 µg/L	92.6	78.0	128
EP234-1: Fenamiphos	22224-92-6	0.01	µg/L	<0.01	0.1 µg/L	104	71.0	135
EP234-1: Fenchlorphos (Ronnel)	299-84-3	10	µg/L	<10	100 µg/L	100	70.0	130
EP234-1: Fenitrothion	122-14-5	2	µg/L	<2	20 µg/L	116	64.0	136
EP234-1: Fensulfothion	115-90-2	0.01	µg/L	<0.01	0.1 µg/L	102	79.0	125
EP234-1: Fenthion	55-38-9	0.05	µg/L	<0.05	0.5 µg/L	100	70.0	130
EP234-1: Malathion	121-75-5	0.02	µg/L	<0.02	0.2 µg/L	95.4	70.0	130
EP234-1: Mevinphos	7786-34-7	0.02	µg/L	<0.02	0.2 µg/L	102	77.0	123
EP234-1: Monocrotophos	6923-22-4	0.02	µg/L	<0.02	0.2 µg/L	111	75.0	129
EP234-1: Omethoate	1113-02-6	0.01	µg/L	<0.01	0.1 µg/L	102	74.0	130
EP234-1: Parathion	56-38-2	0.2	µg/L	<0.2	2 µg/L	87.3	69.0	139
EP234-1: Parathion-methyl	298-00-0	0.5	µg/L	<0.5	20 µg/L	79.3	66.0	140
EP234-1: Phorate	298-02-2	0.1	µg/L	<0.1	1 µg/L	98.9	68.0	136
EP234-1: Pirimiphos-ethyl	23505-41-1	0.01	µg/L	<0.01	0.1 µg/L	104	70.0	130
EP234-1: Pirimiphos-methyl	29232-93-7	0.01	µg/L	<0.01	0.1 µg/L	101	71.0	137
EP234-1: Profenofos	41198-08-7	0.01	µg/L	<0.01	0.1 µg/L	102	70.0	130
EP234-1: Prothiofos	34643-46-4	0.1	µg/L	<0.1	1 µg/L	71.3	70.0	130
EP234-1: Sulfotep	3689-24-5	0.005	µg/L	<0.005	0.05 µg/L	109	71.0	137
EP234-1: Sulprofos	35400-43-2	0.05	µg/L	<0.05	0.5 µg/L	103	70.0	130
EP234-1: Temephos	3383-96-8	0.02	µg/L	<0.02	0.2 µg/L	102	70.0	130
EP234-1: Terbufos	13071-79-9	0.01	µg/L	<0.01	0.1 µg/L	101	70.0	130
EP234-1: Tetrachlorvinphos	22248-79-9	0.01	µg/L	<0.01	0.1 µg/L	104	74.0	128
EP234-1: Triazophos	24017-47-8	0.005	µg/L	<0.005	0.05 µg/L	108	77.0	131
EP234-1: Trichlorfon	52-68-6	0.02	µg/L	<0.02	0.2 µg/L	97.7	70.0	130
EP234-1: Trichloronate	327-98-0	0.5	µg/L	<0.5	5 µg/L	84.2	63.0	139

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **WATER**

Matrix Spike (MS) Report

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 6088047)							
EP2414022-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	100 mg/L	122	70.4	130
ED045G: Chloride by Discrete Analyser (QCLot: 6088048)							
EP2414022-001	Anonymous	ED045G: Chloride	16887-00-6	200 mg/L	122	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 6105452)							
EP2414208-001	Anonymous	EG020A-F: Arsenic	7440-38-2	0.2 mg/L	93.0	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.05 mg/L	98.5	70.0	130
		EG020A-F: Chromium	7440-47-3	0.2 mg/L	96.8	70.0	130
		EG020A-F: Copper	7440-50-8	0.2 mg/L	98.2	70.0	130
		EG020A-F: Lead	7439-92-1	0.2 mg/L	96.8	70.0	130
		EG020A-F: Manganese	7439-96-5	0.2 mg/L	98.4	70.0	130
		EG020A-F: Nickel	7440-02-0	0.2 mg/L	97.8	70.0	130
		EG020A-F: Zinc	7440-66-6	0.2 mg/L	99.5	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 6105451)							
EP2414023-002	QC04	EG035F: Mercury	7439-97-6	0.005 mg/L	109	70.0	130
EG050F: Dissolved Hexavalent Chromium (QCLot: 6091688)							
EP2413664-001	Anonymous	EG050G-F: Hexavalent Chromium	18540-29-9	0.5 mg/L	84.1	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 6088285)							
EP2413951-001	Anonymous	EK055G: Ammonia as N	7664-41-7	1 mg/L	118	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 6088046)							
EP2414022-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	110	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 6088286)							
EP2413951-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	103	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 6087474)							
EP2413779-002	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	5 mg/L	99.1	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 6087473)							
EP2413779-002	Anonymous	EK067G: Total Phosphorus as P	----	1 mg/L	98.3	70.0	130
EP005: Total Organic Carbon (TOC) (QCLot: 6088144)							
EP2414001-002	Anonymous	EP005: Total Organic Carbon	----	100 mg/L	97.0	70.0	130
EP026SP: Chemical Oxygen Demand (Spectrophotometric) (QCLot: 6103622)							
EP2414023-001	QC02	EP026SP: Chemical Oxygen Demand	----	95.2 mg/L	89.3	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 6087275)							
EP2414029-009	Anonymous	EP074: Trichloroethene	79-01-6	20 µg/L	119	79.1	120
EP075(SIM)A: Phenolic Compounds (QCLot: 6088792)							
EP2414008-004	Anonymous	EP075(SIM): Phenol	108-95-2	10 µg/L	20.2	18.8	59.2

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075(SIM)A: Phenolic Compounds (QCLot: 6088792) - continued							
EP2414008-004	Anonymous	EP075(SIM): 2-Chlorophenol	95-57-8	10 µg/L	45.0	34.2	122
		EP075(SIM): 2-Nitrophenol	88-75-5	10 µg/L	32.6	31.8	134
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	10 µg/L	42.2	39.0	118
		EP075(SIM): Pentachlorophenol	87-86-5	10 µg/L	48.0	17.5	118
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6088792)							
EP2414008-004	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 µg/L	52.7	44.0	124
		EP075(SIM): Pyrene	129-00-0	10 µg/L	65.3	61.6	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6087274)							
EP2414023-002	QC04	EP080: C6 - C9 Fraction	----	240 µg/L	122	77.0	137
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6088791)							
EP2413986-003	Anonymous	EP071: C10 - C14 Fraction	----	5676 µg/L	# 37.4	44.5	122
		EP071: C15 - C28 Fraction	----	10740 µg/L	59.2	55.1	143
		EP071: C29 - C36 Fraction	----	3044 µg/L	57.6	53.6	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6087274)							
EP2414023-002	QC04	EP080: C6 - C10 Fraction	C6_C10	290 µg/L	121	77.0	137
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6088791)							
EP2413986-003	Anonymous	EP071: >C10 - C16 Fraction	----	7710 µg/L	# 44.2	44.5	122
		EP071: >C16 - C34 Fraction	----	10930 µg/L	59.6	55.1	143
		EP071: >C34 - C40 Fraction	----	1050 µg/L	58.9	53.6	128
EP080: BTEXN (QCLot: 6087274)							
EP2414023-002	QC04	EP080: Benzene	71-43-2	20 µg/L	116	77.0	122
		EP080: Toluene	108-88-3	20 µg/L	118	73.5	126
EP131A: Organochlorine Pesticides (QCLot: 6092697)							
EP2414017-002	Anonymous	EP131A: Aldrin	309-00-2	1.1 µg/L	92.2	35.8	139
		EP131A: alpha-BHC	319-84-6	1.1 µg/L	105	19.7	153
		EP131A: beta-BHC	319-85-7	1.1 µg/L	71.8	43.8	136
		EP131A: delta-BHC	319-86-8	1.1 µg/L	94.0	37.4	144
		EP131A: 4.4`-DDD	72-54-8	1.1 µg/L	111	37.5	145
		EP131A: 4.4`-DDE	72-55-9	1.1 µg/L	97.8	30.5	146
		EP131A: 4.4`-DDT	50-29-3	1.1 µg/L	63.6	31.0	151
		EP131A: Dieldrin	60-57-1	1.1 µg/L	95.5	34.4	145
		EP131A: alpha-Endosulfan	959-98-8	1.1 µg/L	102	30.2	141
		EP131A: beta-Endosulfan	33213-65-9	1.1 µg/L	106	30.3	148
		EP131A: Endosulfan sulfate	1031-07-8	1.1 µg/L	76.0	19.1	150
		EP131A: Endrin	72-20-8	1.1 µg/L	104	13.0	165
		EP131A: Endrin aldehyde	7421-93-4	1.1 µg/L	81.5	28.3	134
		EP131A: Endrin ketone	53494-70-5	1.1 µg/L	81.5	15.1	146

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP131A: Organochlorine Pesticides (QCLot: 6092697) - continued							
EP2414017-002	Anonymous	EP131A: Heptachlor	76-44-8	1.1 µg/L	76.0	33.2	148
		EP131A: Heptachlor epoxide	1024-57-3	1.1 µg/L	96.8	36.0	143
		EP131A: Hexachlorobenzene (HCB)	118-74-1	1.1 µg/L	104	14.0	146
		EP131A: gamma-BHC - (Lindane)	58-89-9	1.1 µg/L	85.4	27.2	147
		EP131A: Methoxychlor	72-43-5	1.1 µg/L	78.2	34.4	150
		EP131A: cis-Chlordane	5103-71-9	1.1 µg/L	112	15.4	152
		EP131A: trans-Chlordane	5103-74-2	1.1 µg/L	115	45.1	140
EP234A: OP Pesticides (QCLot: 6095688)							
EP2414121-007	Anonymous	EP234-1: Azinphos-methyl	86-50-0	0.2 µg/L	107	70.0	130
		EP234-1: Azinphos-ethyl	2642-71-9	0.2 µg/L	107	70.0	130
		EP234-1: Bromophos-ethyl	4824-78-6	1 µg/L	# 262	70.0	130
		EP234-1: Carbofenothion	786-19-6	0.2 µg/L	100	70.0	130
		EP234-1: Chlorfenvinphos	470-90-6	0.2 µg/L	105	70.0	130
		EP234-1: Chlorpyrifos	2921-88-2	0.2 µg/L	101	70.0	130
		EP234-1: Chlorpyrifos-methyl	5598-13-0	2 µg/L	132	58.0	136
		EP234-1: Coumaphos	56-72-4	0.1 µg/L	112	70.0	130
		EP234-1: Demeton-O	298-03-3	0.05 µg/L	103	70.0	130
		EP234-1: Demeton-O & Demeton-S	298-03-3/126-75-0	0.1 µg/L	101	69.0	129
		EP234-1: Demeton-S	126-75-0	0.05 µg/L	102	70.0	130
		EP234-1: Demeton-S-methyl	919-86-8	0.2 µg/L	106	70.0	130
		EP234-1: Diazinon	333-41-5	0.1 µg/L	102	70.0	130
		EP234-1: Dichlorvos	62-73-7	2 µg/L	125	70.0	130
		EP234-1: Dimethoate	60-51-5	0.2 µg/L	104	69.0	131
		EP234-1: Disulfoton	298-04-4	0.5 µg/L	106	70.0	130
		EP234-1: EPN	2104-64-5	0.5 µg/L	110	70.0	130
		EP234-1: Ethion	563-12-2	0.2 µg/L	101	70.0	130
		EP234-1: Ethoprophos	13194-48-4	0.1 µg/L	# 202	70.0	132
		EP234-1: Fenamiphos	22224-92-6	0.1 µg/L	104	70.0	130
		EP234-1: Fenchlorphos (Ronnel)	299-84-3	100 µg/L	# 141	71.0	133
		EP234-1: Fenitrothion	122-14-5	20 µg/L	# 146	64.0	136
		EP234-1: Fensulfothion	115-90-2	0.1 µg/L	95.7	83.0	123
		EP234-1: Fenthion	55-38-9	0.5 µg/L	120	70.0	130
		EP234-1: Malathion	121-75-5	0.2 µg/L	109	70.0	130
		EP234-1: Mevinphos	7786-34-7	0.2 µg/L	104	69.0	125
		EP234-1: Monocrotophos	6923-22-4	0.2 µg/L	88.0	70.0	128
		EP234-1: Omethoate	1113-02-6	0.1 µg/L	108	70.0	130
		EP234-1: Parathion	56-38-2	2 µg/L	120	70.0	130
		EP234-1: Parathion-methyl	298-00-0	20 µg/L	# 66.8	70.0	140

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP234A: OP Pesticides (QCLot: 6095688) - continued							
EP2414121-007	Anonymous	EP234-1: Phorate	298-02-2	1 µg/L	104	70.0	130
		EP234-1: Pirimiphos-ethyl	23505-41-1	0.1 µg/L	102	70.0	130
		EP234-1: Pirimiphos-methyl	29232-93-7	0.1 µg/L	98.6	70.0	130
		EP234-1: Profenofos	41198-08-7	0.1 µg/L	105	70.0	130
		EP234-1: Prothiofos	34643-46-4	1 µg/L	# 209	70.0	130
		EP234-1: Sulfotep	3689-24-5	0.05 µg/L	102	63.0	135
		EP234-1: Sulprofos	35400-43-2	0.5 µg/L	101	70.0	130
		EP234-1: Temephos	3383-96-8	0.2 µg/L	105	70.0	130
		EP234-1: Terbufos	13071-79-9	0.1 µg/L	108	70.0	130
		EP234-1: Tetrachlorvinphos	22248-79-9	0.1 µg/L	106	77.0	125
		EP234-1: Triazophos	24017-47-8	0.05 µg/L	98.4	74.0	132
		EP234-1: Trichlorfon	52-68-6	0.2 µg/L	# 225	70.0	130
		EP234-1: Trichloronate	327-98-0	5 µg/L	# 183	63.0	139

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EP2414023**	Page	: 1 of 16
Client	: **SLR CONSULTING AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Perth
Contact	: Phuntsho Wangdi	Telephone	: +61-8-9406 1301
Project	: Banksia Landill Site GME 2024	Date Samples Received	: 27-Sep-2024
Site	: ----	Issue Date	: 10-Oct-2024
Sampler	: Kavindi Sahabandu/Pema Dorji	No. of samples received	: 2
Order number	: ----	No. of samples analysed	: 2

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **Laboratory Control outliers exist - please see following pages for full details.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.**

Outliers : Analysis Holding Time Compliance

- **Analysis Holding Time Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
ED093F: Dissolved Major Cations	QC-MRG3-61054500	----	**Magnesium**	7439-95-4	113 %	88.4-110%	**Recovery greater than upper control limit**
EP074E: Halogenated Aliphatic Compounds	QC-6087275-002	----	**Trichloroethene**	79-01-6	113 %	86.4-112%	**Recovery greater than upper control limit**
Matrix Spike (MS) Recoveries							
EP080/071: Total Petroleum Hydrocarbons	EP2413986--003	Anonymous	**C10 - C14 Fraction**	----	37.4 %	44.5-122%	**Recovery less than lower data quality objective**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2	EP2413986--003	Anonymous	**>C10 - C16 Fraction**	----	44.2 %	44.5-122%	**Recovery less than lower data quality objective**
EP234A: OP Pesticides	EP2414121--007	Anonymous	**Bromophos-ethyl**	4824-78-6	262 %	70.0-130%	**Recovery greater than upper data quality objective**
EP234A: OP Pesticides	EP2414121--007	Anonymous	**Ethoprophos**	13194-48-4	202 %	70.0-132%	**Recovery greater than upper data quality objective**
EP234A: OP Pesticides	EP2414121--007	Anonymous	**Fenchlorphos (Ronnel)**	299-84-3	141 %	71.0-133%	**Recovery greater than upper data quality objective**
EP234A: OP Pesticides	EP2414121--007	Anonymous	**Fenitrothion**	122-14-5	146 %	64.0-136%	**Recovery greater than upper data quality objective**
EP234A: OP Pesticides	EP2414121--007	Anonymous	**Parathion-methyl**	298-00-0	66.8 %	70.0-140%	**Recovery less than lower data quality objective**
EP234A: OP Pesticides	EP2414121--007	Anonymous	**Prothiofos**	34643-46-4	209 %	70.0-130%	**Recovery greater than upper data quality objective**
EP234A: OP Pesticides	EP2414121--007	Anonymous	**Trichlorfon**	52-68-6	225 %	70.0-130%	**Recovery greater than upper data quality objective**
EP234A: OP Pesticides	EP2414121--007	Anonymous	**Trichloronate**	327-98-0	183 %	63.0-139%	**Recovery greater than upper data quality objective**

Regular Sample Surrogates

Sub-Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP066S: PCB Surrogate	EP2414023-002	QC04	**Decachlorobiphenyl**	2051-24-3	147 %	27.4-136 %	**Recovery greater than upper data quality objective**

Outliers : Analysis Holding Time Compliance

Matrix: **WATER**

Method	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)	Date extracted	Due for extraction	Days overdue	Date analysed	Due for analysis	Days overdue
EA005P: pH by PC Titrator						

Matrix: **WATER**

Method / **Container** / Client Sample ID(s)	*Extraction / Preparation*			*Analysis*		
	Date extracted	*Due for extraction*	***Days overdue***	*Date analysed*	*Due for analysis*	***Days overdue***
EA005P: pH by PC Titrator - Analysis Holding Time Compliance						
Clear Plastic Bottle - Natural QC02	----	----	----	09-Oct-2024	25-Sep-2024	**14**
Clear Plastic Bottle - Natural QC04	----	----	----	09-Oct-2024	26-Sep-2024	**13**
EA075: Redox Potential						
Clear Plastic Bottle - Natural QC02	----	----	----	28-Sep-2024	25-Sep-2024	**3**
Clear Plastic Bottle - Natural QC04	----	----	----	28-Sep-2024	26-Sep-2024	**2**
ED037P: Alkalinity by PC Titrator						
Clear Plastic Bottle - Natural QC02	----	----	----	09-Oct-2024	08-Oct-2024	**1**
EK055G: Ammonia as N by Discrete Analyser						
Clear Plastic Bottle - Natural QC02	----	----	----	30-Sep-2024	25-Sep-2024	**5**
Clear Plastic Bottle - Natural QC04	----	----	----	30-Sep-2024	26-Sep-2024	**4**
EK057G: Nitrite as N by Discrete Analyser						
Clear Plastic Bottle - Natural QC02	----	----	----	30-Sep-2024	26-Sep-2024	**4**
Clear Plastic Bottle - Natural QC04	----	----	----	30-Sep-2024	27-Sep-2024	**3**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser						
Clear Plastic Bottle - Natural QC02	----	----	----	30-Sep-2024	26-Sep-2024	**4**
Clear Plastic Bottle - Natural QC04	----	----	----	30-Sep-2024	27-Sep-2024	**3**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser						
Clear Plastic Bottle - Natural QC02	01-Oct-2024	25-Sep-2024	**6**	----	----	----
Clear Plastic Bottle - Natural QC04	01-Oct-2024	26-Sep-2024	**5**	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser						
Clear Plastic Bottle - Natural QC02	01-Oct-2024	26-Sep-2024	**5**	----	----	----
Clear Plastic Bottle - Natural QC04	01-Oct-2024	27-Sep-2024	**4**	----	----	----
EP005: Total Organic Carbon (TOC)						

Matrix: **WATER**

Method / Container / Client Sample ID(s)	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Days overdue	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Days overdue
EP005: Total Organic Carbon (TOC) - Analysis Holding Time Compliance						
Clear glass VOC vial - HCl						
QC02	----	----	----	30-Sep-2024	25-Sep-2024	**5**
Clear glass VOC vial - HCl						
QC04	----	----	----	30-Sep-2024	26-Sep-2024	**4**
EP025: Oxygen - Dissolved (DO)						
Clear Plastic Bottle - Natural						
QC02	----	----	----	28-Sep-2024	25-Sep-2024	**3**
Clear Plastic Bottle - Natural						
QC04	----	----	----	28-Sep-2024	26-Sep-2024	**2**
EP131A: Organochlorine Pesticides						
Amber Glass Bottle - Unpreserved						
QC02	02-Oct-2024	01-Oct-2024	**1**	----	----	----
EP234A: OP Pesticides						
Amber Glass Bottle - Unpreserved						
QC02	----	----	----	03-Oct-2024	01-Oct-2024	**2**
Amber Glass Bottle - Unpreserved						
QC04	----	----	----	03-Oct-2024	02-Oct-2024	**1**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Analytical Methods	Method	Count: QC	Count: Regular	Rate (%): Actual	Rate (%): Expected	Quality Control Specification
Laboratory Duplicates (DUP)						
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	0	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)						
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	0	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	0	15	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA005P: pH by PC Titrator							
Clear Plastic Bottle - Natural (EA005-P) QC02	**24-Sep-2024**	**----**	----	----	**09-Oct-2024**	25-Sep-2024	×
Clear Plastic Bottle - Natural (EA005-P) QC04	**25-Sep-2024**	**----**	----	----	**09-Oct-2024**	26-Sep-2024	×
EA010P: Conductivity by PC Titrator							
Clear Plastic Bottle - Natural (EA010-P) QC02	**24-Sep-2024**	**----**	----	----	**09-Oct-2024**	22-Oct-2024	✓
Clear Plastic Bottle - Natural (EA010-P) QC04	**25-Sep-2024**	**----**	----	----	**09-Oct-2024**	23-Oct-2024	✓
EA015: Total Dissolved Solids dried at 180 ± 5 °C							
Clear Plastic Bottle - Natural (EA015H) QC02	**24-Sep-2024**	**----**	----	----	**01-Oct-2024**	01-Oct-2024	✓
Clear Plastic Bottle - Natural (EA015H) QC04	**25-Sep-2024**	**----**	----	----	**01-Oct-2024**	02-Oct-2024	✓
EA075: Redox Potential							
Clear Plastic Bottle - Natural (EA075) QC02	**24-Sep-2024**	**----**	----	----	**28-Sep-2024**	25-Sep-2024	×
Clear Plastic Bottle - Natural (EA075) QC04	**25-Sep-2024**	**----**	----	----	**28-Sep-2024**	26-Sep-2024	×
ED037P: Alkalinity by PC Titrator							
Clear Plastic Bottle - Natural (ED037-P) QC02	**24-Sep-2024**	**----**	----	----	**09-Oct-2024**	08-Oct-2024	×
Clear Plastic Bottle - Natural (ED037-P) QC04	**25-Sep-2024**	**----**	----	----	**09-Oct-2024**	09-Oct-2024	✓
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA							
Clear Plastic Bottle - Natural (ED041G) QC02	**24-Sep-2024**	**----**	----	----	**30-Sep-2024**	22-Oct-2024	✓
Clear Plastic Bottle - Natural (ED041G) QC04	**25-Sep-2024**	**----**	----	----	**30-Sep-2024**	23-Oct-2024	✓
ED045G: Chloride by Discrete Analyser							
Clear Plastic Bottle - Natural (ED045G) QC02	**24-Sep-2024**	**----**	----	----	**30-Sep-2024**	22-Oct-2024	✓
Clear Plastic Bottle - Natural (ED045G) QC04	**25-Sep-2024**	**----**	----	----	**30-Sep-2024**	23-Oct-2024	✓
ED093F: Dissolved Major Cations							
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F) QC02	**24-Sep-2024**	**----**	----	----	**08-Oct-2024**	22-Oct-2024	✓
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F) QC04	**25-Sep-2024**	**----**	----	----	**08-Oct-2024**	23-Oct-2024	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F) QC02	**24-Sep-2024**	**----**	----	----	**08-Oct-2024**	23-Mar-2025	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F) QC04	**25-Sep-2024**	**----**	----	----	**08-Oct-2024**	24-Mar-2025	✓
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T) QC02	**24-Sep-2024**	**08-Oct-2024**	23-Mar-2025	✓	**08-Oct-2024**	23-Mar-2025	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T) QC04	**25-Sep-2024**	**08-Oct-2024**	24-Mar-2025	✓	**08-Oct-2024**	24-Mar-2025	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F) QC02	**24-Sep-2024**	**----**	----	----	**08-Oct-2024**	22-Oct-2024	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F) QC04	**25-Sep-2024**	**----**	----	----	**08-Oct-2024**	23-Oct-2024	✓
EG050F: Dissolved Hexavalent Chromium							
Clear Plastic Bottle - NaOH (EG050G-F) QC02	**24-Sep-2024**	**----**	----	----	**01-Oct-2024**	22-Oct-2024	✓
Clear Plastic Bottle - NaOH (EG050G-F) QC04	**25-Sep-2024**	**----**	----	----	**01-Oct-2024**	23-Oct-2024	✓
EK055G: Ammonia as N by Discrete Analyser							
Clear Plastic Bottle - Natural (EK055G) QC02	**24-Sep-2024**	**----**	----	----	**30-Sep-2024**	25-Sep-2024	×
Clear Plastic Bottle - Natural (EK055G) QC04	**25-Sep-2024**	**----**	----	----	**30-Sep-2024**	26-Sep-2024	×
EK057G: Nitrite as N by Discrete Analyser							
Clear Plastic Bottle - Natural (EK057G) QC02	**24-Sep-2024**	**----**	----	----	**30-Sep-2024**	26-Sep-2024	×
Clear Plastic Bottle - Natural (EK057G) QC04	**25-Sep-2024**	**----**	----	----	**30-Sep-2024**	27-Sep-2024	×
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser							
Clear Plastic Bottle - Natural (EK059G) QC02	**24-Sep-2024**	**----**	----	----	**30-Sep-2024**	26-Sep-2024	×
Clear Plastic Bottle - Natural (EK059G) QC04	**25-Sep-2024**	**----**	----	----	**30-Sep-2024**	27-Sep-2024	×
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser							
Clear Plastic Bottle - Natural (EK061G) QC02	**24-Sep-2024**	**01-Oct-2024**	25-Sep-2024	×	**03-Oct-2024**	29-Oct-2024	✓
Clear Plastic Bottle - Natural (EK061G) QC04	**25-Sep-2024**	**01-Oct-2024**	26-Sep-2024	×	**03-Oct-2024**	29-Oct-2024	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EK067G: Total Phosphorus as P by Discrete Analyser							
Clear Plastic Bottle - Natural (EK067G) QC02	**24-Sep-2024**	**01-Oct-2024**	26-Sep-2024	×	**03-Oct-2024**	29-Oct-2024	✓
Clear Plastic Bottle - Natural (EK067G) QC04	**25-Sep-2024**	**01-Oct-2024**	27-Sep-2024	×	**03-Oct-2024**	29-Oct-2024	✓
EP005: Total Organic Carbon (TOC)							
Clear glass VOC vial - HCl (EP005) QC02	**24-Sep-2024**	**----**	----	----	**30-Sep-2024**	25-Sep-2024	×
Clear glass VOC vial - HCl (EP005) QC04	**25-Sep-2024**	**----**	----	----	**30-Sep-2024**	26-Sep-2024	×
EP025: Oxygen - Dissolved (DO)							
Clear Plastic Bottle - Natural (EP025) QC02	**24-Sep-2024**	**----**	----	----	**28-Sep-2024**	25-Sep-2024	×
Clear Plastic Bottle - Natural (EP025) QC04	**25-Sep-2024**	**----**	----	----	**28-Sep-2024**	26-Sep-2024	×
EP026SP: Chemical Oxygen Demand (Spectrophotometric)							
Clear Plastic Bottle - Natural (EP026SP) QC02	**24-Sep-2024**	**----**	----	----	**08-Oct-2024**	22-Oct-2024	✓
Clear Plastic Bottle - Natural (EP026SP) QC04	**25-Sep-2024**	**----**	----	----	**08-Oct-2024**	23-Oct-2024	✓
EP068C: Triazines							
Amber Glass Bottle - Unpreserved (EP068) QC02	**24-Sep-2024**	**01-Oct-2024**	01-Oct-2024	✓	**07-Oct-2024**	10-Nov-2024	✓
Amber Glass Bottle - Unpreserved (EP068) QC04	**25-Sep-2024**	**01-Oct-2024**	02-Oct-2024	✓	**07-Oct-2024**	10-Nov-2024	✓
EP074E: Halogenated Aliphatic Compounds							
Clear glass VOC vial - HCl (EP074) QC02	**24-Sep-2024**	**30-Sep-2024**	08-Oct-2024	✓	**01-Oct-2024**	08-Oct-2024	✓
Clear glass VOC vial - HCl (EP074) QC04	**25-Sep-2024**	**30-Sep-2024**	09-Oct-2024	✓	**01-Oct-2024**	09-Oct-2024	✓
EP075(SIM)A: Phenolic Compounds							
Amber Glass Bottle - Unpreserved (EP075(SIM)) QC02	**24-Sep-2024**	**01-Oct-2024**	01-Oct-2024	✓	**07-Oct-2024**	10-Nov-2024	✓
Amber Glass Bottle - Unpreserved (EP075(SIM)) QC04	**25-Sep-2024**	**01-Oct-2024**	02-Oct-2024	✓	**07-Oct-2024**	10-Nov-2024	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM)) QC02	**24-Sep-2024**	**01-Oct-2024**	01-Oct-2024	✓	**07-Oct-2024**	10-Nov-2024	✓
Amber Glass Bottle - Unpreserved (EP075(SIM)) QC04	**25-Sep-2024**	**01-Oct-2024**	02-Oct-2024	✓	**07-Oct-2024**	10-Nov-2024	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071) QC02	**24-Sep-2024**	**01-Oct-2024**	01-Oct-2024	✓	**08-Oct-2024**	10-Nov-2024	✓
Amber Glass Bottle - Unpreserved (EP071) QC04	**25-Sep-2024**	**01-Oct-2024**	02-Oct-2024	✓	**08-Oct-2024**	10-Nov-2024	✓
Clear glass VOC vial - HCl (EP080) QC02	**24-Sep-2024**	**30-Sep-2024**	08-Oct-2024	✓	**01-Oct-2024**	08-Oct-2024	✓
Clear glass VOC vial - HCl (EP080) QC04	**25-Sep-2024**	**30-Sep-2024**	09-Oct-2024	✓	**01-Oct-2024**	09-Oct-2024	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071) QC02	**24-Sep-2024**	**01-Oct-2024**	01-Oct-2024	✓	**08-Oct-2024**	10-Nov-2024	✓
Amber Glass Bottle - Unpreserved (EP071) QC04	**25-Sep-2024**	**01-Oct-2024**	02-Oct-2024	✓	**08-Oct-2024**	10-Nov-2024	✓
Clear glass VOC vial - HCl (EP080) QC02	**24-Sep-2024**	**30-Sep-2024**	08-Oct-2024	✓	**01-Oct-2024**	08-Oct-2024	✓
Clear glass VOC vial - HCl (EP080) QC04	**25-Sep-2024**	**30-Sep-2024**	09-Oct-2024	✓	**01-Oct-2024**	09-Oct-2024	✓
EP080: BTEXN							
Clear glass VOC vial - HCl (EP080) QC02	**24-Sep-2024**	**30-Sep-2024**	08-Oct-2024	✓	**01-Oct-2024**	08-Oct-2024	✓
Clear glass VOC vial - HCl (EP080) QC04	**25-Sep-2024**	**30-Sep-2024**	09-Oct-2024	✓	**01-Oct-2024**	09-Oct-2024	✓
EP131A: Organochlorine Pesticides							
Amber Glass Bottle - Unpreserved (EP131A) QC02	**24-Sep-2024**	**02-Oct-2024**	01-Oct-2024	×	**03-Oct-2024**	11-Nov-2024	✓
Amber Glass Bottle - Unpreserved (EP131A) QC04	**25-Sep-2024**	**02-Oct-2024**	02-Oct-2024	✓	**03-Oct-2024**	11-Nov-2024	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) QC02	**24-Sep-2024**	**01-Oct-2024**	23-Mar-2025	✓	**03-Oct-2024**	23-Mar-2025	✓
HDPE (no PTFE) (EP231X) QC04	**25-Sep-2024**	**01-Oct-2024**	24-Mar-2025	✓	**03-Oct-2024**	24-Mar-2025	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) QC02	**24-Sep-2024**	**01-Oct-2024**	23-Mar-2025	✓	**03-Oct-2024**	23-Mar-2025	✓
HDPE (no PTFE) (EP231X) QC04	**25-Sep-2024**	**01-Oct-2024**	24-Mar-2025	✓	**03-Oct-2024**	24-Mar-2025	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) QC02	**24-Sep-2024**	**01-Oct-2024**	23-Mar-2025	✓	**03-Oct-2024**	23-Mar-2025	✓
HDPE (no PTFE) (EP231X) QC04	**25-Sep-2024**	**01-Oct-2024**	24-Mar-2025	✓	**03-Oct-2024**	24-Mar-2025	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) QC02	**24-Sep-2024**	**01-Oct-2024**	23-Mar-2025	✓	**03-Oct-2024**	23-Mar-2025	✓
HDPE (no PTFE) (EP231X) QC04	**25-Sep-2024**	**01-Oct-2024**	24-Mar-2025	✓	**03-Oct-2024**	24-Mar-2025	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X) QC02	**24-Sep-2024**	**01-Oct-2024**	23-Mar-2025	✓	**03-Oct-2024**	23-Mar-2025	✓
HDPE (no PTFE) (EP231X) QC04	**25-Sep-2024**	**01-Oct-2024**	24-Mar-2025	✓	**03-Oct-2024**	24-Mar-2025	✓
EP234A: OP Pesticides							
Amber Glass Bottle - Unpreserved (EP234-1) QC02	**24-Sep-2024**	**----**	----	----	**03-Oct-2024**	01-Oct-2024	×
Amber Glass Bottle - Unpreserved (EP234-1) QC04	**25-Sep-2024**	**----**	----	----	**03-Oct-2024**	02-Oct-2024	×

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Alkalinity by Auto Titrator	ED037-P	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chemical Oxygen Demand (COD) (Spectrophotometric)	EP026SP	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Conductivity by Auto Titrator	EA010-P	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	7	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	7	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Discrete Analyser - Dissolved	EG050G-F	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organochlorine Pesticides (Ultra-trace)	EP131A	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Oxygen - Dissolved	EP025	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	0	2	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	2	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by LCMSMS (Positive Ion Mode)	EP234-1	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH by Auto Titrator	EA005-P	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	2	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Redox Potential	EA075	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Organic Carbon	EP005	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	12	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Alkalinity by Auto Titrator	ED037-P	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chemical Oxygen Demand (COD) (Spectrophotometric)	EP026SP	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Conductivity by Auto Titrator	EA010-P	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS) - Continued							
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Discrete Analyser - Dissolved	EG050G-F	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organochlorine Pesticides (Ultra-trace)	EP131A	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by LCMSMS (Positive Ion Mode)	EP234-1	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH by Auto Titrator	EA005-P	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Redox Potential	EA075	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	3	16	**18.75**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Organic Carbon	EP005	2	4	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Alkalinity by Auto Titrator	ED037-P	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chemical Oxygen Demand (COD) (Spectrophotometric)	EP026SP	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Conductivity by Auto Titrator	EA010-P	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Discrete Analyser - Dissolved	EG050G-F	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organochlorine Pesticides (Ultra-trace)	EP131A	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by LCMSMS (Positive Ion Mode)	EP234-1	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Method Blanks (MB) - Continued							
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Organic Carbon	EP005	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chemical Oxygen Demand (COD) (Spectrophotometric)	EP026SP	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Discrete Analyser - Dissolved	EG050G-F	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organochlorine Pesticides (Ultra-trace)	EP131A	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by LCMSMS (Positive Ion Mode)	EP234-1	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	0	15	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Organic Carbon	EP005	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH by Auto Titrator	EA005-P	WATER	In house: Referenced to APHA 4500 H+ B. This procedure determines pH of water samples by automated ISE. This method is compliant with NEPM Schedule B(3)
Conductivity by Auto Titrator	EA010-P	WATER	In house: Referenced to APHA 2510 B. This procedure determines conductivity by automated ISE. This method is compliant with NEPM Schedule B(3)
Total Dissolved Solids (High Level)	EA015H	WATER	In house: Referenced to APHA 2540C. A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM Schedule B(3)
Redox Potential	* EA075	WATER	In house: Ion selective electrode
Alkalinity by Auto Titrator	ED037-P	WATER	In house: Referenced to APHA 2320 B This procedure determines alkalinity by automated measurement (e.g. PC Titrate) on a settled supernatant aliquot of the sample using pH 4.5 for indicating the total alkalinity end-point. This method is compliant with NEPM Schedule B(3)
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	WATER	In house: Referenced to APHA 4500-SO4. Dissolved sulfate is determined in a 0.45um filtered sample. Sulfate ions are converted to a barium sulfate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO4 suspension is measured by a photometer and the SO4-2 concentration is determined by comparison of the reading with a standard curve. This method is compliant with NEPM Schedule B(3)
Chloride by Discrete Analyser	ED045G	WATER	In house: Referenced to APHA 4500 Cl - G.The thiocyanate ion is liberated from mercuric thiocyanate through sequestration of mercury by the chloride ion to form non-ionised mercuric chloride. In the presence of ferric ions the liberated thiocynate forms highly-coloured ferric thiocynate which is measured at 480 nm.
Major Cations - Dissolved	ED093F	WATER	In house: Referenced to APHA 3120 and 3125; USEPA SW 846 - 6010 and 6020; Cations are determined by either ICP-AES or ICP-MS techniques. This method is compliant with NEPM Schedule B(3) Sodium Adsorption Ratio is calculated from Ca, Mg and Na which determined by ALS in house method QWI-EN/ED093F. This method is compliant with NEPM Schedule B(3) Hardness parameters are calculated based on APHA 2340 B. This method is compliant with NEPM Schedule B(3)
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Trivalent Chromium - Dissolved	EG049G-F	WATER	In house: Referenced to APHA 3500 Cr-B & 3120/3125. Trivalent Chromium is the difference between total dissolved and dissolved hexavalent chromium.
Hexavalent Chromium by Discrete Analyser - Dissolved	EG050G-F	WATER	In house: Referenced to APHA 3500 Cr-A & B. Samples are 0.45µm filtered prior to analysis. Hexavalent chromium is determined directly on water sample by Descrete Analyser as received by pH adjustment and colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3).
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	WATER	In house: Referenced to APHA 4500-Norg D (In house). An aliquot of sample is digested using a high temperature Kjeldahl digestion to convert nitrogenous compounds to ammonia. Ammonia is determined colorimetrically by discrete analyser. This method is compliant with NEPM Schedule B(3)
Total Nitrogen as N (TKN + Nox) By Discrete Analyser	EK062G	WATER	In house: Referenced to APHA 4500-Norg / 4500-NO3-. This method is compliant with NEPM Schedule B(3)
Total Phosphorus as P By Discrete Analyser	EK067G	WATER	In house: Referenced to APHA 4500-P H, Jirka et al, Zhang et al. This procedure involves sulphuric acid digestion of a sample aliquot to break phosphorus down to orthophosphate. The orthophosphate reacts with ammonium molybdate and antimony potassium tartrate to form a complex which is then reduced and its concentration measured at 880nm using discrete analyser. This method is compliant with NEPM Schedule B(3)
Ionic Balance by PCT DA and Turbi SO4 DA	* EN055 - PG	WATER	In house: Referenced to APHA 1030E. This method is compliant with NEPM Schedule B(3)
Total Organic Carbon	EP005	WATER	In house: Referenced to APHA 5310 B, The automated TOC analyzer determines Total and Inorganic Carbon by IR cell. TOC is calculated as the difference. This method is compliant with NEPM Schedule B(3)
Oxygen - Dissolved	EP025	WATER	In house: Referenced to APHA 4500-O G. Dissolved Oxygen Probe. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
Chemical Oxygen Demand (COD) (Spectrophotometric)	EP026SP	WATER	In house: Referenced to APHA 5220 D. Samples are digested with a known excess of an acidic potassium dichromate solution using silver sulfate as a catalyst. The chromium is reduced from the Cr (VI) oxidation state to the Cr (III) state by the oxygen present in the organic material. Both of these chromium species are coloured and absorb in the visible region of (400nm & 600nm) the spectrum. The oxidisable organic matter can be calculated in terms of oxygen equivalents.
Polychlorinated Biphenyls (PCB)	EP066	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
Volatile Organic Compounds	EP074	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)
Organochlorine Pesticides (Ultra-trace)	EP131A	WATER	In house: Referenced to USEPA Method 3640 (GPC cleanup),3620 (Florisil), 8081/8082 (GC/µECD/uECD). This method is compliant with NEPM Schedule B(3)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.4, table B-15 requirements.
Pesticides by LCMSMS (Positive Ion Mode)	EP234-1	WATER	In house: LC-MSMS, direct injection. A sample is filtered and injected directly onto the LC-MSMS. Analysis is by LC/MSMS, ESI Positive Mode.

Preparation Methods	Method	Matrix	Method Descriptions
TKN/TP Digestion	EK061/EK067	WATER	In house: Referenced to APHA 4500 Norg - D; APHA 4500 P - H. This method is compliant with NEPM Schedule B(3)
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Sep. Funnel Extraction of Liquids (Ultra-trace pesticides.)	ORG14-UTP	WATER	In house: Referenced to USEPA 3510 Samples are extracted into dichloromethane, concentrated and exchanged into an apporpriate solvent for GPC and florisil cleanup as required. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging.
Solid Phase Extraction (SPE) for PFAS in water	* ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

CHAIN OF CUSTODY

ALS Environmental

ALS Laboratory: please tick →

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CLIENT: SLR consulting Australia	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)
OFFICE: 500 Hay St, Level 1, Subiaco, WA 6008	☐ Standard TAT (List due date):
PROJECT: Banksia Landfill site GME 2024	☐ Non Standard or urgent TAT (List due date):
ORDER NUMBER:	ALS QUOTE NO.: Blanket
PROJECT MANAGER: Phuntsho Wangdi	QC samples
SAMPLERS :Kavindi Sahabandu/Pema Dorji	CONTACT PH:
COC emailed to ALS? (YES / NO)	SAMPLER MOBILE: 0468245350
Email Reports to (will default to PM if no other addresses are listed): pwangdi@slrconsulting.com; pdorji@slrconsulting.com	EDD FORMAT (or default): Esdat
Email Invoice to (will default to PM if no other addresses are listed): AccountsPayableAU@slrconsulting.com	

COC SEQUENCE NUMBER (Circle)

COC: 1 2 3 4 5 6 7

OF: 1 2 3 4 5 6 7

FOR LABORATORY USE ONLY (Circle)

Custody Seal Intact?	Yes	No	N/A
Free ice / frozen ice bricks present upon receipt?	Yes	No	N/A
Random Sample Temperature on Receipt		°C	
Other comment:			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 27/9 1545	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	Physio-chemical – pH, EC, Em, DO	Nutrients – COD, NH3, nitrate, total nitrogen, total phosphorus, TDS, TOC	Major Ions – Ca, Mg, K, Na, Cl, bicarbonate, sulfate	Dissolved metals – Al, As, Cd, Cr (III+VI), Cu, Pb, Mn, Mo, Hg, Ni, Ti, Se, Zn	Total Metals – Fe	PFAS/PFOA/28 Suite Standard LOR	BTEX, TPH/TRH, PHENOLS, PAH, ATRAZINE, PCB, LIT OCP/OPP, TCE/PCE		Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	QC02	24-09-2024	W			X	X	X	X	X	X	X		
2	QC04	25-09-2024	W			X	X	X	X	X	X	X		
					TOTAL									

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

Environmental Division
Perth
Work Order Reference
EP2414023

Telephone : – 61-8-9406 1301

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WA 6008

NATA Accredited
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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: **Phuntsho Wangdi**

Report **1173105-W**
Project name BANKSIA LANDFILL DEC QUARTERLY GME 2024
Project ID 675.072519.00001
Received Date Dec 18, 2024

Client Sample ID			**GW1S**	**GW1D**	**GW3D**	**SE3S-R**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**L24-De0050589**	**L24-De0050590**	**L24-De0050591**	**L24-De0050592**
Date Sampled			**Dec 18, 2024**	**Dec 18, 2024**	**Dec 16, 2024**	**Dec 17, 2024**
Test/Reference	LOR	Unit				
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	1.7
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	1900
Chloride	5	mg/L	190	280	240	130
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	620	880	730	1400
Dissolved Oxygen	0.1	mg/L	8.1	8.6	7.9	3.8
Nitrate (as N)	0.01	mg/L	3.0	2.2	1.6	0.35
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	0.07
NOx (as N)	0.01	mg/L	3.0	2.2	1.6	0.42
pH (at 25 °C)	0.1	pH Units	5.0	6.2	5.3	5.2
Redox Potential		mV	550	490	480	280
Sulfate (as SO4)	1	mg/L	21	22	15	< 1
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	370	530	440	810
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	0.3	< 0.2	1.8
Total Nitrogen	0.2	mg/L	3.0	2.5	1.6	2.2
Total Organic Carbon	5	mg/L	7.1	5.6	16	910
Total Phosphorus	0.01	mg/L	0.04	0.04	0.02	< 0.01
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	0.004
Radium 226*		mBq/L	0.05	0.49	0.02	0.10
Radium 228*		mBq/L	0.09	0.53	0.12	0.11
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	< 5	43	8.9	300
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	< 5	43	8.9	300
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	0.07	< 0.05	< 0.05	0.29
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.025
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.004
Copper (filtered)	0.001	mg/L	< 0.001	0.001	0.002	0.004
Iron	0.01	mg/L	1.5	0.15	0.06	310
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.005
Manganese (filtered)	0.005	mg/L	0.015	0.005	0.24	1.3
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Client Sample ID			GW1S	GW1D	GW3D	SE3S-R
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050589	L24-De0050590	L24-De0050591	L24-De0050592
Date Sampled			Dec 18, 2024	Dec 18, 2024	Dec 16, 2024	Dec 17, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Nickel (filtered)	0.001	mg/L	0.002	0.006	0.012	0.006
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	0.064	0.028	0.016	0.11
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	9.9	13	11	30
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	2.1	9.0	5.2	27
Magnesium	0.5	mg/L	11	14	10	32
Potassium	0.5	mg/L	1.8	7.1	1.8	6.5
Sodium	0.5	mg/L	90	130	100	140

Client Sample ID			SE4S-R	SE4D	GW5S	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050593	L24-De0050594	L24-De0050595	L24-De0050596
Date Sampled			Dec 16, 2024	Dec 18, 2024	Dec 18, 2024	Dec 17, 2024
Test/Reference	LOR	Unit				
Ammonia (as N)	0.02	mg/L	0.81	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	1600	42	210	88
Chloride	5	mg/L	67	110	760	110
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	1200	390	2100	450
Dissolved Oxygen	0.1	mg/L	0.3	8.0	7.9	8.0
Nitrate (as N)	0.01	mg/L	0.19	0.13	1.9	8.6
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	0.19	0.13	1.9	8.7
pH (at 25 °C)	0.1	pH Units	6.1	4.6	3.8	5.7
Redox Potential		mV	110	500	600	470
Sulfate (as SO4)	1	mg/L	< 1	13	43	21
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	740	230	1200	270
Total Kjeldahl Nitrogen	0.2	mg/L	4.7	0.8	1.6	< 0.2
Total Nitrogen	0.2	mg/L	4.9	0.9	3.5	8.7
Total Organic Carbon	5	mg/L	620	380	170	6.9
Total Phosphorus	0.01	mg/L	< 0.01	< 0.01	0.68	0.03
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	0.004	< 0.002
Radium 226*		mBq/L	0.08	0.39	1.06	0.02
Radium 228*		mBq/L	0.09	0.39	1.12	< 0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	520	< 5	< 5	21
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	520	< 5	< 5	21

Client Sample ID			SE4S-R	SE4D	GW5S	SE6S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050593	L24-De0050594	L24-De0050595	L24-De0050596
Date Sampled			Dec 16, 2024	Dec 18, 2024	Dec 18, 2024	Dec 17, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	0.44	0.69	5.0	< 0.05
Arsenic (filtered)	0.001	mg/L	0.007	< 0.001	0.002	< 0.001
Cadmium (filtered)	0.0001	mg/L	0.0003	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	0.001	0.004	< 0.001
Copper (filtered)	0.001	mg/L	0.006	0.008	0.020	0.002
Iron	0.01	mg/L	400	4.0	50	0.72
Lead (filtered)	0.001	mg/L	0.002	0.004	0.031	< 0.001
Manganese (filtered)	0.005	mg/L	8.2	< 0.005	0.079	0.019
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.028	0.005	0.003	0.003
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	0.006	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	0.08	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	0.005	0.002	0.035	< 0.001
Zinc (filtered)	0.005	mg/L	0.92	0.031	0.27	0.008
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	17	6.2	44	10
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	51	1.0	1.0	3.2
Magnesium	0.5	mg/L	20	7.8	49	11
Potassium	0.5	mg/L	7.9	1.0	8.9	2.7
Sodium	0.5	mg/L	190	69	380	63

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050597	L24-De0050598	L24-De0050599	L24-De0050600
Date Sampled			Dec 17, 2024	Dec 16, 2024	Dec 16, 2024	Dec 16, 2024
Test/Reference	LOR	Unit				
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	130	70	72	110
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	490	260	260	410
Dissolved Oxygen	0.1	mg/L	8.0	8.4	8.0	8.2
Nitrate (as N)	0.01	mg/L	2.3	5.1	2.0	5.1
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	2.3	5.1	2.0	5.1
pH (at 25 °C)	0.1	pH Units	5.7	5.0	5.4	5.8
Redox Potential		mV	470	510	520	500
Sulfate (as SO4)	1	mg/L	28	12	10	11
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	290	160	160	250
Total Kjeldahl Nitrogen	0.2	mg/L	0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	2.5	5.1	2.0	5.1
Total Organic Carbon	5	mg/L	< 5	< 5	6.1	17
Total Phosphorus	0.01	mg/L	0.03	0.02	0.02	0.04
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	< 0.01	0.02	0.02	0.01
Radium 228*		mBq/L	< 0.08	< 0.08	< 0.08	< 0.08

Client Sample ID			GW6D	GW7S	GW7D-R	GW8D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050597	L24-De0050598	L24-De0050599	L24-De0050600
Date Sampled			Dec 17, 2024	Dec 16, 2024	Dec 16, 2024	Dec 16, 2024
Test/Reference	LOR	Unit				
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	13	< 5	5.8	6.9
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	13	< 5	5.8	6.9
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	0.07	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.002	0.004	0.005	0.003
Iron	0.01	mg/L	0.19	0.06	0.13	0.14
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.28	< 0.005	0.010	0.14
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.006	0.003	0.004	0.004
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	0.010	0.005	0.018	0.026
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	4.7	5.4	4.5	7.0
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	2.8	1.2	0.8	1.6
Magnesium	0.5	mg/L	4.8	5.8	4.7	6.8
Potassium	0.5	mg/L	1.3	0.7	0.8	0.8
Sodium	0.5	mg/L	78	38	40	56

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050601	L24-De0050602	L24-De0050603	L24-De0050604
Date Sampled			Dec 17, 2024	Dec 17, 2024	Dec 17, 2024	Dec 16, 2024
Test/Reference	LOR	Unit				
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	67	85	110	86
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	280	310	400	320
Dissolved Oxygen	0.1	mg/L	8.6	8.6	8.4	8.6
Nitrate (as N)	0.01	mg/L	2.0	0.61	6.3	0.12
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	2.0	0.61	6.3	0.13
pH (at 25 °C)	0.1	pH Units	5.7	5.5	5.4	5.6
Redox Potential		mV	460	470	520	520
Sulfate (as SO4)	1	mg/L	10	11	9.1	10
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	170	190	240	190
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			GW9S	GW9D	SE10S	GW10D
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050601	L24-De0050602	L24-De0050603	L24-De0050604
Date Sampled			Dec 17, 2024	Dec 17, 2024	Dec 17, 2024	Dec 16, 2024
Test/Reference	LOR	Unit				
Total Nitrogen	0.2	mg/L	2.0	0.7	6.3	0.2
Total Organic Carbon	5	mg/L	15	17	17	< 5
Total Phosphorus	0.01	mg/L	0.02	0.02	0.01	0.03
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	0.02	0.01	0.02	0.07
Radium 228*		mBq/L	< 0.08	< 0.08	< 0.08	< 0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	10	7.4	< 5	8.9
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	10	7.4	< 5	8.9
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	0.09	< 0.05	0.28
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.002	< 0.001	< 0.001	0.003
Iron	0.01	mg/L	0.04	0.27	0.24	0.07
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.010	0.006	< 0.005	0.027
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.005	< 0.001	< 0.001	0.005
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	0.019	0.008	< 0.005	0.039
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	5.5	5.0	5.8	4.4
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	1.9	1.9	3.4	2.0
Magnesium	0.5	mg/L	5.5	5.0	6.1	4.0
Potassium	0.5	mg/L	0.5	< 0.5	2.8	2.1
Sodium	0.5	mg/L	39	44	54	38

Client Sample ID			GW11S	GW11D	GW12D	GW22S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050605	L24-De0050606	L24-De0050607	L24-De0050608
Date Sampled			Dec 17, 2024	Dec 17, 2024	Dec 17, 2024	Dec 17, 2024
Test/Reference	LOR	Unit				
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	49	56	510	46
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	180	250	1500	210
Dissolved Oxygen	0.1	mg/L	8.4	8.4	7.7	8.6
Nitrate (as N)	0.01	mg/L	4.6	2.3	2.2	3.8

Client Sample ID			GW11S	GW11D	GW12D	GW22S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050605	L24-De0050606	L24-De0050607	L24-De0050608
Date Sampled			Dec 17, 2024	Dec 17, 2024	Dec 17, 2024	Dec 17, 2024
Test/Reference	LOR	Unit				
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	4.6	2.3	2.2	3.8
pH (at 25 °C)	0.1	pH Units	5.4	5.8	5.6	5.8
Redox Potential		mV	530	490	500	500
Sulfate (as SO4)	1	mg/L	6.8	13	50	10.0
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	110	150	910	120
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	4.6	2.3	2.2	3.8
Total Organic Carbon	5	mg/L	17	13	6.0	21
Total Phosphorus	0.01	mg/L	0.02	0.02	0.05	0.03
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	0.01	< 0.01	0.02	< 0.01
Radium 228*		mBq/L	< 0.08	< 0.08	< 0.08	< 0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	5.2	21	21	9.4
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	5.2	21	21	9.4
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.001	< 0.001	< 0.001	0.001
Iron	0.01	mg/L	0.04	0.32	0.16	0.07
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.019	0.065	0.053	0.012
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.002	0.003	0.004	0.002
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	0.012	0.023	0.015	0.054
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	3.3	3.1	32	3.3
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	< 0.5	5.3	7.6	1.9
Magnesium	0.5	mg/L	3.3	3.2	28	3.4
Potassium	0.5	mg/L	< 0.5	0.5	5.2	< 0.5
Sodium	0.5	mg/L	24	34	210	28

Client Sample ID			GW22D	GW23S	GW23D	QC01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050609	L24-De0050610	L24-De0050611	L24-De0050612
Date Sampled			Dec 17, 2024	Dec 17, 2024	Dec 17, 2024	Dec 16, 2024
Test/Reference	LOR	Unit				
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	< 25
Chloride	5	mg/L	60	67	73	63
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Conductivity (at 25 °C)	10	uS/cm	250	280	300	260
Dissolved Oxygen	0.1	mg/L	8.4	8.3	8.2	8.4
Nitrate (as N)	0.01	mg/L	0.94	2.6	0.10	1.9
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	0.94	2.6	0.10	1.9
pH (at 25 °C)	0.1	pH Units	5.1	5.8	5.8	5.3
Redox Potential		mV	540	500	500	510
Sulfate (as SO4)	1	mg/L	10	6.8	8.4	9.6
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	150	170	180	160
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	0.4
Total Nitrogen	0.2	mg/L	1.0	2.6	0.2	2.3
Total Organic Carbon	5	mg/L	20	7.2	< 5	13
Total Phosphorus	0.01	mg/L	0.02	0.03	0.05	0.05
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Radium 226*		mBq/L	0.07	< 0.01	0.03	0.03
Radium 228*		mBq/L	< 0.08	< 0.08	< 0.08	< 0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	< 5	8.5	29	5.2
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5
Total Alkalinity (as CaCO3)	5	mg/L	< 5	8.5	29	5.2
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	0.08	< 0.05
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.004	0.001	< 0.001	0.004
Iron	0.01	mg/L	0.02	0.02	0.06	0.09
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Manganese (filtered)	0.005	mg/L	0.006	0.015	0.053	0.008
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.003	0.002	0.002	0.004
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	0.005	0.015
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	3.9	4.2	3.5	4.3
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	0.7	1.8	8.3	0.7
Magnesium	0.5	mg/L	4.4	4.6	4.1	4.3
Potassium	0.5	mg/L	< 0.5	< 0.5	2.4	0.7
Sodium	0.5	mg/L	37	43	37	36

Client Sample ID			QC03	FB01	RS01	PSD1
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050613	L24-De0050614	L24-De0050615	L24-De0050616
Date Sampled			Dec 17, 2024	Dec 16, 2024	Dec 16, 2024	Dec 16, 2024
Test/Reference	LOR	Unit				
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
Chemical Oxygen Demand (COD)	25	mg/L	< 25	< 25	< 25	-
Chloride	5	mg/L	43	< 5	< 5	-
Chromium (VI)	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Conductivity (at 25 °C)	10	uS/cm	180	< 10	< 10	480
Dissolved Oxygen	0.1	mg/L	8.3	8.7	8.8	8.5
Nitrate (as N)	0.01	mg/L	3.1	< 0.01	< 0.01	-
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
NOx (as N)	0.01	mg/L	3.1	< 0.01	< 0.01	-
pH (at 25 °C)	0.1	pH Units	5.4	4.8	4.7	7.1
Redox Potential		mV	510	540	540	420
Sulfate (as SO4)	1	mg/L	7.0	< 1	< 1	-
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	110	< 5	< 5	-
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2	-
Total Nitrogen	0.2	mg/L	3.1	< 0.2	< 0.2	-
Total Organic Carbon	5	mg/L	21	< 5	< 5	-
Total Phosphorus	0.01	mg/L	0.02	< 0.01	< 0.01	-
Chromium (III) (filtered)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Radium 226*		mBq/L	< 0.01	< 0.01	< 0.01	0.01
Radium 228*		mBq/L	< 0.08	< 0.08	< 0.08	< 0.08
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	-
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	-
Hydroxide Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	-
Total Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	-
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	< 0.05	< 0.05	< 0.05	-
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Cadmium (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	-
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	0.01	mg/L	0.02	< 0.01	< 0.01	-
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Manganese (filtered)	0.005	mg/L	0.020	< 0.005	< 0.005	-
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	-
Nickel (filtered)	0.001	mg/L	0.001	< 0.001	< 0.001	-
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Uranium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	3.8	< 0.5	< 0.5	-
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	< 0.5	< 0.5	< 0.5	-
Magnesium	0.5	mg/L	3.3	< 0.5	< 0.5	-
Potassium	0.5	mg/L	< 0.5	< 0.5	< 0.5	-
Sodium	0.5	mg/L	55	< 0.5	< 0.5	-

Client Sample ID			PSD2	LEP1	LEP3	PLP
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050617	L24-De0050618	L24-De0050619	L24-De0050620
Date Sampled			Dec 16, 2024	Dec 18, 2024	Dec 18, 2024	Dec 18, 2024
Test/Reference	LOR	Unit				
Conductivity (at 25 °C)	10	uS/cm	350	75000	110000	29000
Dissolved Oxygen	0.1	mg/L	8.8	0.8	1.2	0.2
pH (at 25 °C)	0.1	pH Units	7.4	7.5	7.3	8.0
Redox Potential		mV	420	280	290	-88.4
Radium 226*		mBq/L	< 0.01	0.14	0.03	0.11
Radium 228*		mBq/L	< 0.08	< 0.08	< 0.08	< 0.08
Heavy Metals						
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Uranium	0.001	mg/L	< 0.001	< 0.05	< 0.05	< 0.05

Client Sample ID			TDS Leachate Cell 1	FB02	RS02	GW13S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050621	L24-De0050622	L24-De0050623	L24-De0050624
Date Sampled			Dec 18, 2024	Dec 17, 2024	Dec 17, 2024	Dec 17, 2024
Test/Reference	LOR	Unit				
Ammonia (as N)	0.02	mg/L	-	-	-	0.04
Chemical Oxygen Demand (COD)	25	mg/L	-	-	-	< 25
Chloride	5	mg/L	-	-	-	160
Chromium (VI)	0.002	mg/L	-	-	-	< 0.002
Conductivity (at 25 °C)	10	uS/cm	41000	< 10	< 10	610
Dissolved Oxygen	0.1	mg/L	8.5	8.7	8.7	7.3
Nitrate (as N)	0.01	mg/L	-	-	-	11
Nitrite (as N)	0.01	mg/L	-	-	-	0.01
NOx (as N)	0.01	mg/L	-	-	-	11
pH (at 25 °C)	0.1	pH Units	6.1	8.1	7.6	6.3
Redox Potential		mV	330	430	450	470
Sulfate (as SO4)	1	mg/L	-	-	-	18
Total Dissolved Solids Dried at 180 °C ± 2 °C	5	mg/L	-	-	-	360
Total Kjeldahl Nitrogen	0.2	mg/L	-	-	-	2.0
Total Nitrogen	0.2	mg/L	-	-	-	13
Total Organic Carbon	5	mg/L	-	-	-	< 5
Total Phosphorus	0.01	mg/L	-	-	-	0.02
Chromium (III) (filtered)*	0.002	mg/L	-	-	-	< 0.002
Radium 226*		mBq/L	0.34	< 0.01	< 0.01	0.04
Radium 228*		mBq/L	0.20	< 0.08	< 0.08	0.09
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	-	-	-	5.1
Carbonate Alkalinity (as CaCO3)	5	mg/L	-	-	-	< 5
Hydroxide Alkalinity (as CaCO3)	5	mg/L	-	-	-	< 5
Total Alkalinity (as CaCO3)	5	mg/L	-	-	-	5.1
Heavy Metals						
Aluminium (filtered)	0.05	mg/L	-	-	-	0.64
Arsenic (filtered)	0.001	mg/L	-	-	-	< 0.001
Cadmium (filtered)	0.0001	mg/L	-	-	-	< 0.0001
Chromium (filtered)	0.001	mg/L	-	-	-	< 0.001
Copper (filtered)	0.001	mg/L	-	-	-	0.017

Client Sample ID			TDS Leachate Cell 1	FB02	RS02	GW13S
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			L24-De0050621	L24-De0050622	L24-De0050623	L24-De0050624
Date Sampled			Dec 18, 2024	Dec 17, 2024	Dec 17, 2024	Dec 17, 2024
Test/Reference	LOR	Unit				
Heavy Metals						
Iron	0.01	mg/L	-	-	-	0.36
Lead (filtered)	0.001	mg/L	-	-	-	< 0.001
Manganese (filtered)	0.005	mg/L	-	-	-	< 0.005
Mercury (filtered)	0.0001	mg/L	-	-	-	< 0.0001
Nickel (filtered)	0.001	mg/L	-	-	-	0.003
Selenium (filtered)	0.001	mg/L	-	-	-	< 0.001
Thorium*	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Titanium (filtered)	0.005	mg/L	-	-	-	< 0.005
Uranium	0.001	mg/L	0.005	< 0.001	< 0.001	< 0.001
Zinc (filtered)	0.005	mg/L	-	-	-	0.038
Alkali Metals (filtered)						
Magnesium (filtered)	0.5	mg/L	-	-	-	20
Eurofins Suite B11C: Na/K/Ca/Mg						
Calcium	0.5	mg/L	-	-	-	3.5
Magnesium	0.5	mg/L	-	-	-	19
Potassium	0.5	mg/L	-	-	-	0.8
Sodium	0.5	mg/L	-	-	-	77

Client Sample ID			GW13D
Sample Matrix			Water
Eurofins Sample No.			L24-De0050625
Date Sampled			Dec 17, 2024
Test/Reference	LOR	Unit	
Total Organic Carbon	5	mg/L	1500
Heavy Metals			
Aluminium (filtered)	0.05	mg/L	0.21
Arsenic (filtered)	0.001	mg/L	0.016
Cadmium (filtered)	0.0001	mg/L	< 0.0001
Chromium (filtered)	0.001	mg/L	0.003
Copper (filtered)	0.001	mg/L	< 0.001
Iron	0.01	mg/L	190
Lead (filtered)	0.001	mg/L	0.003
Manganese (filtered)	0.005	mg/L	2.7
Mercury (filtered)	0.0001	mg/L	< 0.0001
Nickel (filtered)	0.001	mg/L	0.010
Selenium (filtered)	0.001	mg/L	< 0.001
Thorium*	0.05	mg/L	< 0.05
Titanium (filtered)	0.005	mg/L	< 0.005
Uranium	0.001	mg/L	0.005
Zinc (filtered)	0.005	mg/L	0.33
Alkali Metals (filtered)			
Magnesium (filtered)	0.5	mg/L	32
Eurofins Suite B11C: Na/K/Ca/Mg			
Calcium	0.5	mg/L	68
Magnesium	0.5	mg/L	26
Potassium	0.5	mg/L	9.9
Sodium	0.5	mg/L	1000

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
Ammonia (as N)	Welshpool	Dec 19, 2024	28 Days
- Method: ARL303 - Ammonia in Water by Discrete Analyser			
Nitrate (as N)	Welshpool	Dec 19, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Nitrite (as N)	Welshpool	Dec 19, 2024	2 Days
- Method: ARL311 - Nitrite in Water by Discrete Analyser			
NOx (as N)	Welshpool	Dec 19, 2024	28 Days
- Method: ARL313/319 - NOx in Water by Discrete Analyser			
Total Kjeldahl Nitrogen	Welshpool	Dec 19, 2024	28 Day
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Nitrogen	Welshpool	Dec 19, 2024	28 Days
- Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP			
Total Phosphorus	Welshpool	Dec 19, 2024	28 Days
- Method: ARL308 - Total Phosphorus in Water by Discrete Analyser			
Chemical Oxygen Demand (COD)	Melbourne	Dec 21, 2024	28 Days
- Method: LTM-INO-4220 Determination of COD in Water			
Chromium (VI)	Welshpool	Dec 19, 2024	1 Day
- Method: ARL316 - Hexavalent Chromium in Water by Discrete Analyser			
pH (at 25 °C)	Welshpool	Dec 19, 2024	6 Hours
- Method: LTM-GEN-7090 pH in water by ISE			
Redox Potential	Welshpool	Dec 19, 2024	28 Day
- Method: ARL119 - Reduction/Oxidation Potential of Water			
Total Organic Carbon	Melbourne	Dec 21, 2024	28 Days
- Method: LTM-INO-4060 Total Organic Carbon in water and soil			
Chromium (III) (filtered)*	Welshpool	Dec 19, 2024	180 Days
- Method: ARL402/403 - Metals in Water by ICPOES/ICPMS			
Heavy Metals (filtered)	Welshpool	Dec 19, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Metals M8 filtered	Welshpool	Dec 19, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Heavy Metals	Welshpool	Dec 19, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Alkali Metals (filtered)	Welshpool	Dec 19, 2024	6 Months
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B11C: Na/K/Ca/Mg	Welshpool	Dec 19, 2024	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Chloride	Welshpool	Dec 19, 2024	28 Days
- Method: ARL305 - Chloride in Water by Discrete Analyser			
Sulfate (as SO4)	Welshpool	Dec 19, 2024	28 Days
- Method: ARL301 - Sulfate in Water by Discrete Analyser			
Alkalinity (speciated)	Welshpool	Dec 19, 2024	14 Days
- Method: LTM-INO-4250 Alkalinity by Electrometric Titration			
Conductivity (at 25 °C)	Welshpool	Dec 19, 2024	28 Days
- Method: LTM-INO-4030 Conductivity			
Total Dissolved Solids Dried at 180 °C ± 2 °C	Welshpool	Dec 19, 2024	7 Days
- Method: ARL No. 017 - Total Dissolved Solids			

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Project Name: BANKSIA LANDFILL DEC QUARTERLY GME 2024
Project ID: 675.072519.00001

Order No.:
Report #: 1173105
Phone: 08 9388 8360
Fax: 08 9381 2360

Received: Dec 18, 2024 2:50 PM
Due: Jan 6, 2025
Priority: 10 Day
Contact Name: *ALL RESULTS/SRA/COC"S

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Chemical Oxygen Demand (COD)	Chromium (III) (filtered)*	Chromium (VI)	Conductivity (at 25 °C)	Dissolved Oxygen	Iron	Magnesium (filtered)	Manganese (filtered)	pH (at 25 °C)	Radium 226	Radium 228	Redox Potential	Selenium (filtered)	Thorium*	Titanium (filtered)	Total Organic Carbon	Uranium	Metals M8 filtered	Eurofins Suite B11C: Na/K/Ca/Mg	Total Dissolved Solids (TDS)	Eurofins Suite B19D	Eurofins Suite B11E
Perth Laboratory - NATA # 2377 Site # 2370 & 2554						X		X	X	X	X	X	X	X	X			X	X	X	X		X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254							X															X						
External Laboratory																X	X											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**																							
1	GW1S	Dec 18, 2024		Water	L24-De0050589	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	GW1D	Dec 18, 2024		Water	L24-De0050590	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	GW3D	Dec 16, 2024		Water	L24-De0050591	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	SE3S-R	Dec 17, 2024		Water	L24-De0050592	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	SE4S-R	Dec 16, 2024		Water	L24-De0050593	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	SE4D	Dec 18, 2024		Water	L24-De0050594	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7	GW5S	Dec 18, 2024		Water	L24-De0050595	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	SE6S	Dec 17, 2024		Water	L24-De0050596	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9	GW6D	Dec 17, 2024		Water	L24-De0050597	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	GW7S	Dec 16, 2024		Water	L24-De0050598	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11	GW7D-R	Not Provided		Water	L24-De0050599	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12	GW8D	Dec 16, 2024		Water	L24-De0050600	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13	GW9S	Dec 17, 2024		Water	L24-De0050601	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Contact Name: *ALL RESULTS/SRA/COC"S

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Chemical Oxygen Demand (COD)	Chromium (III) (filtered)*	Chromium (VI)	Conductivity (at 25 °C)	Dissolved Oxygen	Iron	Magnesium (filtered)	Manganese (filtered)	pH (at 25 °C)	Radium 226	Radium 228	Redox Potential	Selenium (filtered)	Thorium*	Titanium (filtered)	Total Organic Carbon	Uranium	Metals M8 filtered	Eurofins Suite B11C: Na/K/Ca/Mg	Total Dissolved Solids (TDS)	Eurofins Suite B19D	Eurofins Suite B11E
Perth Laboratory - NATA # 2377 Site # 2370 & 2554						X		X	X	X	X	X	X	X	X			X	X	X	X		X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254							X															X						
External Laboratory																X	X											
14	GW9D	Dec 17, 2024		Water	L24-De0050602	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15	SE10S	Not Provided		Water	L24-De0050603	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16	GW10D	Dec 16, 2024		Water	L24-De0050604	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17	GW11S	Dec 17, 2024		Water	L24-De0050605	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18	GW11D	Dec 17, 2024		Water	L24-De0050606	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19	GW12D	Dec 17, 2024		Water	L24-De0050607	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20	GW22S	Dec 17, 2024		Water	L24-De0050608	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21	GW22D	Dec 17, 2024		Water	L24-De0050609	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22	GW23S	Dec 17, 2024		Water	L24-De0050610	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23	GW23D	Dec 17, 2024		Water	L24-De0050611	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24	QC01	Dec 16, 2024		Water	L24-De0050612	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
25	QC03	Dec 17, 2024		Water	L24-De0050613	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26	FB01	Dec 16, 2024		Water	L24-De0050614	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27	RS01	Dec 16, 2024		Water	L24-De0050615	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28	PSD1	Dec 16, 2024		Water	L24-De0050616					X	X				X	X	X	X		X			X					

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Project Name: BANKSIA LANDFILL DEC QUARTERLY GME 2024
Project ID: 675.072519.00001

Order No.:
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Received: Dec 18, 2024 2:50 PM
Due: Jan 6, 2025
Priority: 10 Day
Contact Name: *ALL RESULTS/SRA/COC"S

Eurofins Analytical Services Manager : Natalie Hill

Sample Detail						Aluminium (filtered)	Chemical Oxygen Demand (COD)	Chromium (III) (filtered)*	Chromium (VI)	Conductivity (at 25 °C)	Dissolved Oxygen	Iron	Magnesium (filtered)	Manganese (filtered)	pH (at 25 °C)	Radium 226	Radium 228	Redox Potential	Selenium (filtered)	Thorium*	Titanium (filtered)	Total Organic Carbon	Uranium	Metals M8 filtered	Eurofins Suite B11C: Na/K/Ca/Mg	Total Dissolved Solids (TDS)	Eurofins Suite B19D	Eurofins Suite B11E
Perth Laboratory - NATA # 2377 Site # 2370 & 2554						X		X	X	X	X	X	X	X	X			X	X	X	X		X	X	X	X	X	X
Melbourne Laboratory - NATA # 1261 Site # 1254							X															X						
External Laboratory																X	X											
29	PSD2	Dec 16, 2024		Water	L24-De0050617					X	X				X	X	X	X		X			X					
30	LEP1	Dec 18, 2024		Water	L24-De0050618					X	X				X	X	X	X		X			X					
31	LEP3	Dec 18, 2024		Water	L24-De0050619					X	X				X	X	X	X		X			X					
32	PLP	Dec 18, 2024		Water	L24-De0050620					X	X				X	X	X	X		X			X					
33	TDS Leachate Cell 1	Dec 18, 2024		Water	L24-De0050621					X	X				X	X	X	X		X			X					
34	FB02	Dec 17, 2024		Water	L24-De0050622					X	X				X	X	X	X		X			X					
35	RS02	Dec 17, 2024		Water	L24-De0050623					X	X				X	X	X	X		X			X					
36	GW13S	Dec 17, 2024		Water	L24-De0050624	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
37	GW13D	Dec 17, 2024		Water	L24-De0050625	X						X	X	X					X	X	X	X	X	X	X			
Test Counts						29	28	28	28	8	36	29	29	29	36	36	36	36	29	37	29	29	37	29	29	28	28	28

Internal Quality Control Review and Glossary

General

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

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Ammonia (as N)	mg/L	< 0.02			0.02	Pass	
Chloride	mg/L	< 5			5	Pass	
Chromium (VI)	mg/L	< 0.002			0.002	Pass	
Nitrate (as N)	mg/L	< 0.01			0.01	Pass	
Nitrite (as N)	mg/L	< 0.01			0.01	Pass	
NOx (as N)	mg/L	< 0.01			0.01	Pass	
Sulfate (as SO4)	mg/L	< 1			1	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	mg/L	< 5			5	Pass	
Total Nitrogen	mg/L	< 0.2			0.2	Pass	
Total Phosphorus	mg/L	< 0.01			0.01	Pass	
Method Blank							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO3)	mg/L	< 5			5	Pass	
Hydroxide Alkalinity (as CaCO3)	mg/L	< 5			5	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	< 0.0001			0.0001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	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	
Titanium (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals (filtered)							
Magnesium (filtered)	mg/L	< 0.5			0.5	Pass	
Method Blank							
Chemical Oxygen Demand (COD)	mg/L	< 25			25	Pass	
Method Blank							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Thorium*	mg/L	< 0.05			0.05	Pass	
Uranium	mg/L	< 0.001			0.001	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Thorium*	mg/L	< 0.05			0.05	Pass	
Uranium	mg/L	< 0.001			0.001	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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							
Total Organic Carbon	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Thorium*	mg/L	< 0.05			0.05	Pass	
Uranium	mg/L	< 0.001			0.001	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Thorium*	mg/L	< 0.05			0.05	Pass	
Uranium	mg/L	< 0.001			0.001	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Heavy Metals							
Iron	mg/L	< 0.01			0.01	Pass	
Thorium*	mg/L	< 0.05			0.05	Pass	
Uranium	mg/L	< 0.001			0.001	Pass	
Method Blank							
Eurofins Suite B11C: Na/K/Ca/Mg							
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							
Chemical Oxygen Demand (COD)	mg/L	< 25			25	Pass	
LCS - % Recovery							
Total Dissolved Solids Dried at 180 °C ± 2 °C	%	97			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Aluminium (filtered)	%	106			80-120	Pass	
Arsenic (filtered)	%	103			80-120	Pass	
Cadmium (filtered)	%	107			80-120	Pass	
Chromium (filtered)	%	107			80-120	Pass	
Copper (filtered)	%	105			80-120	Pass	
Lead (filtered)	%	102			80-120	Pass	
Manganese (filtered)	%	107			80-120	Pass	
Mercury (filtered)	%	111			80-120	Pass	
Nickel (filtered)	%	106			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Selenium (filtered)	%	102			80-120	Pass	
Titanium (filtered)	%	109			80-120	Pass	
Zinc (filtered)	%	110			80-120	Pass	
LCS - % Recovery							
Alkali Metals (filtered)							
Magnesium (filtered)	%	105			80-120	Pass	
LCS - % Recovery							
Chemical Oxygen Demand (COD)	%	81			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	109			80-120	Pass	
Uranium	%	109			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	103			80-120	Pass	
Magnesium	%	106			80-120	Pass	
Potassium	%	104			80-120	Pass	
Sodium	%	105			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	111			80-120	Pass	
Uranium	%	109			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	111			80-120	Pass	
Magnesium	%	113			80-120	Pass	
Potassium	%	113			80-120	Pass	
Sodium	%	115			80-120	Pass	
LCS - % Recovery							
Total Organic Carbon	%	96			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	108			80-120	Pass	
Thorium*	%	111			80-120	Pass	
Uranium	%	112			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	105			80-120	Pass	
Magnesium	%	111			80-120	Pass	
Potassium	%	108			80-120	Pass	
Sodium	%	113			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Iron	%	97			80-120	Pass	
Thorium*	%	86			80-120	Pass	
Uranium	%	91			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	91			80-120	Pass	
Magnesium	%	91			80-120	Pass	
Potassium	%	95			80-120	Pass	
Sodium	%	88			80-120	Pass	
LCS - % Recovery							
Heavy Metals							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Iron	%	95			80-120	Pass	
Thorium*	%	85			80-120	Pass	
Uranium	%	92			80-120	Pass	
LCS - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	90			80-120	Pass	
Magnesium	%	87			80-120	Pass	
Potassium	%	93			80-120	Pass	
Sodium	%	85			80-120	Pass	
LCS - % Recovery							
Chemical Oxygen Demand (COD)	%	91			70-130	Pass	
CRM - % Recovery							
Heavy Metals							
Arsenic (filtered)	%	107			90-110	Pass	
Cadmium (filtered)	%	100			90-110	Pass	
Chromium (filtered)	%	102			90-110	Pass	
Copper (filtered)	%	95			90-110	Pass	
Lead (filtered)	%	104			90-110	Pass	
Manganese (filtered)	%	92			90-110	Pass	
Mercury (filtered)	%	98			70-130	Pass	
Nickel (filtered)	%	104			90-110	Pass	
Zinc (filtered)	%	95			90-110	Pass	
CRM - % Recovery							
Chemical Oxygen Demand (COD)	%	86			70-130	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	%	97			80-120	Pass	
CRM - % Recovery							
Heavy Metals							
Iron	%	109			80-120	Pass	
CRM - % Recovery							
Heavy Metals							
Uranium	%	105			80-120	Pass	
CRM - % Recovery							
Heavy Metals							
Iron	%	105			80-120	Pass	
CRM - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	105			70-130	Pass	
Potassium	%	105			70-130	Pass	
CRM - % Recovery							
Eurofins Suite B11C: Na/K/Ca/Mg							
Sodium	%	108			70-130	Pass	
CRM - % Recovery							
Heavy Metals							
Thorium*	%	96			70-130	Pass	
CRM - % Recovery							
Heavy Metals							
Cadmium (filtered)	%	107			90-110	Pass	
Copper (filtered)	%	101			90-110	Pass	
Iron	%	98			80-120	Pass	
Manganese (filtered)	%	104			90-110	Pass	
Selenium (filtered)	%	97			90-110	Pass	
Titanium (filtered)	%	90			90-110	Pass	
Zinc (filtered)	%	104			90-110	Pass	
CRM - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Eurofins Suite B11C: Na/K/Ca/Mg							
Calcium	%	107			70-130	Pass	
Magnesium	%	106			70-130	Pass	
Sodium	%	105			70-130	Pass	
CRM - % Recovery							
Total Dissolved Solids Dried at 180 °C ± 2 °C	%	96			80-120	Pass	
CRM - % Recovery							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO3)	%	111			70-130	Pass	
Hydroxide Alkalinity (as CaCO3)	%	111			70-130	Pass	
Total Alkalinity (as CaCO3)	%	111			70-130	Pass	
CRM - % Recovery							
Total Dissolved Solids Dried at 180 °C ± 2 °C	%	96			80-120	Pass	
CRM - % Recovery							
Chemical Oxygen Demand (COD)	%	83			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-De0050589	CP	%	101			75-125	Pass	
Arsenic (filtered)	L24-De0050589	CP	%	109			75-125	Pass	
Cadmium (filtered)	L24-De0050589	CP	%	102			75-125	Pass	
Chromium (filtered)	L24-De0050589	CP	%	104			75-125	Pass	
Copper (filtered)	L24-De0050589	CP	%	101			75-125	Pass	
Lead (filtered)	L24-De0050589	CP	%	99			75-125	Pass	
Manganese (filtered)	L24-De0050589	CP	%	101			75-125	Pass	
Mercury (filtered)	L24-De0050589	CP	%	106			75-125	Pass	
Nickel (filtered)	L24-De0050589	CP	%	102			75-125	Pass	
Selenium (filtered)	L24-De0050589	CP	%	103			75-125	Pass	
Titanium (filtered)	L24-De0050589	CP	%	102			75-125	Pass	
Zinc (filtered)	L24-De0050589	CP	%	97			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-De0050589	CP	%	100			75-125	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	L24-De0050590	CP	%	110			80-120	Pass	
Nitrate (as N)	L24-De0050590	CP	%	118			70-130	Pass	
Nitrite (as N)	L24-De0050590	CP	%	97			80-120	Pass	
NOx (as N)	L24-De0050590	CP	%	110			80-120	Pass	
Sulfate (as SO4)	L24-De0050590	CP	%	118			70-130	Pass	
Total Nitrogen	L24-De0050590	CP	%	113			70-130	Pass	
Total Phosphorus	L24-De0050590	CP	%	101			80-120	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Thorium*	L24-De0050595	CP	%	112			75-125	Pass	
Uranium	L24-De0050595	CP	%	98			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-De0050595	CP	%	75			75-125	Pass	
Magnesium	L24-De0050595	CP	%	94			75-125	Pass	
Potassium	L24-De0050595	CP	%	86			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-De0050599	CP	%	116			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Arsenic (filtered)	L24-De0050599	CP	%	102			75-125	Pass	
Cadmium (filtered)	L24-De0050599	CP	%	108			75-125	Pass	
Chromium (filtered)	L24-De0050599	CP	%	110			75-125	Pass	
Copper (filtered)	L24-De0050599	CP	%	103			75-125	Pass	
Lead (filtered)	L24-De0050599	CP	%	97			75-125	Pass	
Manganese (filtered)	L24-De0050599	CP	%	108			75-125	Pass	
Mercury (filtered)	L24-De0050599	CP	%	101			75-125	Pass	
Nickel (filtered)	L24-De0050599	CP	%	104			75-125	Pass	
Selenium (filtered)	L24-De0050599	CP	%	109			75-125	Pass	
Titanium (filtered)	L24-De0050599	CP	%	106			75-125	Pass	
Zinc (filtered)	L24-De0050599	CP	%	113			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-De0050599	CP	%	98			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-De0050602	CP	%	85			75-125	Pass	
Cadmium (filtered)	L24-De0050602	CP	%	89			75-125	Pass	
Chromium (filtered)	L24-De0050602	CP	%	75			75-125	Pass	
Lead (filtered)	L24-De0050602	CP	%	77			75-125	Pass	
Manganese (filtered)	L24-De0050602	CP	%	79			75-125	Pass	
Mercury (filtered)	L24-De0050602	CP	%	82			75-125	Pass	
Selenium (filtered)	L24-De0050602	CP	%	112			75-125	Pass	
Titanium (filtered)	L24-De0050602	CP	%	86			75-125	Pass	
Zinc (filtered)	L24-De0050602	CP	%	77			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-De0050602	CP	%	85			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-De0050605	CP	%	104			75-125	Pass	
Arsenic (filtered)	L24-De0050605	CP	%	107			75-125	Pass	
Cadmium (filtered)	L24-De0050605	CP	%	106			75-125	Pass	
Chromium (filtered)	L24-De0050605	CP	%	102			75-125	Pass	
Copper (filtered)	L24-De0050605	CP	%	100			75-125	Pass	
Iron	L24-De0050605	CP	%	91			75-125	Pass	
Lead (filtered)	L24-De0050605	CP	%	97			75-125	Pass	
Manganese (filtered)	L24-De0050605	CP	%	101			75-125	Pass	
Mercury (filtered)	L24-De0050605	CP	%	106			75-125	Pass	
Nickel (filtered)	L24-De0050605	CP	%	100			75-125	Pass	
Selenium (filtered)	L24-De0050605	CP	%	106			75-125	Pass	
Titanium (filtered)	L24-De0050605	CP	%	107			75-125	Pass	
Uranium	L24-De0050605	CP	%	106			75-125	Pass	
Zinc (filtered)	L24-De0050605	CP	%	109			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-De0050605	CP	%	103			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-De0050605	CP	%	77			75-125	Pass	
Magnesium	L24-De0050605	CP	%	91			75-125	Pass	
Potassium	L24-De0050605	CP	%	90			75-125	Pass	
Sodium	L24-De0050605	CP	%	84			75-125	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heavy Metals				Result 1					
Aluminium (filtered)	L24-De0050606	CP	%	105			75-125	Pass	
Arsenic (filtered)	L24-De0050606	CP	%	116			75-125	Pass	
Cadmium (filtered)	L24-De0050606	CP	%	102			75-125	Pass	
Chromium (filtered)	L24-De0050606	CP	%	96			75-125	Pass	
Copper (filtered)	L24-De0050606	CP	%	87			75-125	Pass	
Lead (filtered)	L24-De0050606	CP	%	91			75-125	Pass	
Manganese (filtered)	L24-De0050606	CP	%	90			75-125	Pass	
Mercury (filtered)	L24-De0050606	CP	%	99			75-125	Pass	
Nickel (filtered)	L24-De0050606	CP	%	89			75-125	Pass	
Selenium (filtered)	L24-De0050606	CP	%	121			75-125	Pass	
Titanium (filtered)	L24-De0050606	CP	%	100			75-125	Pass	
Zinc (filtered)	L24-De0050606	CP	%	97			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-De0050606	CP	%	103			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Aluminium (filtered)	L24-De0050607	CP	%	98			75-125	Pass	
Arsenic (filtered)	L24-De0050607	CP	%	106			75-125	Pass	
Cadmium (filtered)	L24-De0050607	CP	%	99			75-125	Pass	
Chromium (filtered)	L24-De0050607	CP	%	98			75-125	Pass	
Copper (filtered)	L24-De0050607	CP	%	93			75-125	Pass	
Lead (filtered)	L24-De0050607	CP	%	93			75-125	Pass	
Manganese (filtered)	L24-De0050607	CP	%	89			75-125	Pass	
Mercury (filtered)	L24-De0050607	CP	%	100			75-125	Pass	
Nickel (filtered)	L24-De0050607	CP	%	93			75-125	Pass	
Selenium (filtered)	L24-De0050607	CP	%	102			75-125	Pass	
Titanium (filtered)	L24-De0050607	CP	%	107			75-125	Pass	
Zinc (filtered)	L24-De0050607	CP	%	99			75-125	Pass	
Spike - % Recovery									
Alkali Metals (filtered)				Result 1					
Magnesium (filtered)	L24-De0050607	CP	%	85			75-125	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	L24-De0050610	CP	%	114			80-120	Pass	
Chloride	L24-De0050610	CP	%	116			70-130	Pass	
Chromium (VI)	L24-De0050610	CP	%	115			80-120	Pass	
Nitrate (as N)	L24-De0050610	CP	%	88			70-130	Pass	
Nitrite (as N)	L24-De0050610	CP	%	97			80-120	Pass	
NOx (as N)	L24-De0050610	CP	%	92			80-120	Pass	
Sulfate (as SO4)	L24-De0050610	CP	%	108			70-130	Pass	
Total Nitrogen	L24-De0050610	CP	%	119			70-130	Pass	
Total Phosphorus	L24-De0050610	CP	%	104			80-120	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	L24-De0050615	CP	%	83			75-125	Pass	
Thorium*	L24-De0050615	CP	%	124			75-125	Pass	
Uranium	L24-De0050615	CP	%	97			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-De0050615	CP	%	80			75-125	Pass	
Magnesium	L24-De0050615	CP	%	85			75-125	Pass	
Potassium	L24-De0050615	CP	%	83			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Sodium	L24-De0050615	CP	%	86			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	L24-De0050623	CP	%	103			75-125	Pass	
Thorium*	L24-De0050623	CP	%	101			75-125	Pass	
Uranium	L24-De0050623	CP	%	103			75-125	Pass	
Spike - % Recovery									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1					
Calcium	L24-De0050623	CP	%	94			75-125	Pass	
Magnesium	L24-De0050623	CP	%	109			75-125	Pass	
Potassium	L24-De0050623	CP	%	105			75-125	Pass	
Sodium	L24-De0050623	CP	%	115			75-125	Pass	
Spike - % Recovery									
				Result 1					
Chemical Oxygen Demand (COD)	L24-De0050624	CP	%	95			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	L24-De0050589	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-De0050589	CP	mg/L	190	190	2.0	30%	Pass	
Chromium (VI)	L24-De0050589	CP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Nitrate (as N)	L24-De0050589	CP	mg/L	3.0	2.6	13	30%	Pass	
Nitrite (as N)	L24-De0050589	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx (as N)	L24-De0050589	CP	mg/L	3.0	2.6	13	20%	Pass	
Sulfate (as SO4)	L24-De0050589	CP	mg/L	21	22	4.0	30%	Pass	
Total Nitrogen	L24-De0050589	CP	mg/L	3.0	3.1	17	30%	Pass	
Total Phosphorus	L24-De0050589	CP	mg/L	0.04	0.04	4.0	20%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	L24-De0050590	CP	uS/cm	880	890	1.0	30%	Pass	
pH (at 25 °C)	L24-De0050590	CP	pH Units	6.2	5.9	5.0	30%	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	L24-De0050590	CP	mg/L	530	530	1.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Aluminium (filtered)	L24-De0050593	CP	mg/L	0.44	0.44	<1	30%	Pass	
Arsenic (filtered)	L24-De0050593	CP	mg/L	0.007	0.008	6.0	30%	Pass	
Cadmium (filtered)	L24-De0050593	CP	mg/L	0.0003	0.0004	10	30%	Pass	
Chromium (filtered)	L24-De0050593	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	L24-De0050593	CP	mg/L	0.006	0.006	2.0	30%	Pass	
Lead (filtered)	L24-De0050593	CP	mg/L	0.002	0.002	1.0	30%	Pass	
Mercury (filtered)	L24-De0050593	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	L24-De0050593	CP	mg/L	0.028	0.028	2.0	30%	Pass	
Selenium (filtered)	L24-De0050593	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Titanium (filtered)	L24-De0050593	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc (filtered)	L24-De0050593	CP	mg/L	0.92	0.94	1.0	30%	Pass	
Duplicate									
Alkali Metals (filtered)				Result 1	Result 2	RPD			
Magnesium (filtered)	L24-De0050593	CP	mg/L	17	17	1.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	L24-De0050594	CP	mg/L	4.0	4.6	14	30%	Pass	
Thorium*	L24-De0050594	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Uranium	L24-De0050594	CP	mg/L	0.002	0.002	6.0	30%	Pass	

Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-De0050594	CP	mg/L	1.0	1.0	1.0	30%	Pass	
Magnesium	L24-De0050594	CP	mg/L	7.8	7.7	1.0	30%	Pass	
Potassium	L24-De0050594	CP	mg/L	1.0	1.1	4.0	30%	Pass	
Sodium	L24-De0050594	CP	mg/L	69	69	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	L24-De0050599	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-De0050599	CP	mg/L	72	70	2.0	30%	Pass	
Chromium (VI)	L24-De0050599	CP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Nitrite (as N)	L24-De0050599	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
Sulfate (as SO4)	L24-De0050599	CP	mg/L	10	10	1.0	30%	Pass	
Total Nitrogen	L24-De0050599	CP	mg/L	2.0	1.9	7.0	30%	Pass	
Total Phosphorus	L24-De0050599	CP	mg/L	0.02	0.02	2.0	20%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	L24-De0050600	CP	uS/cm	410	420	1.0	30%	Pass	
pH (at 25 °C)	L24-De0050600	CP	pH Units	5.8	5.9	2.0	30%	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	L24-De0050600	CP	mg/L	250	250	1.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	L24-De0050604	CP	mg/L	0.07	0.07	11	30%	Pass	
Thorium*	L24-De0050604	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Uranium	L24-De0050604	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-De0050604	CP	mg/L	2.0	2.3	14	30%	Pass	
Magnesium	L24-De0050604	CP	mg/L	4.0	4.3	7.0	30%	Pass	
Potassium	L24-De0050604	CP	mg/L	2.1	2.2	7.0	30%	Pass	
Sodium	L24-De0050604	CP	mg/L	38	42	9.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chemical Oxygen Demand (COD)	L24-De0050606	CP	mg/L	< 25	< 25	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	L24-De0050609	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chloride	L24-De0050609	CP	mg/L	60	58	3.0	30%	Pass	
Chromium (VI)	L24-De0050609	CP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Nitrate (as N)	L24-De0050609	CP	mg/L	0.94	0.94	1.0	30%	Pass	
Nitrite (as N)	L24-De0050609	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx (as N)	L24-De0050609	CP	mg/L	0.94	0.94	1.0	20%	Pass	
Sulfate (as SO4)	L24-De0050609	CP	mg/L	10	10	1.0	30%	Pass	
Total Nitrogen	L24-De0050609	CP	mg/L	1.0	0.9	3.0	30%	Pass	
Total Phosphorus	L24-De0050609	CP	mg/L	0.02	0.02	<1	20%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	L24-De0050610	CP	uS/cm	280	290	<1	30%	Pass	
pH (at 25 °C)	L24-De0050610	CP	pH Units	5.8	5.6	3.0	30%	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	L24-De0050610	CP	mg/L	170	170	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	L24-De0050614	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Thorium*	L24-De0050614	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Uranium	L24-De0050614	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-De0050614	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Magnesium	L24-De0050614	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Potassium	L24-De0050614	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Sodium	L24-De0050614	CP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	L24-De0050615	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass	
Chemical Oxygen Demand (COD)	L24-De0050615	CP	mg/L	< 25	< 25	<1	30%	Pass	
Chloride	L24-De0050615	CP	mg/L	< 5	< 5	<1	30%	Pass	
Chromium (VI)	L24-De0050615	CP	mg/L	< 0.002	< 0.002	<1	20%	Pass	
Nitrate (as N)	L24-De0050615	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Nitrite (as N)	L24-De0050615	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
NOx (as N)	L24-De0050615	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass	
Sulfate (as SO4)	L24-De0050615	CP	mg/L	< 1	< 1	<1	30%	Pass	
Total Organic Carbon	L24-De0050615	CP	mg/L	< 5	19	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Thorium*	L24-De0050617	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Uranium	L24-De0050617	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Eurofins Suite B11C: Na/K/Ca/Mg				Result 1	Result 2	RPD			
Calcium	L24-De0050617	CP	mg/L	19	21	7.0	30%	Pass	
Magnesium	L24-De0050617	CP	mg/L	3.9	4.0	4.0	30%	Pass	
Potassium	L24-De0050617	CP	mg/L	8.3	8.7	5.0	30%	Pass	
Sodium	L24-De0050617	CP	mg/L	25	26	5.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	L24-De0050621	CP	uS/cm	41000	41000	1.0	30%	Pass	
pH (at 25 °C)	L24-De0050621	CP	pH Units	6.1	6.4	4.0	30%	Pass	
Total Dissolved Solids Dried at 180 °C ± 2 °C	L24-De0050621	CP	mg/L	25000	25000	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Organic Carbon	L24-De0050624	CP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Thorium*	L24-De0050624	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	

Comments

Radium 226 and 228 analysis by: ALS, NATA accreditation no. 825, report reference EP2419288

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	N/A
Samples received within HoldingTime	N/A
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q05	The matrix spike concentration is less than five times the background concentration in the sample - therefore the spike recovery cannot be determined
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

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Kim Rodgers
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request

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CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN: 50 005 085 521

Sydney Laboratory
Unit F3, Building F, Block Road, Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNS@eurofins.com

Brisbane Laboratory
Unit 1, 20 Smallwood Place, Murarrie QLD 4172
07 3902 4600 EnviroSampleQL@eurofins.com

Perth Laboratory
Unit 1, 2 Kalamunda Road, Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

Melbourne Laboratory
6 Monterey Road, Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company	SLR Consulting Australia Pty Ltd	Project No	675.072519.00001
Address	Level 1/500 Hay Street, Subiaco, WA	Project Name	Banksia Landfill Dec Quarterly GME 2024
Contact Name	Phuntsho Wangdi	Project Manager	Phuntsho Wangdi
Phone No	433907756	EDD Format (Excel, Esdat etc)	Esdat
Special Directions	Lab filter for Dissolved metals where indicated in the sample bottles. Also, QC01 and QC04 kindly forward to ALS lab	Sampler(s)	PW and KT
Purchase Order		Handed over by	PW and KT
Quote ID No	SLR 050324 (excluding PFAS and Organics)	Email for Invoice	AccountsPayableAU@slrconsulting.com
		Email for Results	pwangdi@slrconsulting.com

Analyses (Please tick the required analysis box and write in the number of containers for each analysis. If insufficient space, please attach additional COC)

Containers (Refer to container type & size, if possible)

Required Turnaround Time (TAT) (Select one box. Prior booking may be required)

*Surcharge will apply
- ☐ Overnight (reporting by 9am)*
- ☐ Same day* ☐ 1 day*
- ☐ 2 days* ☐ 3 days*
- ☑ 5 days (Standard)
- ☐ Other ( )

No	Client Sample ID	Sample Date/Time (dd/mm/yy hh:mm)	Matrix (Solid (S), Water (W))	Physico-chemical – pH, EC, Eh, DO	Nutrients – COD, NH3, nitrate, total nitrogen, total phosphorus, TDS, Total Organic Carbon	Major ions – Ca, Mg, K, Na, Cl, bicarbonate, sulfate	Dissolved metals – Al, As, Cd, Cr (III+IV), Cu, Pb, Mn, Mg, Hg, Ni, Ti, Se, Zn	Total Metals – Fe	Radionuclides – Ra226, Ra228	Metals – Th and U	500mL Plastic	250mL Plastic	125mL Plastic	250mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Indicate size, eg. 60mL WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	GW1S	18-12-2024	W	X	X	X	X	X	X	X									
	GW1D	18-12-2024	W	X	X	X	X	X	X	X									
2	GW3D	16-12-2025	W	X	X	X	X	X	X	X									
3	SE3S-R	17-12-2024	W	X	X	X	X	X	X	X									
5	SE4S-R	16-12-2026	W	X	X	X	X	X	X	X									
6	SE4D	18-12-2024	W	X	X	X	X	X	X	X									
7	GW5S	18-12-2027	W	X	X	X	X	X	X	X									
8	GW5D	18-12-2024																	Dry (No sample collected)
9	SE6S	17-12-2024	W	X	X	X	X	X	X	X									
10	GW6D	17-12-2024	W	X	X	X	X	X	X	X									
11	GW7S	16-012-2029	W	X	X	X	X	X	X	X									
12	GW7D-R	21-12-2024	W	X	X	X	X	X	X	X									
13	GW8D	16-012-2030	W	X	X	X	X	X	X	X									
14	GW9S	17-12-2024	W	X	X	X	X	X	X	X									
15	GW9D	17-12-2024	W	X	X	X	X	X	X	X									
16	SE10S	23-12-2024	W	X	X	X	X	X	X	X									
17	GW10D	16-012-2032	W	X	X	X	X	X	X	X									
18	GW11S	17-12-2024	W	X	X	X	X	X	X	X									
19	GW11D	17-12-2024	W	X	X	X	X	X	X	X									
20	GW12S	17-12-2024	W																Dry(Not sampled)
23	GW12D	17-12-2034	W	X	X	X	X	X	X	X									
24	GW22S	17-12-2044	W	X	X	X	X	X	X	X									
25	GW22D	17-12-2054	W	X	X	X	X	X	X	X									
26	GW23S	17-12-2024	W	X	X	X	X	X	X	X									
40	GW23D	17-12-2036	W	X	X	X	X	X	X	X									
41	QC01	16-12-2024	W	X	X	X	X	X	X	X									
42	QC03	17-12-2024	W	X	X	X	X	X	X	X									
43	FB01	16-12-2024	W	X	X	X	X	X	X	X									
44	RS01	16-12-2024	W	X	X	X	X	X	X	X									
45	PSD1	16-12-2024	W	X					X	X									
46	PSD2	16-12-2024	W	X					X	X									
47	LEP1	18-12-2024	W	X					X	X									leachate sample
48	LEP3	18-12-2024	W	X					X	X									leachate sample
49	PLP	18-12-2024	W	X					X	X									leachate sample
50	TDS Leachate Cell 1	18-12-2024	W	X					X	X									leachate sample
51	FB02	17-12-2024	W	X					X	X									
52	RS02	17-12-2024	W	X					X	X									
53	GW13S	17-12-2024	W	X	X	X	X	X	X	X									
54	GW13D	17-12-2024	W	X	X	X	X	X	X	X									Analyse as per the sampled container (green bottles were missing as there was not enough
	Total Counts																		

Method of Shipment	☐ Courier # ( )	☑ Hand Delivered	☐ Name		Signature	Date	Time
Eurofins | mgt Laboratory Use Only	Received By: MC	SYD | BNE | MEL | PER | ADL | NTL | OKA	Signature		Date: 18/12/24	Time: 1450	Temperature: 24.6 C
	Relinquished By:	SYD | BNE | MEL | PER | ADL | NTL | OKA	Signature		Date:	Time:	Report No: 117305.

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Submission of samples to this laboratory will be deemed as acceptance of Eurofins | mgt standard Terms and Conditions unless agreed otherwise in writing. Copy of Eurofins | mgt Standard Terms and Conditions available on request.

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