Green Island Landfill

Interim Human Health and Environmental Risk Assessment

Dunedin City Council

20 May 2024

→ **The Power of Commitment**

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[Compliance statement]

The Power of Commitment

Executive Summary

GHD Pty Limited (GHD) has been commissioned by Dunedin City Council (DCC) to complete a combined interim human health and environmental risk assessment (HHERA) for the Green Island landfill (hereafter referred to as 'the site' or 'the landfill'). The site is located at 9 Brighton Road, Green Island, adjacent to the Kaikorai Stream. A site location plan is provided as Figure 1 and Figure 2 in Appendix A. The purpose of this HHERA is to support the resource consenting process for the landfill.

The focus of this HHERA is the exposure of chemicals associated with the landfill to humans and the environment. The chemicals assessed in this HHERA are limited to those provided in existing monitoring reports and include metals, nutrients (ammonia, nitrate), cyanide, total organic carbon, chloride, and per- and poly-fluoroalkyl Substances (PFAS). The HHERA incorporates existing surface water data collected from on-site and off-site ponds and from the Kaikorai Stream, both upstream and downstream of the site, as well as leachate and groundwater data. The sampling locations are shown in Figure 3 in Appendix A.

Objectives

The objective of this HHERA is to evaluate whether contamination originating from the site may represent a risk to the human users or environment of the catchment.

Outcomes

The outcomes of the HHERA are summarised in the table below, with the key findings as follows:

- A number of chemicals, including nitrate, zinc and PFAS were identified in samples collected both upstream and downstream from the landfill, suggesting contributions from across the catchment.
- The monitoring data does not indicate a discernible impact to surface water quality from the landfill.
- There is some uncertainty associated with the available dataset, as the sampling undertaken to date may not adequately capture situations where pulses of surface water from the landfill ponds flow into the Kaikorai Stream

Receptors	Exposure scenario	Chemicals of interest	Potential risk	Comments
Human users of the Kaikorai Stream and Estuary	Incidental ingestion and contact by recreational users of the stream and estuary	None	Low	The chemical concentrations in Kaikorai Stream surface water and onsite ponds were lower than the Tier 1 screening criteria for the recreational use of surface water.
	Consumption of locally caught aquatic organisms (e.g., fish)	PFAS	Low	The contribution of the landfill to PFAS impacts is not distinguishable from the contribution of other sources within the catchment. As such, the HHERA has focused on the PFAS impacts present at the broader catchment scale. The weight of available evidence suggests that the PFAS concentrations measured within Kaikorai Stream and Estuary are unlikely to result in adverse effects on human users of the aquatic environment. A preliminary (desktop), quantitative bioaccumulation model indicates that the regular consumption of locally caught fish (i.e., > 1 serving per week for a lifetime) would be required to result in levels of PFAS intake that are above the tolerable daily intake (TDI) set by Australian health regulators (FSANZ, 2017).
The environment of Kaikorai Stream and Estuary	Incidental ingestion, contact and uptake by the flora and fauna in the CMA	Zinc	Low	The dataset collected from the Kaikorai Stream, and the toxicity dataset published for zinc in saline water indicates that that there is a low risk that discharges from the landfill are resulting in measurable adverse chronic effects on aquatic organisms. However, it is possible that, at a catchment scale, marginal adverse effects on aquatic organisms are possible due to the presence of elevated concentrations of zinc derived from other sources.
		PFAS	Low	The PFAS concentrations measured in surface water upstream and downstream of the site were lower than the 95% species protection level (HEPA, 2020), which is applicable to the assessment of direct exposure risks.
	Food chain exposures to higher trophic level organisms (e.g., wading birds)	PFAS	Low	The PFAS concentrations measured in Kaikorai Stream were of a similar order of magnitude to the HEPA (2020) ecological water quality guidelines for the protection of 99% of species and generally below the ANZG (2023) draft values. These results suggest that PFAS discharges from the site are unlikely to adversely affect the aquatic environment. The PFAS concentrations measured in Kaikorai Stream and Estuary (typically less than 0.005 µg/L) align with those reported by HEPA (2022) for urban catchments (up to 0.013 µg/L).

This HHERA provides an interim assessment to be updated as additional data is collected.

Recommendations

GHD provides the following recommendations, noting that this work is outside the scope of the current consent and includes elements which are best addressed via a catchment management approach:

– Characterising temporal variability in discharges from the landfill: Additional investigations could be undertaken by DCC to assess the hydrology of the onsite and off-site ponds and the nature and extent of any discharge events from the onsite ponds into the Kaikorai Stream
– Characterising nutrient inputs, toxicity and eutrophication at a catchment scale: Additional investigation could be undertaken by the Regional Council to better understand the nature of these impacts and their implications for the health of the aquatic environment for the catchment. This would assist the community to understand the wider impacts of land-use in the catchment on water quality outcomes in the Kaikorai Stream.
– Characterising metal inputs, bioavailability and toxicity at a catchment scale: Additional studies, focused on understanding the bioavailability of metals in the Kaikorai catchment, would assist in better understanding the relationship between the measured concentrations and any associated effects on aquatic ecology. As above, recognises the need for a broader catchment scale approach to understanding drivers for water quality in the lower Kaikorai Stream.
– Characterising PFAS inputs at a catchment-scale: A well-designed catchment monitoring program would allow regulators to differentiate between ambient (diffuse) and point sources of PFAS to the Kaikorai Stream and Estuary and to evaluate temporal changes in the level of impact (e.g., following wet and dry periods).
– Characterising PFAS bioaccumulation and understanding any associated risks: The sampling and analysis of aquatic biota from across the Kaikorai catchment would provide greater certainty around the extent of PFAS bioaccumulation in aquatic food chains. In addition, engagement with local stakeholder groups would allow for a better understanding of the nature and extent of fishing in the waterway.

Final remarks

This HHERA provides data to inform a broader catchment approach to improve water quality outcomes. The proposed ongoing monitoring at the Green Island Landfill site and within the Kaikorai Stream will assist to inform part of the wider catchment water quality management approach. However, as the contaminants within the Kaikorai are derived from multiple current and historical sources throughout the catchment, the approach to managing and improving water quality should be addressed holistically, and ideally led by the Regional Council.

The outcomes and recommendations have been made based on the available data. It should be acknowledged that the risk assessment is based on limited data and chemical concentration variability may play a significant role, particularly in surface water. This report is subject to, and must be read in conjunction with, the limitations set out in Section 1.5 and the assumptions and qualifications contained throughout the report.

Contents

Table index

Figure index

Appendices

1. Introduction

GHD Limited (GHD) has been commissioned by Dunedin City Council (DCC) to complete combined human health and environment risk assessment (HHERA) for the Green Island landfill (hereafter referred to as 'the site' or 'the landfill'). The site is located at 9 Brighton Road, Green Island, adjacent to the Kaikorai Stream. A site location plan is provided as Figure 1 in Appendix A.

1.1 Background

DCC has embarked on the Waste Futures Project to develop an improved comprehensive waste management system for Dunedin. While the planned improvements progress through the approvals process and are realised, the currently operating Green Island landfill will continue to accept waste. Based on Dunedin's current waste disposal rates, it is projected that the Green Island landfill can continue accepting waste until sometime between December 2029 and March 2031 depending in actual disposal rates. As the landfill continues to fill up, parts of the site will be closed and capped in stages. The long-term use of the landfill site post closure will be determined in consultation with local community stakeholders.

The operation of the Green Island Landfill, including associated waste processing operations and facilities, is currently subject to 14 existing resource consents granted by Otago Regional Council (ORC). The consents cover landfill operation activities relating to discharges to land, water, and air, taking and/or diverting water, and disturbance of a contaminated site. All consents expire on 1 October 2023 and at the time of reporting, the DCC had applied to ORC for replacement resource consents to continue to use the landfill until closure, when waste disposal can be transferred to a new landfill facility.

Environmental monitoring is undertaken at the landfill and within the Kaikorai Stream on a routine basis. This monitoring has identified the presence of a variety of contaminants, including per- and polyfluoroalkyl substances (PFAS) in surface water monitoring sites within the Kaikorai Stream. These detections are consistent with those that typically occur in urbanised catchments, such as the Kaikorai Stream and the *Waste Futures - Green Island Landfill Closure Surface Water Report* (GHD, 2023b), which was completed as part of the replacement resource consents process, concluded that there are no demonstrable adverse effects associated with the surface water discharges from the site into the receiving environment of the Kaikorai Stream. GHD (2023b) did however recommend the completion of this HHERA to achieve the following:

- To better understand the risk to human health from chemicals such as PFAS, which has been measured at low levels in most of the surface water monitoring sites.
- Inform a broader catchment approach, led by ORC, to the ongoing monitoring of contamination in the Kaikorai Stream throughout the proposed Green Island Landfill operations and closure programme.

The *Groundwater Technical Report* (GHD, 2023a) included a recommendation that the quarterly monitoring of PFAS concentrations in Kaikorai Stream is undertaken for the next three years. Hence, this HHERA provides an interim assessment, to be updated as additional data is collected.

1.2 Purpose and objectives of this report

The purpose of this HHERA is to support the resource consenting process for the landfill, including the public engagement that will be undertaken by ORC during this process. Specifically, the objective of this HHERA is to evaluate whether contamination originating from the site may represent a risk to the human users or environment of the catchment.

1.3 Risk assessment framework and methodology

The HHERA has been prepared with reference to the following legislation and guidance:

- Australian and New Zealand Governments (ANZG, 2018) *Australia and New Zealand Fresh Water and Marine Water Quality Guidelines*.

- Food Standards Australia New Zealand (FSANZ, 2017) *Report on Perfluorinated Chemicals in Food*.
- MfE (2021a) *Ministry for the Environment Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand*.
- MfE (2021b) *Ministry for the Environment Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils*.
- MfE (2012) *Users' Guide: National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health*.
- Ministry for the Environment (MfE, 2011a) *Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health*.
- MfE (2011b) *Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand*.
- Ministry of Health (MoH, 2022) *Drinking Water Standards of New Zealand 2005* (Revised 2022)
- Heads of EPAs Australia and New Zealand (HEPA, 2020) *PFAS National Environmental Management Plan, version 2.0* (the "PFAS NEMP").

  At the time of writing HEPA (2022) *had also released a draft version of the PFAS NEMP 3.0 and although this document had not been finalised, it was considered in this assessment where relevant.*
- Taumata Arowai, *Water Services (Drinking Water Standards for New Zealand) Regulations* 2022

Guidance provided by international agencies has also been referenced where required and consistent with New Zealand guidance.

Fundamental to the HHERA process is the development of a Conceptual Site Model (CSM), which is a description of the plausible mechanisms ('pathways'), by which people and ecosystems ('receptors') may be exposed to chemicals in the environment ('sources'). Potential risks to human health and the environment cannot occur unless there is a complete exposure pathway associated with a source of contamination.

The key steps in the HHERA process are outlined in Plate 1.1 overleaf and can be summarised as follows:

- ***Issues identification:*** establishes the objectives of the HHERA, evaluates the available data and establishes a preliminary CSM.
- ***Receptor identification***: identifies the human and ecological species that may be at risk and evaluates the level of acceptable risk in the context of the ecological values that need to be protected.
- ***Toxicity assessment:*** establishes the relationships between chemical exposure and potential health and ecological effects.
- ***Exposure assessment:*** produces estimates of the chemical exposure that may be experienced by the identified human and ecological receptors of the site and within the surrounding area.
- ***Risk characterisation:*** combines the results of the toxicity assessment and exposure assessment, to provide estimates of the potential health and ecological risks to relevant receptors.
- ***Uncertainty and sensitivity assessment:*** evaluates the uncertainty associated with the HHERA and sensitivity of the assessment outcomes to the various assumptions and inputs.

The issues identification process for this HHERA, including a Tier 1 evaluation of the environmental dataset, is outlined in Sections 1 to 2.12. The detailed ('Tier 2') risk assessment is presented in Section 3.5.1.

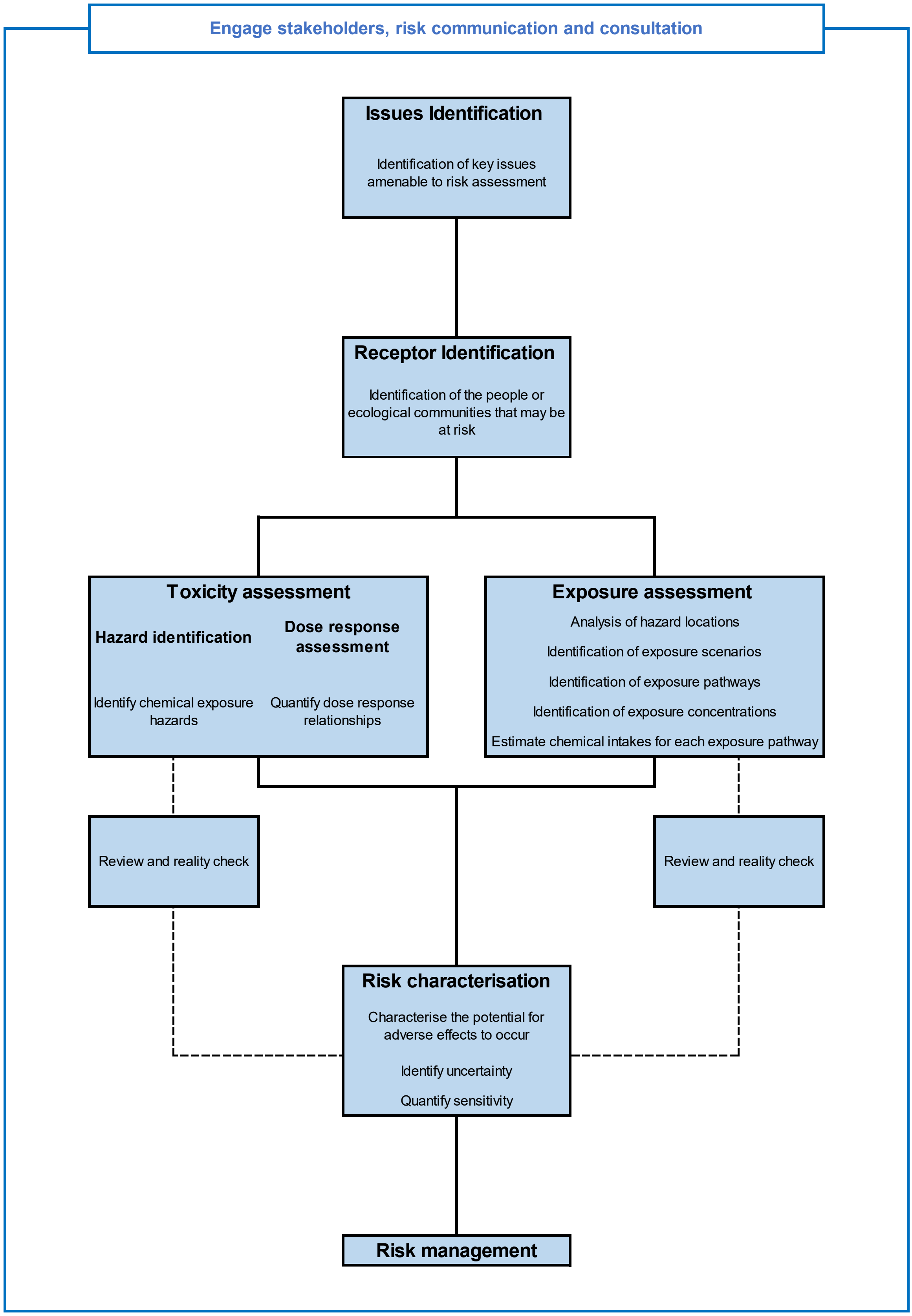

Plate 1.1 HHERA methodology, modified from enHealth (2012b)

The HHERA has considered environmental sampling data collected from the site and from upstream and downstream monitoring points in the Kaikorai Stream, as reported in the following documents:

- *The Waste Futures - Green Island Landfill Closure Surface Water Report* (GHD, 2023b)
- *The Waste Future - Groundwater Technical Report* (GHD, 2023a)
- *Green Island landfill Annual Monitoring Reports* (GHD, 2019; 2021; 2022; 2023e)

1.4 Assumptions

This report has been prepared with reference to the legislation and guidance presented in Section 1.3 and incorporates the following key assumptions:

- This HHERA is limited to the assessment of the risks to human health and the environment associated with exposure to chemicals associated with the landfill site. Risks related to ambient concentrations and/or other sources are not part of the scope of work of this HHERA.
- The chemical concentrations in media in the receiving environment were characterised using existing surface water and groundwater data, as discussed in Section 1.3. The HHERA reflects the conditions in the site and the receiving environment at the time of sampling.
- The chemicals assessed in this HHERA are limited to those provided in existing monitoring reports or unreported data collected by GHD, as discussed in the report.
- The HHERA excludes terrestrial environments.
- The HHERA is based on the dataset available to GHD which spans from 2017 to 2023. A full evaluation of data quality is not part of the scope of work of this HHERA.
- The toxicity endpoints used in this HHERA were consistent with the guidance provided by New Zealand health and environmental regulators at the time of reporting.

1.5 Limitations

This report: has been prepared by GHD for Dunedin City Council and may only be used and relied on by Dunedin City Council for the purpose agreed between GHD and Dunedin City Council as set out in Section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than Dunedin City Council arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD disclaims liability arising from any of the assumptions being incorrect.

The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.

Investigations undertaken in respect of this report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in this report.

GHD has prepared this report on the basis of information provided by Dunedin City Council and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. Environmental setting

2.1 Site location and identification

The site is a municipal landfill facility situated to the west of Brighton Road, approximately 10 km southwest of the suburb of Green Island and central Dunedin. Several activities are currently being undertaken on the site including municipal waste disposal, compost production, operation of a waste transfer station and recycling centre, and liquid waste and sludge disposal. A site location plan is provided as Figure 1 in Appendix A.

The identification information for the Landfill designation area was sourced from the Dunedin City District Plan/2GP Map tool[1] and is summarised in Table 2.1.

Table 2.1 Summary of site identification information

Item	Details
Site address	9 Brighton Road, Green Island, Dunedin 9018, New Zealand
Certificate of title[1]	11B/1241, 12C/262, 15A/266, 15C/1016, 166/158, 368/19 1040233, 16D/1194, 16D/1193
Legal description[1]	- LOT 1 DP 20582, PT SEC 45 SO 3 GREEN ISLAND BUSH SD, PT SEC 46 SO 3 GREEN ISLAND BUSH SD, PT SEC 47 SO 3 GREEN ISLAND BUSH SD, PT SEC 48 SO 436 GREEN ISLAND BUSH SD, PT SEC 55 BLK VII SO 436 DUNEDIN & EAST TAIERI SD, PT SEC 65 BLK VII SO 436 DUNEDIN & EAST TAIERI SD, SEC 1 SO 24047, SEC 119 BLK VII SO 21878 DUNEDIN & EAST TAIERI SD, SEC 54 BLK VII SO 436 DUNEDIN & EAST TAIERI SD, SEC 63 BLK VII SO 436 DUNEDIN & EAST TAIERI SD, SEC 81 BLK VII SO 12928 DUNEDIN & EAST TAIERI SD - LOT 1 DP 20826, LOT 2 DP 572543, LOT 4 DP 572543, PT CLSD RD BLK V SO 10373 LOWER KAIKORAI SD, PT SEC 100 BLK V SO 3 LOWER KAIKORAI SD, PT SEC 101 BLK V SO 3 LOWER KAIKORAI SD, PT SEC 53 BLK VII SO 436 DUNEDIN & EAST TAIERI SD, PT SEC 85 BLK V SO 3 LOWER KAIKORAI SD, PT SEC 86 BLK V SO 3 LOWER KAIKORAI SD, PT SEC 87 BLK V SO 3 LOWER KAIKORAI SD, PT SEC 98 BLK V SO 3 LOWER KAIKORAI SD, PT SEC 99 BLK V SO 3 LOWER KAIKORAI SD, SEC 102 BLK V SO 3 LOWER KAIKORAI SD, SEC 103 BLK V SO 3 LOWER KAIKORAI SD, SEC 120 BLK VII SO 21940 DUNEDIN & EAST TAIERI SD
Local Government Authority	Dunedin City Council
Zoning	Rural coastal (western portion). Industrial (eastern portion). Recreational (northeastern portion)
Property owner	Dunedin City Council – The facility is currently managed and operated by Waste Management Ltd
Land use	Utility Services: Sanitary Rural Industry: Stock Finishing
Area (approximate)	67.1 hectares
Notes: [1] Data sourced from **https://www.dunedin.govt.nz/services/rates-information/rates?ratingID=454600** and **https://www.dunedin.govt.nz/services/rates-information/rates?ratingID=338381**	

The site is located in a reclaimed wetland area within the Kaikorai Estuary, which is part of the larger Kaikorai Catchment. The catchment covers an area of 55 km^2, with natural boundaries formed by the Kaikorai Stream, Abbots Creek, and the Chain Hills to the northwest and north, Kaikorai and Round Hills to the north and northeast, and Saddle Hill to the west.

[1] Available at: **https://dunedin.maps.arcgis.com/apps/webappviewer/index.html?id=f7fc69e07dba4db589ffe2ddcac4acc7**

2.2 Site description

A site layout plan is provided in Figure 2 in Appendix A. The key site features include the following:

- The landfilled area which occupies the southern and central portions of the site.
- A bund is present along the western, southern and eastern perimeter of the site.
- A Resource Recovery Park and a composting area in the northern portion of the site.
- A series of artificial ponds are present in the southwestern, eastern, and northern portions of the site. The site's drainage system is described in Section 2.6.2.

Notably, an off-site pond called Southwestern Pond (or Western Pond by MW0) is present immediately to the southwest of the site which at present receives little or no flow from the site.

2.3 Site history and development

The site history is provided in detail by GHD (2023a). Information relevant to this HHERA is summarised as follows:

- Before the construction of the landfill, the site was occupied by a tidal estuary associated with the upper reaches of the Kaikorai Estuary. The Kaikorai Stream originally ran through the site but was diverted along the western boundary of the site to run in a south-westerly and southerly direction, towards the Kaikorai Lagoon and ultimately the ocean. The diverted stream currently forms the northern and western limits of the landfill before flowing into the Pacific Ocean near Waldronville.
- Waste disposal first occurred at the site in 1956, with the disposal of industrial waste. The site has been used for waste disposal since that time.
- Waste was originally dumped directly onto the estuarine muds. Unregulated and uncontrolled landfilling occurred at the site until the 1990s, when waste disposal activities started being regulated by DCC under a resource consent granted under the *Resource Management Act 1991*.
- Landfilling commenced at the south-east corner of the landfill site and has continued north and west over the decades. The eastern portion of the landfill has a relatively shallow depth of waste at around 3 to 6 m thickness and is currently used for facilities and waste transfer station operations. The southwestern half of the landfill has up to approximately 6 to 8 m depth of waste placed largely during the 1990's, and a further 10 to 15 m of waste can be placed in this area. The main landfill area is located to the west of the Resource Recovery Park Precinct (Figure 2 in Appendix A). Waste placement in this area has been confined over recent decades within a constructed soil bund that encircles the landfill on the eastern, northern, and western sides adjacent to the estuary. However, prior to berm construction waste had been placed across the whole extent of the area.
- Following the 1994 consent process, a range of site improvements were made to manage the effects of the landfill on the surrounding environment. These included the construction of stormwater detention basins (referred to as the Eastern and Western Sedimentation Ponds), the construction of a leachate interception trench (see below), and some minor works associated with the conveyance of stormwater into these collection systems. Additional details are provided below.

2.4 Topography

The landfill is located in the low-lying portion of the Kaikorai catchment near the coast. The Kaikorai Catchment rises from the coast to a high point of 668 m at Flagstaff hilltop. The Chain Hills form the western and north-western boundary of the catchment. The hills surrounding the low-lying portion of the catchment are characterized by steep gradients.

The landfill site reaches a height of 25 meters above mean sea level (amsl), but it is situated in a low-lying area. The access road on the western perimeter, situated between the landfill and Kaikorai Stream, is at an elevation ranging from 1.5 to 2.0 meters amsl and is built directly over estuary sediments.

2.5 Geology

The main stratigraphic unit underlying the site is the Kaikorai Estuary Formation (KEF) which is considered to extend to a depth of approximately 11 m below ground level (m bgl) in in the landfill area (BDGC, 2002). The Kaikorai Estuary Formation is comprised of two members, an upper and lower KEF, and is underlined by the Abbotsford Formation, a mudstone. The geology of the site is summarised in Table 2.2.

Table 2.2 Summary of the local geology

Depth (m bgl)	Geological formation / member	Description
0 – 4.5	Upper Kaikorai Estuary Member (UKEF)	Variable thin beds of sand, silty sand, sandy silt, silt, clayey silt and silty clay
4.5 – 11	Lower Kaikorai Estuary Member (LKEF)	Massive homogeneous beds of clayey silt, silty clay and silt, and minor (possibly localised) beds of clay, very fine sandy silt and silty very fine sand.
>11	Abbotsford Formation	Glauconitic mudstone

Intrusive investigations conducted by GHD (2023c) included the advancement of 12 bore holes. Table 2.3 summarises the general geological profile encountered along the site perimeter. In several of the bore holes there was a coarse-grained layer (sand and/or gravel) at the contact of the LKEM and mudstone. Depending on the location, variable amounts of fill were encountered. At BH104, drilled in the south-eastern part of the site, fill sits directly on mudstone.

Table 2.3 Summary of the site geology based on GHD's intrusive investigations

Depth (m bgl)	Geological formation / member	Description
Various depths	Fill	Waste and soil
1 – 3	UKEM	Silty fine to medium sand, sandy silt
6 – 8.5	LKEM	Organic silt, silty clay
Unknown	Abbotsford Mudstone	Grey-brown mudstone, very weak

2.6 Local hydrology

The Kaikorai Catchment flows to the southwest through the Kaikorai Valley into Kaikorai Estuary. The catchment comprises natural areas of bush, but has been heavily altered by residential, industrial, and agricultural development. The main water body near the site is Kaikorai Stream. The stream originates in the Kaikorai Hills to the north, and in the Abbot's Hill, the Chain Hills, and Saddle Hills to the west.

The Green Island Landfill and the Maxwell Landfill, another landfill located on the opposite side of Kaikorai Stream, have together reduced the Kaikorai estuarine area by approximately 30% (Beca, 1992). From time to time, the estuary mouth is blocked because of sand/debris accumulation from storm events. When this occurs, water backs up in the stream and results in higher stream levels adjacent to the site. Elevated water levels are maintained until the mouth is opened again, either by natural or mechanical methods.

Water levels in the Kaikorai Stream and Estuary are influenced by tides. Monitoring at location ST4 (Figure 3 in Appendix A) have shown water levels fluctuating by about half a meter between low and high tides (GHD, 2023b). This difference can exceed half a meter when the estuary mouth is closed.

2.6.1 Local surface water quality

The expiring resource consents for the Green Island landfill include a suite of conditions that require the monitoring of surface water quality. A review of the dataset is provided by GHD (2023b) and can be summarised as follows:

– The latest annual monitoring report includes results from four surface water locations (including up and down stream of the site) within the Kaikorai Estuary catchment and from two on-site sedimentation ponds (i.e., Eastern Sedimentation Pond and Western Sedimentation Pond).

– The sampling occurs every three months, with the samples required to be collected during low tide (within three hours of low tide) and not within 72 hours of any measurable rainfall. The water samples are analysed for pH, conductivity, dissolved oxygen, soluble metals (aluminium, cadmium, chromium, copper, lead, and nickel), nutrients (ammonia, nitrate), cyanide, total organic carbon, and chloride. Analytical results are compared against the ANZG (2018) screening criteria for the protection of the 80th percentile of species and are used to assess the potential for landfill leachate discharge to the surface water receiving environment.

– The results from all stream and estuary samples, including those upstream of the landfill, exhibit the dissolved metal and nutrient concentrations typical of urban to peri-urban catchments. The metal and nutrient concentrations measured in surface water samples collected adjacent to and downstream of landfill are typically not distinctly different to those measured upstream.

2.6.2 Site drainage and water management

The landfill area is subdivided into a series of stormwater catchments as shown in Figure 4 Appendix A. These catchments have changed over time as the landfill form has developed. The drainage of these catchments is summarised in Table 2.4.

Table 2.4 Summary discharge zones in each catchment according to water type

Water type	Catchments	Discharge area	Comment
Clean water	1, 3a, 3b and 6b	Kaikorai Stream	Stormwater generated in areas that are completed and vegetated discharge to the Kaikorai Stream via: – perimeter swales along the western and northern sides of the site. – sedimentation ponds to the south-west and east of the site
Stormwater runoff	4, 5b, 8 and 9	Eastern Sedimentation Pond, which discharges into the Northeastern Pond.	Stormwater generated in areas that are subject to earthworks or have been recently capped areas undergoes sedimentation in a pond before being released into the environment. Alternatively, sediment-rich stormwater can be routed to a leachate pump station and the Green Island Waste Water Treatment Plant (GIWWTP).
Leachate	2, 2a, and 5a	Northern Leachate Pond and ultimately the GIWWTP	Collected leachate is either directed back into active filling areas of the landfill (via infiltration) or directed to the GIWWTP.
	6a, 7a, 7b	Pumpstation 1 (PS1), the leachate system, and ultimately the GIWWTP	
	10		
	4a	To ground at the north-eastern corner of this area. Which is used for windrowing and composting of green waste.	

The ponds that are present on site for the purpose of managing stormwater and leachate can be summarised as follows (refer to Figure 2 in Appendix A):

– The Northeastern Pond, which discharges to Kaikorai Stream. Following high rainfall events, the Northeastern Pond receives overflow from the Eastern Sedimentation Pond and overflow to the perimeter swales.

– The Southeastern Pond, which discharges into the Northeastern Pond via a culvert and ultimately into Kaikorai Stream.

- The Western Sedimentation Pond, which at present receives little or no flow from the site as the limited volume of flow from the southern and western catchments of the landfill is diverted to the leachate collection system. Historically, larger volumes of stormwater were discharged into this pond, and it discharged into the Kaikorai Stream.
- The Southwestern Pond, which at present receives little flow from the site but has been monitored on some occasions.
- The Borrow Area Sedimentation Pond, which collects runoff from the borrow area and the immediate surrounds before discharging to the Kaikorai Stream via the Western Sedimentation Pond. This pond has not been monitored.

Leachate leakage in the Eastern Sedimentation Pond Culvert

Previous investigations have identified the presence of leachate in the culvert carrying flow from the Southeastern Pond to the Eastern Sedimentation Pond (Figure 2 in Appendix A). Initial evaluations of this culvert have suggested that the seepage of leachate into it is minimal. Considering the natural dilution mechanisms at play within the drainage system, it is anticipated that this would have an insignificant effect on the water quality of the Kaikorai Stream (GHD, 2023b).

2.7 Hydrogeology

Prior to the construction of the landfill, groundwater within the estuarine deposits (KEF) is likely to have been hydraulically connected to the Kaikorai Stream and other surface water features. However, the current leachate collection system (refer to Section 2.7.1) pumps groundwater/leachate from the perimeter trenches and creates a hydraulic barrier between surface water and the shallow aquifer underlying the landfill. The underlying Abbotsford Formation mudstone is inferred to be an aquitard due to the very low permeability of the mudstone and effectively an impermeable barrier for downward seepage (GHD, 2023a).

Hydraulic conductivity studies indicate the geological heterogeneity in the estuarine sediments results in the presence of discrete channels of higher permeability materials (where active stream channels were located), with both horizontal (due to the direction of deposition) and vertical (due to the layering of sediments) anisotropy (GHD, 2023a). The water level monitoring consistently shows that the lowest groundwater levels (in monitoring wells) occur adjacent to the trench (MWC wells).

2.7.1 Leachate interception trench and collection system

A leachate interception trench system collects landfill leachate mixed with groundwater seeping from the site. The leachate collection system comprises a gravel interception trench with a high-density polyethylene (HDPE) liner on outer side, and the slotted polyvinyl chloride (PVC) drainage pipe, together with a manhole and pump station (Figure 2.1).

Groundwater and leachate are conveyed by gravity to nine individual pump stations, identified as PS1 to PS9, into a 125 mm diameter rising main, which transfers the leachate and groundwater to the main sewer and ultimately to the (GIWWTP). The rising main has a discharge into the sewer at each end, one approximately 79 m south of PS1 and the other approximately 80 m south of PS8. Pump Station PS9 discharges directly to the sewer main.

The leachate interception trench is absent along the southern edge of the landfill where waste is placed against the base of the slope that rises to the east. Management of leachate in this area is currently via a shallow surface drain which conveys the leachate (and any shallow groundwater seepage) to PS1.

The leachate interception trench and collection system create a barrier to prevent the migration of groundwater and leachate offsite. The HDPE liner helps reduce water inflow from the Kaikorai Stream, although some inflows are still possible. Continuous dewatering of the trench is necessary to maintain this barrier. The pump stations are set to keep water levels low, creating a hydraulic gradient that directs the flow towards the trench. The leachate pumps are automated and start when the groundwater/leachate level reaches a specific elevation, with several safety and equipment and alarms operating.

Consent conditions require regular monitoring of groundwater levels adjacent to the trench to confirm the hydraulic gradient. A network of groundwater/leachate monitoring wells was installed in a series of lines crossing perpendicular to the interception trench to monitor groundwater/leachate levels across the trench to confirm hydraulic containment of the shallow groundwater. This network consists of both shallow and deep monitoring wells and each line is located approximately halfway between each pump station. A schematic cross section plan of the landfill and the location of the leachate collection drain and monitoring well arrangement is presented in Figure 2.1.

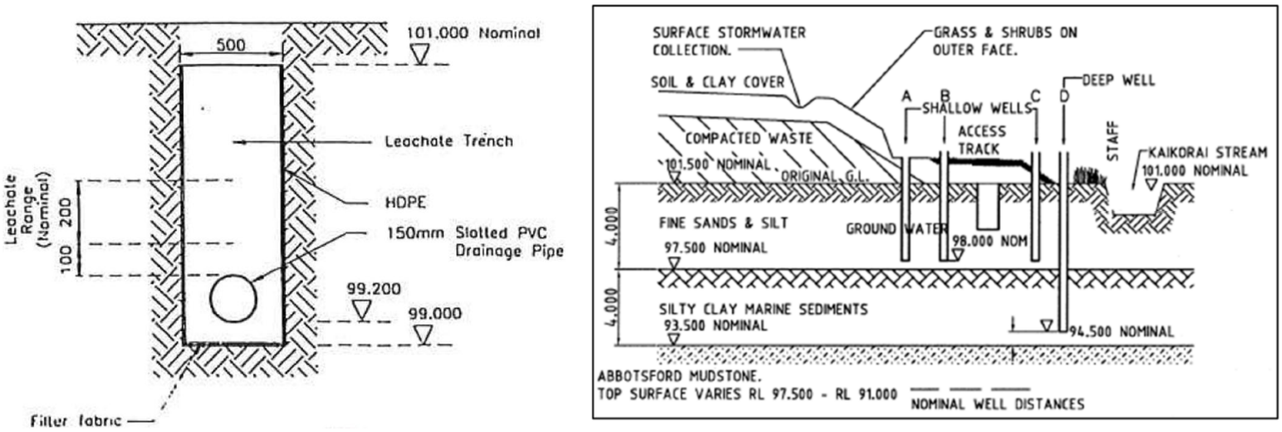

Figure 2.1 ***Leachate drain schematic (left) and typical cross section of the leachate trench and monitoring well network (right) – extracted from City Consultant (1997)***

Additional leachate drains have been installed over intermediate cover soils in the southern portion of the landfill and in the northern sector of waste placed in 2019-2022. These drains direct leachate to the perimeter leachate collection trench.

A sewer line which collects leachate runs along the southern boundary of the landfilled area and is directly connected to the GIWWTP.

2.7.2 Groundwater monitoring network

The existing groundwater monitoring network comprises 28 wells. Regular water level and quality assessments are conducted in compliance with current consents as outlined by GHD (2023a). The groundwater monitoring well network can be summarized as follows:

- Eight lines of wells are installed along the landfill perimeter, transecting the leachate collection trench (refer to Figure 3 in Appendix A).
- Each well line, positioned between two pump stations, features three shallow wells labelled MWA, MWB, and MWC, except for Line 7 where MWC is absent. Most wells are within the upper KEM geological unit. Figure 2.2 shows the layout of the well lines.
- Within each well line, MWA and MWB are on the landfill side of the leachate trench, approximately 20 m and 5 m from the trench, respectively. In contrast, MWC wells are located between the trench and the Kaikorai Stream/eastern sedimentation pond/eastern boundary.
- On three well lines (Well Line 2, 4, and 7), deep monitoring wells (MWD) are installed between the trench and the stream and are screened in the lower KEM geological unit.
- An extra bore, MW0C, is installed at the end of the leachate trench within Well Line 0, south of PS1.
- Another monitoring well, MW9D, once situated in the landfill's centre, was lost during landfilling activities in 2015.
- GHD (2023a) suggested that wells MW3C, MW4C, MW6C, MW7C, MW7D, and MW8C are likely to be installed within, or influenced by, historical waste materials outside of the leachate collection trench. Monitoring well MW4D, installed at 10.5 m bgl, is likely to be screened below the waste materials.

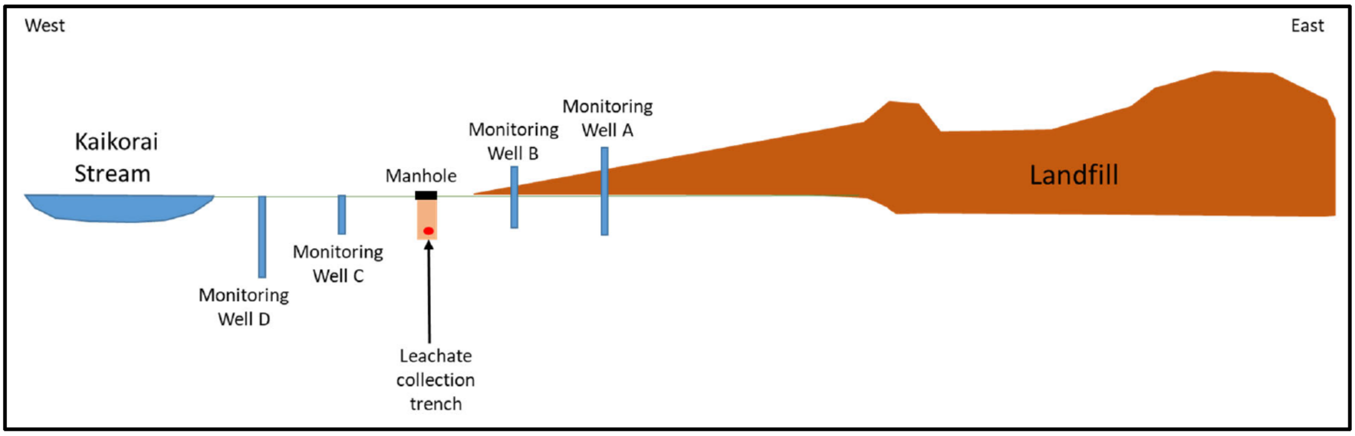

Figure 2.2 Schematic of a typical monitoring well line (transect)

2.7.3 Groundwater levels

The leachate collection trench was designed to create a hydraulic barrier by reducing groundwater levels in the trench and drawing groundwater from both sides of the trench (i.e., landfill and stream side, although the stream side inflows were designed to be retarded by the installation of a HDPE liner on the stream side of the trench). Groundwater levels are checked monthly to monitor the hydraulic gradient.

Long term (1995 to 2003 and from 2015 to present) groundwater level records have been reviewed by GHD (2023a) and indicated the following:

- Groundwater levels fluctuate within a range for each well, with no long-term trend in groundwater levels evident, except for MW4D (Figure 3 in Appendix A) discussed below.
- Seasonal variation is evident in the record for some wells (e.g., MW3C and MW6C). Groundwater levels are generally lowest in drier periods (summer-autumn), with groundwater highs occurring winter/spring and large rainfall events.
- Groundwater levels in MW4D showed an increasing trend from 1997 to 2003. Following the extension of the well casing above ground to reduce the risk of leakage of groundwater from the top of the casing (artesian conditions) groundwater levels stabilised.

Leachate levels were measured in the landfill by dipping existing gas wells and groundwater monitoring wells within the landfill footprint in August 2022 by a site contractor. Results showed that leachate elevations varied from 21.8 m amsl in the centre of the landfill to 6.3 m amsl in the northern portion of the site, noting that the landfill extends up to a height of 25 m amsl.

2.7.4 Landfill impact on groundwater quality

Groundwater quality is monitored on a quarterly basis in accordance with the consenting conditions, and results are reported in annual monitoring reports. The sampling occurs during low tide and not within 72 hours of any measurable rainfall. The water samples are analysed for pH, conductivity, dissolved oxygen, dissolved aluminium, cadmium, chromium, copper, lead, and nickel, nutrients (ammoniacal-nitrogen, nitrate-nitrogen), cyanide, total organic carbon, and chloride. In addition, stable isotope analyses including $\delta^{13}C$ (ratio of carbon-13 and carbon-12 in dissolved organic carbon), $\delta^{15}N$ (nitrogen-15/nitrogen-14 in nitrate and ammonia), $\delta^{18}O$ (oxygen-18/oxygen-16 in water), and δD (deuterium/protium in water), a measure of the ratio of stable isotopes of carbon, nitrogen, oxygen, and hydrogen, have been performed to investigate the origin and source of dissolved inorganic carbon, ammonia, and water in the landfill leachate and groundwater.

GHD (2023a) provides a summary of groundwater quality conditions along the landfill perimeter; results can be summarised as follows:

- The landfill waste mass influences the groundwater quality. In areas where waste is present outside of the leachate trench, the groundwater quality is characterised by a mixed major ion signature likely associated with elevated contaminant concentrations.

- The major ion chemistry clearly shows mixing of groundwater and landfill leachate in water pumped from the leachate trench, indicating the leachate collection system functions.
- Ammoniacal nitrogen and iron concentrations are elevated in many of the groundwater samples, including monitoring wells unlikely to be influenced by waste. The elevated ammoniacal-N and iron levels in background groundwater may reflect the influence of the organic material in the estuarine sediments and reducing conditions in the aquifer.

Electrical conductivity reflects the influence of leachate and/or brackish water in the Kaikorai estuary.

2.8 Climate

The impact of rainfall on the local catchment inflows and subsequent water levels in the estuary are an important factor that could affect discharges from the site into the receiving environment of Kaikorai Stream. The average temperatures in the area range from 14°C in summer (January) to 5°C in winter (July), with frequent frost and occasional snow reported. The average yearly precipitation is 806 mm per year. Most precipitation falls between October and December with a monthly average of 102 mm for December, whilst July is the driest month on 43 mm (GHD, 2023a).

2.9 Human use of the area

The land uses surrounding the site include the following:

- **North**: State Highway 1 and Abbotts Creek, followed by sports fields.
- **East**: A residential area and Brighton Road industrial area, including a waste management facility (Enviro NZ), and a concrete manufacturing facility.
- **South**: Agricultural/rural land and the GIWWTP. The Dunedin City Council recently re-zoned a block of land located between Weir Street and Brighton Road, south of Clariton Avenue, to a General Residential Zone enabling low-medium density residential living.
- **West**: Kaikorai Stream and Estuary, and the former Maxwell landfill located on the opposite side of the estuary. Leachate control at Maxwells landfill is via an interception drainage system where groundwater levels are depressed via pumping. The pumped leachate and groundwater are discharged into the sewer.

Kaikorai Estuary is an extensively modified, tidal lagoon. The catchment is dominated by pasture (48%) and urban areas (21%) (LAWA, 2023). Past and current land use practices, which include heavy industrial activities, landfilling, quarrying, and agricultural activities, have impacted surface water quality upstream and downstream of the landfill in the Kaikorai Stream and Abbotts Creek (GHD, 2023b). According to Beca (1992) These activities include the following:

- The overall landforms in the estuary have been significantly altered by past human activities, including the construction of drainage systems to enhance land reclamation for farming, the development of two landfills, with various industries established including a brick works and mining activities (for coal, sand, and gold).
- The catchment became the preferred location of early industrial activities during the last century, with waste disposal occurring directly to the waterways of the Kaikorai Stream. These industries included freezing works, cement factory, mills, used oil refinery and tanneries.
- Direct discharges in waterways occurred until the 1970s. The Green Island sewer pipeline was constructed in the early 1930s, but it was not until the middle of last century that some of the major polluters connected to the sewer.
- Industrial land use within the Kaikorai estuary catchment, upstream of the site, continues to present day. The Fairfield Quarry is active within the Abbots Creek catchment, whilst a range of industrial activities occur along the Kaikorai Stream including Burnside Landfill which operates as a Class 2 landfill.

The Kakanui Beach is listed as a coastal recreation area in the Otago Regional Plan (Otago Regional Council, 2004), with the estuary being potentially suitable for activities such as swimming, walking and fishing. Due to the disturbed nature of the catchment, there are however some limitations to the suitability of this waterway for these activities; with high bacteria counts frequently measured after heavy rainfall, when river flows are high, and/or when the estuary mouth closes[2].

The Landfill site is not classified as an area of cultural significance. The margins of the Kaikorai Stream and estuary bordering the landfill to the north and west however are identified in the *Proposed Second-Generation Dunedin City District Plan (2GP)* as Wāhi Tupuna, which are landscapes and places that embody the relationship of mana whenua and their culture and traditions with their ancestral lands, water, sites, wāhi tapu (sacred places), and other taoka (treasure). This area hosted coastal settlements and provided eels, waterfowl, birds, and kai moana. The district plan also identifies the following values to be protected: "*Historical Mahika kai. Of less value now due to pollution* and *Archaeological remains*".

2.10 Ecological values of the area

The margins of the Kaikorai Stream and Kaikorai Estuary bordering the landfill to the north and west are identified as an Area of Significant Biodiversity Value in the *Proposed Second-Generation Dunedin City District Plan (2GP)*. The Kaikorai Estuary is also recognised as a Regionally Significant Wetland in the *Otago Regional Plan*. It potentially provides saltmarsh habitats for various species.

Despite this, the Kaikorai Estuary and the Kaikorai Stream in the vicinity of the site are considered moderately disturbed/degraded systems based on the following:

– Salt (2020) completed an ecological monitoring program of the Kaikorai Estuary for the ORC. This report concludes that the Kaikorai Estuary is moderately degraded due to:
  - Cumulative sedimentation rates, in the range of 7-8 mm/year, which exceeded the national guideline value of 2 mm/year.
  - Poor to fair sediment quality upstream of the Brighton Road Bridge, where muddy sediments reported elevated organic content and nutrient concentrations. Heavy metals (including zinc) exceeded the ANZG (2018) sediment guidelines. Downstream of Brighton Road Bridge, the sediment condition was defined as good or very good thanks to a sandy and well flushed environment.
  - Limited macrofauna, including few surface-dwelling organisms and seaweeds observed during monitoring works.
– LAWA (2023) describes the Kaikorai Estuary as an extensively modified, moderate-sized lagoon that is characterised by high level of eutrophication, poor sediment oxygenation, and high phytoplankton concentrations. The upper portions and central basin of the estuary, which are relatively sheltered, exhibit the most degraded conditions. In contrast, the report confirms that lower reaches of the estuary experience flushing due to tidal influences and the actions of waves during storms.
– Otago Reginal Council (2017) reviewed available water quality data and trends across the region. The Kaikorai Stream and Estuary are described as among the sites with the worst overall water quality in the region, based largely on Macroinvertebrate Community Index (MCI) scores, nutrient (particularly nitrate, phosphorus, and ammonia) concentrations, biological testing (*E. coli*), and high algal cover (99% stream bed cover for the 2017 sampling).

2.11 Ecological Impact Assessment

DCC engaged Boffa Miskell Ltd (Boffa Miskell, 2023) to undertake an ecological impact assessment for the site. The study aimed to evaluate the impact of landfill operations on ecological values, including vegetation, avifauna, and freshwater and estuarine ecosystems. Key findings from the assessment are as follows:

– Terrestrial habitat: The terrestrial habitat within the landfill site consisted of planted indigenous and exotic vegetation with negligible ecological value.

[2] https://www.theswimguide.org/beach/6216

- Avifauna: Avifauna surveys identified 32 key species at the site, indicating a range of ecological values from low to very high.
- Freshwater and estuarine ecosystems: While Kaikorai Stream and Abbotts Creek demonstrated moderate ecological value, Kaikorai Lagoon was characterised by high ecological value. The macroinvertebrate communities within the waterways were in fair to poor conditions. Six native fish species were identified in these water bodies, including black flounder, common bully, inanga, longfin eel, shortfin eels, and upland bully.

An evaluation of potential ecological receptors was conducted to assess the impacts of current and proposed (e.g., continued operation and closure) landfill activities on the ecological values within the site and the receiving environment. The level of effect was categorised from very high to very low, or positive effects. Results indicated very low ecological effects for most factors (various terrestrial environments, aquatic ecosystems, and avifauna), except for:

- Extension of the landfill operations[3]: Positive short-term impacts on food supply for black-backed gulls.
- Future landfill closure: Positive impacts on food supply and foraging ability for avifauna using the landfill and Kaikorai Lagoon.

Overall, Boffa Miskell (2023) concluded that the identified effects do not warrant mitigation measures.

[3] Including the extension of the leachate collection trench along the southern side of the landfill and installation of additional internal leachate drains.

2.12 Preliminary conceptual site model

Potential risks to human health or the environment cannot occur in association with a specific contamination source unless there is a complete exposure pathway connecting the source of contamination and the receptors. For a Source Pathway Receptor (SPR) linkage to be complete the following components must exist for a given chemical:

- A source of contamination capable of providing chemical concentrations sufficiently high that they may present a risk to human health or the environment (in this case the landfill).
- A mechanism for release of contaminants from identified sources (i.e., vertical leaching to the aquifer and lateral migration and surface water runoff).
- A contaminant migration pathway (e.g., groundwater, stormwater).
- Potential receptors of contamination (e.g., ecosystems and human use of the Kaikorai Stream and Estuary); and
- A mechanism for chemical intake by the receptors at the point of exposure (i.e., ingestion, dermal contact, inhalation, or a combination). This includes the presence of the contaminant in a bioavailable form.

If any of these elements are absent or sufficiently limited, the SPR linkage is incomplete and the possibility of harm to the receptor from a specific contamination source can be deemed unlikely. Conversely, a complete SPR linkage does not by default indicate a receptor will be at risk. The HHERA process is used to evaluate the extent of the potential risks.

This section provides an overview of the sources, pathways, and receptors, relating to site discharges, that have relevance to this HHERA.

2.12.1 Sources

The primary source of contamination associated with the site is the landfill waste and associated leachate and stormwater runoff.

Potential sources of contamination that are external to the site, but which may also influence water quality within the Kaikorai Stream and Estuary include the current and historical urban and industrial areas upstream and surrounding the site and the closed landfill to the west of the Kaikorai Stream.

2.12.2 Migration pathways and mechanisms

The primary mechanism via which chemicals may migrate from the site into the Kaikorai Stream is the direct discharge of surface water during pond and drain overflow events. The interception trench (refer to Section 2.7) intercepts the migration of leachate from the site into the Kaikorai Stream via groundwater movement.

2.12.3 Receptors and exposure pathways

The receptors that may be exposed to chemicals within the Kaikorai Stream surface waters include:

- Human users of the waterway who may come into direct contact with impacted surface waters during recreational activities and/ or may consume aquatic biota.
- Aquatic organisms inhabiting the estuary and higher trophic level aquatic, semi-aquatic and terrestrial species that feed on these organisms.

3. Source-pathway-receptor evaluation

The tier 1 data screening process involves the comparison of the concentrations of chemical of potential concern measured at the site with conservative screening levels provided by National or International Guidelines. The aim of this process is to focus the HHERA on the chemicals and exposure pathways that have the potential to be associated with a risk to human health or the environment.

This section defines the sources, pathways, and receptors that require detailed assessment within this HHERA by providing a Tier 1 screening assessment of the available dataset. Given the large number of contaminants of potential concern associated with landfills and the number of chemicals monitored in previous investigations, this section examines the SPR linkages connecting the chemicals discharged from the site via groundwater/leachate and surface water, and the chemicals identified in the receiving environment of the Kaikorai Stream and Estuary.

3.1 Tier 1 screening criteria

The Tier 1 assessment criteria used in the process were selected with reference to the environmental values and human use patterns of the site and the Kaikorai Stream and Estuary. Relevant analytical data are presented in Appendix B while sampling locations are shown in Figure 5 Appendix A.

The guideline values adopted in this assessment have been sourced from the following documents:

– Australian and New Zealand Governments (ANZG, 2018) *Australia and New Zealand Fresh Water and Marine Water Quality Guidelines*.
– Australian and New Zealand Environment and Conservation Council (ANZECC) & Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) (2000) *Guidelines for fresh and marine water quality*.
– Heads of EPAs Australia and New Zealand (HEPA, 2020) *PFAS National Environmental Management Plan*, over 2.0 (the “PFAS NEMP”).
– Taumata Arowai, *Water Services (Drinking Water Standards for New Zealand) Regulations 2022* (DWSNZ, 2022).
– National Health and Medical Research Council (NHMRC, 2008) *Guidelines for managing risks in recreational waters.*
– Canadian Council of Ministers of the Environment (CCME, 2022a) *Canadian Environmental Quality Guidelines* (CEQGs).
– Van Dam *et al.* (2018) *Water quality guideline values for aluminium, gallium and molybdenum in marine environments* (criteria for protection of 95% of marine aquatic species).
– British Colombia Ministry of Environment and Climate Change Strategy (2021) *British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture.*

In accordance with Contaminated Land Management Guideline No.2, *Hierarchy and Application in New Zealand of Environmental Guideline Values* (MfE, 2011d), a preference has been given to assessment criteria endorsed by New Zealand regulators where available. Criteria endorsed by Australian, United States and Canadian regulators or sourced from the published scientific literature have also been adopted when New Zealand criteria were not available.

3.1.1 Ecological screening criteria for surface water and groundwater

The assessment criteria adopted in this report for water samples have primarily been sourced from ANZG (2018). The values were generally derived using a sensitivity distribution (SSD) approach, in which the existing scientific data was compiled, and a cumulative distribution function was plotted against concentrations at which effects on laboratory species are observed. Ecological criteria have been compared against filtered water sample results (dissolved phase concentrations) where applicable (e.g., nutrients and metals) to account for bioavailability, in accordance with the approach recommended by ANZG (2018). However, not all samples have been filtered; in those cases, criteria were applied to unfiltered (total) results.

To facilitate the completion of contamination assessment in an aquatic environment it is necessary to define the level of protection afforded to a water body, which in turn informs the acceptable water quality for a waterway. The level of protection afforded a waterway typically considers the ecosystem condition of the waterway and community values and associated management goals.

ANZG (2018) recognises three categories of current or desired ecosystem condition, including:

– High conservation or ecological value systems (99% species protection) – effectively unmodified or other highly valued ecosystems, typically occurring in national parks and conservation reserves, or in remote and inaccessible locations.
– Slightly to moderately disturbed systems (95% species protection) – ecosystems in which aquatic biological diversity may have been adversely affected to a relatively small but measurable degree by human activity. The biological communities remain in a healthy condition and ecosystem integrity is largely retained.
– Highly disturbed systems (80-90% species protection) – Measurably degraded ecosystems of lower ecological value, such as shipping ports and sections of harbours serving coastal cities.

On this basis, the 95% species protection level has been adopted for the purpose of this assessment. Further, in accordance with ANZG (2018), the 99% species protection levels have been adopted for chemicals that have the potential to bioaccumulate in aquatic organisms and for chemicals where the 95% species protection level is not adequately protective, as defined in more detail in the section below.

Additional approaches used when applying the surface water assessment criteria are as follows:

– Where available, screening criteria specific to the marine and estuarine environment have been adopted. If not available, freshwater criteria have been applied instead.
– For compounds with no 95% species protection criteria available, the ANZG (2018) criteria with unknown level of species protection have been applied instead.
– For compounds not specifically addressed by ANZG (2018), criteria have been sourced from the scientific literature or North American regulators.

Identification of potentially bioaccumulative substances

If a chemical has the potential to be bioaccumulative, ANZG (2018) suggests that the next most protective guideline value than the one that would normally be applied should be used (i.e., the 99% species protection guideline for effectively unmodified or other highly valued ecosystems instead of the 95% species protection guideline value), unless:

– The guideline value has a high or very high level of reliability AND has been derived based on a significant proportion of (a) long-term mesocosm/field effects data, or (b) multigenerational laboratory toxicity data for a range of taxa (e.g., > 30% of the dataset and for > 3 taxa groups); or
– A rigorous weight-of-evidence process has demonstrated that aquatic and terrestrial species are not experiencing harmful direct and indirect effects from the toxicant due to bioaccumulation, and the community values are being protected; or
– A lower protection level interim target is agreed upon by stakeholders for a highly disturbed site where the higher protective level could not be attained in a reasonable timeframe.

ANZG (2018) and US EPA (2000) specifically identified the following as potentially bioaccumulative chemicals requiring consideration of the potential for secondary poisoning:

– Cadmium and mercury.
– Polychlorinated biphenyls (PCBs); and
– Polycyclic aromatic hydrocarbons (PAHs), including anthracene, indeno(g,h,i)pyrene, phenanthrene, fluoranthene, fluorene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, acenaphthylene, benzo(a)anthracene and benzo(a)pyrene.

On this basis, the 99% species protection water quality has been adopted for these chemicals water samples, where available.

Considerations for per- and polyfluoroalkyl substances (PFAS).

PFAS are referred to as bioaccumulative chemicals. As such, the 99% species protection level is generally recommended for Tier 1 screenings. However, PFAS are ubiquitous and in urban/industrial areas are present at ambient levels. The available dataset (Table 1 in Appendix B) show that PFAS concentrations upstream of the landfill site exceed the 99% species protection level recommended in the PFAS NEMP (HEPA, 2020). For instance, concentrations of PFOS up to 0.005 µg/L have been detected in samples collected from upstream locations GI1 and GI2. This concentration is circa one order of magnitude greater than the 99% species protection level of 0.00023 µg/L.

Given the presence of ambient concentrations of PFAS within the Kaikorai Stream catchment, the PFAS dataset has primarily been assessed with reference to the 95% species protection levels (i.e., 0.13 µg/L for PFOS and 19 µg/L for PFOA). Consideration has also been given in the screening process to both the 99% species protection level and the comparison of the PFAS concentrations measured downstream of the site, relative to those measured upstream.

3.1.2 Human health assessment criteria

The primary human receptors for discharges from the site into the Kaikorai Stream are recreational users of the area, with water being used for activities such as swimming, fishing and boating (refer to Section 2.9).

Assessment criteria adopted for surface water

NHMRC (2008) advocates for the estimation of recreational water assessment criteria by multiplying published drinking water guidelines by a factor of 20. This factor reflects the lower incidental surface water ingestion rate that occurs during activities such as swimming (typically less than 100 mL), relative to drinking water consumption rates (typically 2 L/day for adults). This approach has been adopted in this assessment to derive recreational water quality guidelines.

The drinking water guidelines used as the basis of these calculations have been sourced from DWSNZ (2022) where available. The drinking water guidelines published by NHMRC/NRMMC (2011) and US EPA (2022) have also been referenced where required. Health-based criteria were compared against results for un-filtered samples where possible. When unfiltered results were not available, the criteria were compared against filtered results.

The recreational water quality guidelines for PFOS+PFHxS and PFOA in the PFAS NEMP (HEPA, 2020) have also been adopted directly in this assessment, although it is noted that PFAS can be bioaccumulative and Tier 1 screening criteria specific to the consumption of aquatic biota are not available for these chemicals.

3.1.3 Data considered in the HHERA

Condition 11 of the discharge permit consent no. 3839A_V1 requires that DCC provide the consent authority (ORC) with an Annual Landfill Monitoring Report. The dataset collected includes the monitoring of leachate, groundwater and surface water.

This HHERA is based on the data gathered as part of the available Annual Landfill Monitoring Reports (ranging from 2017 to 2023) as reported by GHD (2019; 2021; 2021; GHD, 2022). At the time of writing the data collected after October 2022 have not been included in a published report but have been included in this HHERA for completeness.

Chemicals assessed in previous monitoring studies

The primary investigations upon which this HHERA is based includes a broad suite of chemicals as required by the Resource consent 3839A_V1 and detailed by GHD (2022). The analytical suite prescribed by Resource consent 3839A_V1 is summarised in Table 3.1. The available dataset is provided in Appendix B.

Table 3.1 Analytical suite prescribed by Resource consent 3839A_V1

Matrix	Sampling point ID	Analytical suite	Sampling frequency
Combined leachate/groundwater discharge to sewer – prior to discharge to the GIWWTP	Pump Station PS3	Major cations and anions, cation/anion ratio, pH, conductivity, chemical oxygen demand (COD), biological oxygen demand (BOD, ammonia, nitrate alkalinity, DO, dissolved reactive phosphorus, total organic carbon (TOC), acid soluble metals (Al, As, Ba, Br, Cd, Cr, Cu, Fe, Ni, Mn and Zn), total mercury, total cyanide, sulphide, total phenols, faecal coliforms, organochlorine, pesticides, polychlorinated biphenyls (PCB), volatile fatty acids, volatile organic compounds and semi-volatile organic compounds.	Yearly, 2017-2023
		Isotope analysis for $\delta^{13}C$ (in dissolved inorganic carbon from groundwater), $\delta^{15}N$ (ammonia and nitrate), $\delta^{18}O$ (water), and δD (water).	Quarterly
Leachate collection pumps and shallow and deep groundwater/leachate wells	MW(0-8)A, MWB(0-8) MWC(0-8), manholes (MH0-MH8) and the pump stations (PS1-PS9)	pH and conductivity	Quarterly
Deep groundwater	MW2D, MW4D MW7D/ MW9D[a]	BOD, major cations and anions, cation/anion ratio, pH, conductivity, ammonia, dissolved metals (Fe, Pb, Zn), DO, and TOC.	Yearly
		Isotope analysis for $\delta^{13}C$ (in dissolved inorganic carbon from groundwater), $\delta^{15}N$ (ammonia and nitrate), $\delta^{18}O$ (water), and δD (water).	Quarterly
Kaikorai Estuary	GI1, GI2, GI3 GI5[b]	pH, conductivity, chloride, DO, ammonia, nitrate, dissolved metals (Al, Cd, Cr, Cu, Pb and Ni), total cyanide, total organic carbon and isotope analysis for $\delta^{13}C$ (in dissolved inorganic carbon), $\delta^{15}N$ (ammonia and nitrate), $\delta^{18}O$ (water), and δD (water).	Quarterly
Eastern and Western Sedimentation Ponds	E Pond W Pond	pH, electrical conductivity, ammonia, nitrate, alkalinity, chloride, potassium, total organic carbon, DO, dissolved metals (Cr, Cu, Pb, Ni and Zn).	Quarterly

Notes:

[a] In some cases MW7D was sampled in place of MW9D (MW9D was buried during landfill operations)

[b] GI1, in the Kaikorai Stream, upstream of the Green Island landfill, at the Brighton Road bridge; GI2, in Abbots Creek, a tributary of the Kaikorai stream, at State Highway 1 Bridge at Sunnyvale, 630 m north of the confluence with the Kaikorai Stream; GI3, in the Kaikorai Stream, 200 m below the Abbots Creek confluence; GI5, downstream of the landfill adjacent to the western sedimentation pond.

PFAS testing

PFAS testing was undertaken in October 2022, December 2022, January 2023, April 2023, and August 2023 at the following locations (refer to Figure 5 in Appendix A), noting that not all locations were sampled in each monitoring event:

– Kaikorai Stream at GI1, GI2, GI5, GI3, and Estuary.
– Groundwater monitoring wells MW0C, MW1C, MW2C, MW3C, MW4C, MW5C, MW6C, MW8C, GW15, GW21, and GW36.
– Deeper groundwater monitoring wells MW2D, MW4D, MW7D.
– On-site surface water at W Pond (by MW0), W Pond, SE Pond, E Pond, and NE Pond.

– Leachate Pump Station PS3.

An issue with quality of the PFAS data was identified for samples collected in October 2022. Elevated PFAS concentrations were initially reported by the laboratory (Eurofins Environment Testing Australia, also referred to as Eurofins) in samples MW4C and Western Sedimentation Pond with PFOS concentrations of 15 µg/L and 6.2 µg/L, respectively. Following further analysis of sample MW4C, concentrations were below the limit of reporting (i.e., <0.001 µg/L), suggesting the possibility for cross contamination having occurred in the laboratory (GHD, 2023a). Sample Western Sedimentation Pond could not be reanalysed due to insufficient sample volume. On this basis, the Eurofins issued a letter indicating that the October 2022 PFAS dataset should be discarded (the letter is provided in Appendix C). As such, the results of the October 2022 sampling event have been excluded from this assessment.

3.2 Data quality assessment

The current scope of the HHERA does not include a complete evaluation of data quality. This HHERA assumed that the data quality is adequate to address the objectives of the assessment. It is noted that samples have been collected following GHD's standard operating procedures, including laboratory standard QA/QC procedures.

3.3 Screening assessment approach

The site is located in an environment subject to inputs from a variety of urban and industrial sources, as discussed in Section 2.9. The surface water samples collected from the Kaikorai Stream reflect cumulative impacts associated with various natural and anthropogenic sources of chemicals and not only impacts associated with the landfill site. It is plausible that various contaminants are present in the Kaikorai Stream aquatic environment at 'ambient' concentrations and are not associated with discharges from the landfill. As such, this HHERA adopted the following approach to identify chemicals of potential concern (CoPC) for the landfill:

1. **Identify site-related contaminants** that have impacted the surface water of the Kaikorai Stream and Estuary. The aim of this initial step is to define the CoPC associated with the landfill and that may pose risks to human health and the environment downstream of the landfill. This step is reported in Section 3.4.
2. **Pond water data review** to assess potential risks associated with short-term stormwater/leachate overflow events, which may not be captured within the dataset collected from within the receiving environment. This step is provided in Section 3.5.

3.3.1 Statistical approach

Water quality measurements are typically based on samples taken from a heterogeneous environment, within which spatial and temporal variability in the chemical concentrations, ecology and abiotic conditions are expected to occur naturally. In this context the identification of chemical concentrations above ambient levels and/or tier assessment criteria in a percentage of water samples is not unexpected and may not be indicative of a likely adverse effect on the environment. Therefore, it is reasonable to adopt a statistical approach to the tier 1 screening assessment process.

To facilitate the evaluation of the dataset statistically, the dataset was first divided spatially. Sampling points located upstream of the site (GI1 and GI2) were separated from those located downstream of the landfill (GI3, GI5, and Estuary). Pond surface water and groundwater/leachate sampling points were also separated.

Given that several sampling rounds were undertaken at each location, the maximum and median concentration of the chemicals were calculated. The median concentration is considered an appropriate indicator of the central tendency of the concentration distribution (ANZG, 2018). Median concentrations were calculated when sufficient data (e.g., at least three sampling rounds) were available. Median concentrations could not be calculated for PFAS as only 2-3 sampling rounds were completed at each sampling point.

To compare results from different areas (e.g., up- or down-stream, ponds), the following statistical functions were then used to evaluate the dataset.

– The 95th percentile and maximum concentrations were calculated for the relevant chemicals and compared to the relevant criteria. At least three detections are required to calculate a meaningful 95th percentile value.

– As recommended by ANZG (2018) a requirement for additional assessment was triggered if the 95th percentile of the distribution of the dataset from an area exceeds both the ambient levels and the guideline.

The statistical assessment of the dataset was undertaken using the US EPA ProUCL statistical package, in general accordance with Singh & Maichle (2013). Detailed results can be found in Appendix D.

3.4 Kaikorai stream and estuary data review

3.4.1 Identification of chemicals of potential concern

A comparison of chemical concentrations upstream and downstream along Kaikorai Stream has been undertaken to identify site-related contaminants. Detecting significant concentration increases downstream could indicate the site as a source. This would trigger further assessment of human health and ecological risks.

Table 1 in Appendix B presents the surface water dataset comprising samples collected on Kaikorai Stream and Abbotts Creek. Table 2 in Appendix B provides summary statistics of the surface water dataset, comparing upstream (GI1 and GI2, refer to Figure 5 in Appendix A) and downstream (GI3, GI5, and Estuary) locations. The table presents maximum and median concentrations at each sampling point and the percentage difference in concentrations downstream compared to upstream of the site.

A review of Table 1 (Appendix B) shows that the following chemicals/parameters were detected downstream at greater concentration than upstream:

– **Electrical conductivity (EC)**: a gradual increase was identified moving downstream, with median concentrations immediately downstream of the site (GI5, 1275 µS/cm) approximately one order of magnitude greater than in upstream locations (211-359 µS/cm). At the most downstream location identified as ‘Estuary’, the EC was 131,100 µS/cm, three orders of magnitude higher than upstream of the site. These elevated values are likely due to a greater tidal influence at downstream locations. On this basis, EC is not further considered in this HHERA.
– **Chloride**: Chloride concentrations increased by 2-3 orders of magnitude between the up- and down-stream of the site. The maximum concentration detected was 16,467 mg/L which is just below the typical seawater concentration of 19,000 mg/L (LAWA[4]) and is indicative of an estuarine environment. As such, chloride is excluded from further consideration in the HHERA.
– **Dissolved oxygen (DO)**: Dissolved oxygen was marginally higher downstream compared to upstream indicating good water oxygenation conditions immediately downstream of the site. An increase in the DO of surface water is a positive rather than a negative water quality indicator and DO is expected to vary based on the conditions in the catchment at the time of sampling. DO has therefore not been further discussed in this HHERA.
– **Total carbon**: a general increase was identified in downgradient locations, with maximum and median concentrations increasing by up to 88% and 16% relative to upstream, respectively.
– **Ammonia**: Maximum concentrations increased by up to one order of magnitude from upstream to immediately downstream of the site, reaching a maximum of 2.44 mg/L at GI5. Median concentrations at locations GI3 and GI5 were greater than upstream of the site. However, ammonia concentrations at the estuary were lower than upstream of the site. Given the increase in ammonia concentrations in the vicinity of the site, further assessment is warranted.
– **Nitrate**: A marginal increase of the maximum concentrations was recorded at GI3. However, median concentrations downstream of the site were lower than upstream indicating the site is not the major contributor of nitrate in the Kaikorai Stream. Based on Otago Regional Council (2017), nitrate contamination is well documented along the Kaikorai Stream. As such, nitrate is further considered in the HHERA.
– **Total chromium (filtered)**: while the maximum concentrations increased immediately downstream of landfill up to one order of magnitude, median concentration decreased when compared to upstream monitoring locations. At the estuary, both maximum and median concentrations of total chromium were one order of magnitude higher than upstream of the site. Given the higher total chromium concentrations downstream of the site, further assessment is warranted.

[4] LAWA weblink: **https://www.lawa.org.nz/learn/factsheets/groundwater/chloride/**

- **Lead (filtered)**: maximum and median concentrations increased at monitoring location GI5 compared to upstream. Median concentrations at the estuary also increased. Given the increase in dissolved lead concentrations downstream of the site, further assessment is warranted.
- **Zinc (filtered)**: Only maximum concentrations measured at sampling location GI5 demonstrated an increase relative to upstream locations. Median concentrations were all below the upstream levels. Given the higher zinc concentrations in the vicinity of the landfill, further assessment is warranted.
- **PFAS**: various PFAS have been detected both upstream and downstream of the landfill at concentrations of the same order of magnitude. It is likely that external sources contribute to the presence of PFAS in Kaikorai Stream and Estuary, as these chemicals are present in industrial and urban areas (HEPA, 2020). However, a marginal increase in PFAS concentration is apparent downstream of the site particularly for terminal PFAS including perfluorohexanoic acid (PFHxA), perfluorooctanoic acid (PFOA), and perfluorooctane sulfonic acid (PFOS). As such, further evaluation of these PFAS detections is warranted within this HHERA.

In summary, the assessment of the surface water dataset and of the ambient chemical concentrations identified the following CoPC potentially associated with the landfill:

- Nutrients including ammonia and nitrate.
- Chromium expressed as total chromium.
- Lead.
- Zinc.
- PFAS.

These CoPC are screened against the relevant Tier 1 criteria in the following section.

3.4.2 Tier 1 screening assessment

The previous section identified nutrients (ammonia, nitrite, and nitrate), chromium, lead, zinc, and PFAS as the key CoPC associated with discharges from the landfill. This section provides a comparison of CoPC concentrations in surface water of Kaikorai Stream against Tier 1 health-based and ecological screening criteria.

The review of CoPC concentrations in surface water samples (location GI1, GI2, GI3, GI5, and Estuary) against the adopted screening level guidelines is presented in Table 3.2.

Table 3.2 Summary and review of COPC concentrations reported in surface water (Kaikorai Stream) up- and downstream of the landfill site

COPC	Location relative to site	No. observations	Max conc.	95th percentile	Health-based criteria - recreational	Ecological criteria
Ammonia (mg/L)	Upstream	48	0.4	0.2	Not applicable – no health concern [2]	0.91[a]
	Downstream	55	2.4	0.4		
Nitrate (mg/L)[1]	Upstream	18	2.8	2.6	**50[d]**	2.4[b]
	Downstream	24	3.2	2.7		
Chromium (total) (mg/L)	Upstream	48	0.0008	0.0008	**1[e]**	0.0044[a]
	Downstream	56	0.002	0.002		
Lead (mg/L)	Upstream	48	0.0006	0.0005	**0.2[e]**	0.0044 [a]
	Downstream	56	0.0008	0.0009		
Zinc (mg/L)	Upstream	14	0.08	0.07	Not applicable – no health concern [2]	0.008 [a]
	Downstream	21	0.15	0.03		
PFOA (µg/L)	Upstream	5	0.001	N/A	**10** [c]	220[c]
	Downstream	7	0.001	0.001		
PFHxS (µg/L)	Upstream	5	N/A	N/A	**2** [c]	Not available
	Downstream	7	N/A	N/A		
PFOS (µg/L)	Upstream	5	*0.001*	N/A	**2** [c]	0.13[c] *0.00023*[c]
	Downstream	7	*0.005*	*0.004*		
PFHxS +PFOS (µg/L)	Upstream	5	0.001	0.001	**2** [c]	Not available
	Downstream	5	0.005	0.004		

Notes:

Upstream locations are GI1 and GI2. Downstream locations are GI3, GI5, and Estuary.

[a] ANZG (2018) criterion for the protection of 95th percentile of species.

[b] NIWA (2013) Updating nitrate toxicity effects on freshwater aquatic species

[c] PFAS NEMP (HEPA, 2020) – criteria for the protection of 95% and 99% of species or human health recreational use.

[d] NHMRC (2008).

[e] MoH (2022) – drinking water criterion adjusted by a factor of 20 to obtain a recreational value.

[1] Nitrite is unstable and is easily oxidized to nitrate. Hence, nitrate is the compound predominantly found in surface waters.

[2] Based on MoH (2022).

N/A = Not Applicable. A 95th percentile could not be calculated due to insufficient data or detections.

Bold and underlined values indicate concentrations exceeding the health-based screening criteria.

Shaded blue values indicate concentrations exceeding the ecological screening criteria

Italics value indicate PFAS concentrations exceeding the ecological screening criteria for the protection of 99% of species.

A review of Table 3.2 indicates the following:

– The concentrations of all CoPC were below the health-based criteria. Hence, concentrations of the identified CoPC pose a low risk to the health of recreational users of the downstream aquatic environment and generally do not require further evaluation from a human health risk perspective.

– PFAS is bioaccumulative and the human health Tier 1 screening criteria do not consider the exposure to PFAS by human consumption of contaminated aquatic biota (e.g., fish and crustaceans) caught from the stream. Further evaluation of this scenario within the HHERA is therefore warranted.

– PFOS+PFHxS were identified both upstream and downstream of the site at concentrations below the 95% species protection value but more that an order of magnitude higher than the 99% species protection value. On this basis, further assessment is warranted to evaluate health and ecological risks associated with the presence of PFAS in the Kaikorai catchment.

- The maximum concentration of ammonia downstream of the site exceeded the ecological criterion. The dataset shows that a single sample, collected from location GI5 on 14 July 2017, exceeded the ecological screening criterion. All remaining (102) surface water samples collected up- and down-stream of the site reported ammonia concentrations below the ecological screening level. On this basis, ammonia has not been considered in more detail in this HHERA.
- Concentrations of nitrate above the ecological screening levels were limited to a single sampling event undertaken in July 2022. The concentrations measured upstream of the site (2.6 mg/L at GI1 and 2.8 mg/L at GI2) were similar to those measured downstream (2.8 mg/L at GI3, 3.2 mg/L at GI5 and 2.2 mg/L in the Estuary) and hence clear link between discharges from the site and increased levels of nitrate in surface water is not apparent in the dataset. On this basis, nitrate has not been assessed in more detail in this HHERA, but it is noted that periodically elevated concentrations of nitrate in the Kaikorai catchment have the potential to adversely affect the aquatic environment, both via direct toxicity and indirect mechanisms (e.g., eutrophication and oxygen depletion).
- The maximum and 95^{th} percentile zinc concentrations measured both up- and down-stream of the site exceeded the ecological screening criterion, by more than an order of magnitude in some samples. On this basis, further assessment is warranted to evaluate health and ecological risks associated with the presence of zinc in the Kaikorai catchment.
- Concentrations of chromium and lead were below the ecological screening levels both upstream and downstream of the site. Hence, their presence in surface water poses a low risk to the aquatic environment and further evaluation has not been undertaken in this HHERA.
- The historical monitoring dataset (GHD, 2019; 2021; 2021; 2022) identified a number of chemicals present in the surface water samples collected upstream of landfill, at concentrations above the ANZG (2018). These impacts likely reflect the urban nature of the catchment and include:
  - Total cyanide (maximum upstream concentration of 0.08 mg/L, criterion 0.004 mg/L.
  - Aluminium (maximum concentration of 0.53 mg/L, criterion 0.055 mg/L).
  - Copper (maximum concentration of 0.004 mg/L, criterion 0.0013 mg/L).
  - Nickel (maximum concentration of 0.02 mg/L, criterion 0.007 mg/L).

In summary, based on the Tier 1 screening assessment of the surface water dataset collected from within the Kaikorai stream and estuary, zinc and PFAS are the only chemicals for which a more detailed assessment has been undertaken. This assessment is provided in Section 3.5.1.

3.5 Pond water data review

The management of surface water at the site is discussed in Section 2.6.2. The following on-site ponds discharge into Kaikorai Stream (refer to Figure 2 in Appendix A):

- **Northern Leachate Pond** (sample ID: N Pond): This pond collects water that may have been in contact with waste (leachate). Normally, leachate is directed to a leachate drain/channel connected to a leachate pump station, which then sends it to the sewer and the GIWWTP. However, during extended heavy rainfall, the pond can overflow to the perimeter swales and subsequently flow to the Kaikorai Stream.
- **Northeastern Pond** (sample ID: NE Pond): This pond collects stormwater from the Eastern Sedimentation Pond and the Southeastern Pond, discharging directly into the Kaikorai Stream.
- **Eastern Sedimentation Pond**: This pond does not discharge directly to Kaikorai Stream but is directly connected to the Northeastern Pond.
- **Western Pond** (sample ID: W Pond): This pond historically discharged to Kaikorai Stream.
- **Southwestern Pond** (sample ID: W Pond by MW0): This pond contains largely rainwater and is tidally influenced and connected to Kaikorai Stream. GHD (2023b) reports that this pond is located outside the landfill designation and does not have any direct connection to water management catchments or leachate collection systems.

The sampling program associated with Condition 11 of the discharge permit consent no. 3839A_V1 takes place during periods of low tide and more than 72 hours following significant rainfall. Hence it is likely that the surface water samples collected from Kaikorai Stream (sampling IDs GI1, GI2, GI3, GI5, and Estuary) were collected when the on-site ponds were not actively releasing water into the stream and may not capture situations where pulses of surface water from the onsite ponds flow into the Kaikorai Stream. Hence, a tier 1 screening assessment of the pond water dataset has been undertaken to evaluate whether this is a significant data gap.

Tables 3 and 3b in Appendix B present the on-site pond water dataset. Table 4 in Appendix B provides summary statistics of analytical results for each pond and compares them against surface water results collected upstream of the site (GI1 and GI2, refer to Figure 5 in Appendix A). Table 4 in Appendix B presents maximum and median concentrations in water detected at each pond and the percentage difference in concentrations compared to stream water collected upstream of the site (sampling points GI1 and GI2). The median is considered an appropriate statistic function to describe the central tendency of the dataset in agreement with ANZG (2018).

A review of Table 4 (Appendix B) shows that the following chemicals/parameters were detected in ponds at greater concentration than in stream water upstream of the site:

– **Electrical conductivity (EC)**: Water samples collected from all on-site ponds had EC values up to circa three orders of magnitude higher than in the receiving environment. This is likely due to the elevated concentration of suspended sediment and chemicals in solution.
– **Total carbon/organic carbon**: This parameter was detected at concentrations up to approximately one order of magnitude above the ambient levels. It is plausible that these elevated levels are due to the stagnant nature of the ponds which promote the build-up of organic matter.
– **Total cyanide:** The median concentration detected in the Northeastern Pond (0.013 mg/L) was marginally above the ambient levels (0.012 mg/L). However, the maximum ambient concentrations were higher than those measured in on-site ponds. On this basis, total cyanide is not further considered in this HHERA.
– **Chloride**: It was detected in sampling points W Pond, W Pond by MW0, and NE Pond at concentrations up to two orders of magnitude above the ambient levels. Median concentrations were lower than the typical seawater concentration of 19,000 mg/L. The maximum concentration on record, 4300 mg/L at W Pond by MW0, was above this criterion; notably this pond is not currently connected to the site. It is possible that elevated chloride levels in this pond are due to evaporation processes. Given the receiving environment is estuarine, these concentrations are unlikely to pose risks to the Kaikorai Stream ecosystem. On this basis, chloride is not further considered in this HHERA.
– **Ammonia**: On-site ponds had concentrations generally one to two orders of magnitude higher than ambient levels. The highest concentration (221 mg/L) was detected in the Northeastern Pond. Hence, it is possible that flushes of surface water with elevated concentrations of ammonia occur during overflow events. This type of scenario is not incorporated in the dataset as sampling was not undertaken after rainfall events. Further assessment is therefore warranted.
– **Nitrate and nitrite**: Concentrations of nitrate and nitrite above the ambient levels were recorded in the two ponds in the western portion of the landfill (W Pond and W Pond by MW0) and in the Northeastern Pond. As such, nitrate and nitrite are further considered in the HHERA.
– **Metals and metalloids:** Median and maximum concentrations of aluminium, chromium, copper, iron, and lead have been reported at the Northeastern Pond which discharges directly into the Kaikorai Stream. Median concentrations detected at sampling points NE Pond, W Pond, W Pond by MW0, and N Pond) were generally below and of the same order of magnitude as ambient levels. Given the elevated concentrations of aluminium, chromium, copper, iron, and lead at the Northeastern Pond, further assessment is warranted.
– **PFAS**: Three PFAS, namely PFHxA, PFOA, and PFOS, were detected in pond water samples at concentrations up to two orders of magnitude above the ambient levels. These elevated detections correspond to the results obtained for surface water samples collected along Kaikorai Stream, downstream of the site. As such, further evaluation of these PFAS detections is required.

In summary, the assessment of the pond water dataset identified the following CoPC:

– Nutrients including ammonia, nitrite, and nitrate.
– Metals and metalloids, comprising aluminium, chromium, copper, iron, and lead.
– PFAS.

These CoPC are screened against Tier 1 criteria in the following section.

3.5.1 Tier 1 screening of the CoPC concentrations in pond water

Table 3.3 presents a review of the maximum and 95^{th} percentile concentrations of the CoPC identified in pond water samples and a comparison against Tier 1 screening criteria.

Table 3.3 Summary and review of COPC concentrations reported in pond water at the landfill site – comparison against Tier 1 screening criteria

Parameter	Ammonia*	Nitrate	Nitrate*	Nitrite	Al	Al*	Cr	Cr*	Cu	Cu*	Fe	Fe*	Pb	Pb*	PFOA	PFHxS	PFOS	PFOS+PFHxS
	mg/L														µg/L			
Eastern Pond																		
Maximum	6.6	1.25	0.9	0.03	1.9	0.096	0.0039	0.0016	0.0051	0.0051	4.13	0.65	0.0076	0.0076	0.0222	0.0044	*0.015*	0.019
95th percentile	4.1	1.156	0.8	0.03	1.9	0.092	0.0039	0.0020	0.0051	0.0038	4.021	0.564	0.0076	0.0013	-	-	-	-
Northeastern Pond																		
Maximum	221	-	3	0.22	1.7	1.4	0.014	0.012	0.0063	5.9	12.3	3.82	0.0019	0.00061	0.18	0.053	*0.031*	0.1
95th percentile	19	-	1.5	0.12	0.80	0.52	0.0139	0.0094	0.0056	2.08	10.87	3.575	0.0017	0.0006	-	-	-	-
Southeastern Pond																		
Maximum	2.7	-	3	0.032	1.7	1.2	0.0028	0.0021	0.0061	0.0046	4.6	1.77	0.0027	0.00065	0.0046	<0.001	*0.0013*	0.0013
95th percentile	2.6	-	1.6	0.032	0.79	0.48	0.0021	0.0015	0.00532	0.0040	4.35	1.553	0.0020	0.00062	-	-	-	-
Western Pond																		
Maximum	4.96	18.3	0.3	0.28	0.73	0.039	0.0068	0.0044	0.0028	0.0048	2.3	0.2	0.0051	0.0003	0.016	0.006	*0.013*	0.013
95th percentile	3.9	15.6	0.3	0.26	0.73	0.038	0.0068	0.0042	0.0028	0.0046	2.255	0.2	0.0051	0.0005	-	-	-	-
Western Pond by MW0/Southwestern Pond																		
Maximum	4.4	-	9.2	0.17	3.9	0.24	0.0146	0.0017	0.0081	0.0046	10.2	0.931	0.0098	0.00041	0.0063	0.0013	*0.014*	0.015
95th percentile	2.4	-	3.9	0.098	3.5	0.12	0.0138	0.001	0.00897	0.01	8.825	0.629	0.0094	0.002	-	-	-	-
Northern Leachate and Sedimentation Pond																		
Maximum	0.13	-	-	-	-	-	0.0014	0.00026	0.0065	0.0046	-	-	0.0025	0.000066	-	-	-	-
Tier 1 Screening criteria																		
Health-based criteria - recreational	**NA [a]**	**50[c]**	**NA**	**NA [e]**	**20[g]**	**NA**	**1[g]**	**NA**	**40[g]**	**NA**	**NA**	**NA**	**0.2[g]**	**NA**	**10[h]**	**2[h]**	**2[h]**	**2[h]**
Ecological criteria	0.91[b]	NA	2.4[d]	NA [e]	NA	0.056[b]	NA	0.0044[b]	NA	0.0013[b]	NA	NA	NA	0.0044[b]	220[h]	NA	0.13[h] *0.00023*	NA

Notes:

* Indicates that the Tier-1 screening assessment was undertaken on sampled filtered using a <0.45 µm filter. An absence of this symbol indicates that the analysis was undertaken on an unfiltered sample.

NA = Not applicable / available. Not of health concern.

- Not measured or insufficient data to calculate a 95th percentile value.

[a] Based on MoH (2022)

[b] ANZG (2018) criterion for the protection of 95th percentile of species.

[c] NHMRC (2008).

[d] NIWA (NIWA, 2013) Updating nitrate toxicity effects on freshwater aquatic

[e] Nitrite is unstable and is easily oxidized to nitrate. Hence, nitrate is the compound predominantly found in surface waters.

[f] van Dam (2018).

[g] MoH (2022) – drinking water criterion adjusted by a factor of 20 to obtain a recreational value.

[h] PFAS NEMP (HEPA, 2020) – criteria for the protection of 95% of species or human health recreational use.

[i] PFAS NEMP (HEPA, 2020) – criteria for the protection of 99% of species. Exceedances are marked in *italics*.

Bold and underlined values indicate concentrations exceeding the health-based screening criteria.

Shaded blue values indicate concentrations exceeding the ecological screening criteria

Italics values indicate PFAS concentrations exceeding the ecological screening criteria for the protection of 99% of species.

A review of Table 3.3 indicates the following:

– PFOS maximum concentrations exceeded the 99% species protection criterion in all ponds. However, maximum concentrations were all below the 95% species protection criterion. All concentrations of PFAS were lower than the human health recreational criteria.
– Concentrations of CoPC in the on-site ponds were found to be below the human health-based screening criteria. Hence, the discharge of pond water would pose a low risk to the recreational users of Kaikorai Stream and Estuary.
– Ammonia concentrations exceeded the ANZG (2018) criterion for the protection of 95th percentile of marine species (0.91 mg/L) in all ponds except for the Northern Leachate and Sedimentation Pond. The highest, maximum (221 mg/L) and 95th percentile (19 mg/L) concentrations were detected in the Northeastern Pond which is directly connected to the Kaikorai Stream. Exceedances were generally within one order of magnitude of the screening levels, with few exceptions all measured in the Northeastern Pond.
– Nitrate concentrations above the NIWA (2013) criteria were also identified in the Northeastern, Southeastern and Southwestern Pond, with the highest concentrations identified in the Southwestern Pond. As this pond is offsite, sources other than the landfill may contribute to these concentrations.
– Aluminium, copper, and chromium maximum and 95th percentile concentrations exceeded the ecological screening levels in multiple on-site ponds. All the highest concentrations were detected in the Northeastern Pond and, therefore, have the potential to discharge directly in the Kaikorai Stream. The maximum concentrations of copper exceeded their ecological criteria by three orders of magnitude, while the aluminium and chromium maximum concentrations exceeded the criteria by circa one order of magnitude.
– The lead maximum concentration measured in the Eastern Pond marginally exceeded the ecological screening level, but the 95th percentile of the concentrations was lower than this criterion.
– Zinc concentrations in pond water were all below the ecological screening levels. This indicates that on-site pond water is unlikely to be the primary source of the zinc exceedances identified along Kaikorai Stream (refer to Section 3.4.2).

In summary, the Tier 1 screening assessment of the surface water dataset collected form the ponds indicates the following:

– In agreement with the surface water Tier 1 screening outcomes for Kaikorai Stream (refer to Section 3.4) the discharge of onsite pond water and its subsequent recreational use in Kaikorai Stream poses a low risk to the recreational users of Kaikorai Stream and Estuary.
– PFAS have been found in surface water samples taken from the offsite Southwestern Pond, with concentrations comparable to those detected in background sampling locations (GI1 and GI2). As the data suggests that this pond does not receive runoff from the landfill site, it is not subject to further assessment in this report.
– Aluminium, copper, chromium, lead, nitrate, ammonia and PFAS have been identified in onsite pond water at concentrations above the Tier 1 screening criteria for ecological receptors. The sampling program associated with Condition 11 of the discharge permit consent no. 3839A_V1 is generally undertaken when the onsite ponds are not actively releasing water into the stream and may therefore not adequately capture situations where pulses of surface water from the onsite ponds flow into the Kaikorai Stream. It is therefore recommended that additional investigations are undertaken to assess the nature and extent of any discharge events from the onsite ponds into the Kaikorai Stream and to understand and associated environmental impacts.

3.6 Leachate and Groundwater data review

This section provides a review of the leachate and groundwater dataset. In this assessment it is crucial to consider the broader environmental context. The hydrology of the Kaikorai Stream is complex and is characterised by the interconnection of the surface water and groundwater systems which is influenced by tidal fluctuations in water levels within the stream and estuary. Notably, the leachate collection trench serves as a hydraulic barrier, effectively lowering groundwater levels within the trench and drawing water from both the landfill and stream sides.

3.6.1 Considerations on the efficacy of the leachate interception trench

The trench's effectiveness in intercepting landfill leachate and contaminated groundwater discharges towards the stream is supported by multiple lines of evidence:

– The design of the leachate interception trench system is aimed at maintaining a hydraulic gradient that directs impacted groundwater away from Kaikorai Stream and towards the trench.

– Ongoing monthly groundwater level monitoring since 1994 consistently showed that the lowest groundwater levels occur in monitoring wells adjacent to the trench towards the stream (MWC wells). These findings, documented in the Green Island Landfill annual monitoring reports (GHD, 2019; 2021; 2021; 2022), demonstrate the efficacy of the interception system (GHD, 2023a).

– Leachate samples collected from the monitored pump station PS3 showed major ion compositions reflecting a mixture of stream water, groundwater, and leachate (GHD, 2023a). This observation suggests that the leachate interception trench system successfully collects leachate originating from the landfill, as well as groundwater and surface water from beyond the landfill perimeter.

– Groundwater and leachate modelling conducted at the site by GHD (2023a) confirmed the trench's effectiveness in intercepting landfill leachate and directing it away from the stream. Figure 3.1 provides a graphical representation of the leachate interception trench’s impact on groundwater-surface water interactions. This model identified a negligible flow of approximately 0.01 L/s of shallow groundwater toward the stream, compared to a 0.3-0.5 L/s flow that would occur if the trench were inactive. This negligible flow is associated with groundwater seepage from the streambed and adjacent to the stream bank (GHD, 2023a). Notably, it is important to acknowledge that historical waste deposition outside of the trench area, such as near MW4C (GHD, 2023a), may influence water quality.

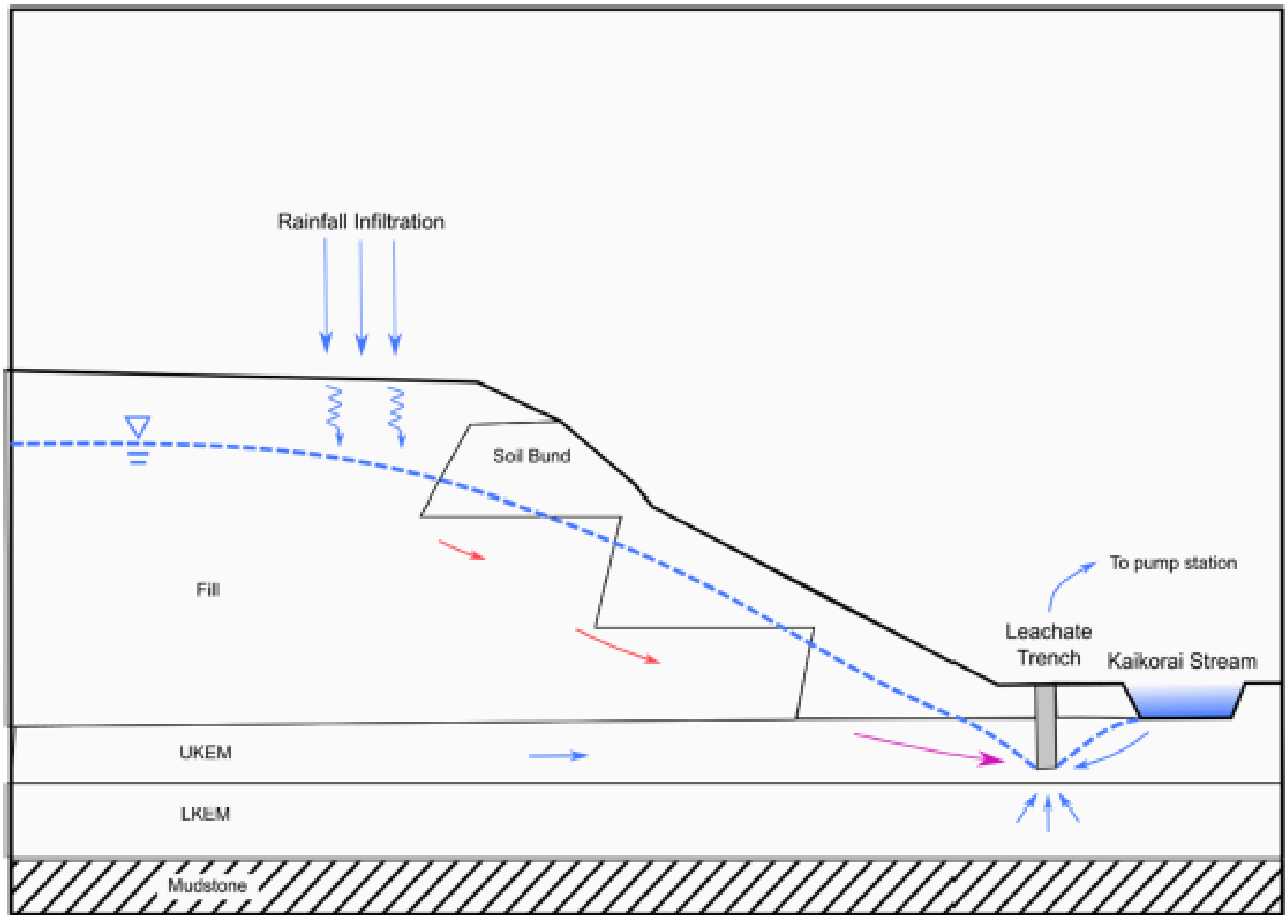

Figure 3.1 ***Conceptual model describing the effect of the leachate interception trench on the groundwater-surface water dynamics.***

In summary, a review of available data associated with the leachate interception trench demonstrates its effectiveness and consistency in limiting the migration of contaminants from the landfill to Kaikorai Stream. As such, it is reasonable to assume that that the surface water analytical results discussed in Section 3.4 reflect and incorporate the contaminant contribution (if any) of groundwater flowing from the site.

The role of groundwater as a source of contamination into Kaikorai Stream has also been assessed through the comparison of leachate and groundwater data against ambient surface water concentrations, as presented in the following section.

3.6.2 Comparison of groundwater and leachate results against ambient levels

The leachate interception trench and collection system, groundwater monitoring network and landfill impact on groundwater quality is discussed in Section 2.7 of this report. Monitoring locations for leachate and groundwater can be generally grouped as follows:

– Leachate is collected at pump station 3 (PS3).
– There are three onsite monitoring wells located within waste cells (GW15, GW21 and GW36).
– Monitoring wells identified with a “C” (e.g.: MW0C) are located on the stream side along the perimeter of the leachate interception trench.
– Monitoring wells identified with a “D” (e.g.: MW2D) are located on the stream side along the perimeter of the leachate interception trench.

Given the leachate within the pump stations is directed to a sewer rising main and then to the Green Island Wastewater Treatment Plant, it is not discharging directly to the Kaikorai Estuary. Data from PS3 can give a general indication of the characteristics of leachate from the site and may be useful in identifying which contaminants may be of potential concern in groundwater. Similarly, the three onsite monitoring wells located within waste cells do not represent offsite impacts but may be useful indicators of contaminants of potential concern.

As monitoring well types C and D are located beyond the leachate interception trench, results from these locations can be used to check for contaminant migration from the waste into the shallow and deep aquifers respectively. A comparison with up and downstream surface water results can be used to assess groundwater may be contributing to any observed downstream impacts.

Tables 5 in Appendix B presents the leachate, onsite groundwater, and perimeter groundwater dataset. Table 6 in Appendix B provides summary statistics of analytical results for each leachate / groundwater location and compares them against surface water results collected upstream of the site (GI1 and GI2). This includes maximum and median concentrations in water detected at each location and the percentage difference in concentrations compared to stream water collected upstream of the site. The median is considered an appropriate statistic to describe the central tendency of the dataset in agreement with ANZG (2018).

Table 3.4 summarises and discusses the key outcomes of the data review.

Table 3.4 Summary and discussion of leachate and groundwater results compared against ambient levels (surface water samples collected from Kaikorai Stream at upstream locations)

Matrix	Chemicals exceeding ambient levels*	Discussion
Leachate – collected from leachate wells and monitoring wells installed in the waste mass	EC, carbon, chloride, ammonia, nitrate, nitrite, nitrogen, TOC, aluminium, cadmium, chromium (III+VI) (filtered), copper, iron, lead, nickel, zinc, and PFAS.	These chemicals have been monitored in the receiving environment (Kaikorai Stream) and have generally not been reported at concentrations above the Tier 1 screening criteria and/or ambient concentrations. Zinc and PFAS, which are addressed in more detail in Section 4 were detected in leachate samples at concentrations above ambient levels, which suggests that the waste mass is a source of these chemicals.
Groundwater – monitoring wells installed along the landfill perimeter on the stream side (shallow and deep)	EC, carbon, chloride, ammonia, nitrate, nitrite, nitrogen, TOC, aluminium, chromium, iron, lead, nickel, zinc, and PFAS.	These chemicals have been monitored in the receiving environment (Kaikorai Stream) and have generally not been reported at concentrations above the Tier 1 screening criteria and/or ambient concentrations. Zinc and PFAS, which are addressed in more detail in Section 4 were detected in groundwater samples at concentrations above ambient levels, which suggests that groundwater is a source of these chemicals.

3.7 Ecotoxitity Testing

Boffa Miskell (2023) engaged the Cawthron Institute (Cawthron) to assess the toxicity of surface water and groundwater samples collected at and near the landfill. The results can be summarised as follows:

- Cawthron utilised passive sample devices to accumulate organic chemicals from four surface water samples collected up- and downgradient of the landfill and four groundwater samples collected at the site. They carried out bioassays using an algal and a bacterial species to assess the general toxicity of the samples. A third bioassay using blue mussel (*Mytilus galloprovincialis*) was carried out separately in December 2023 (Cawthron, 2023).
- The ecotoxicity tests, conducted using bacteria bioluminescence and marine algae, revealed the potential presence of organic contaminants in the surface water of Kaikorai Stream, both up- and downstream (e.g., Kaikorai Lagoon) of the landfill. These contaminants could be toxic to bacteria. Similar toxicity was observed in both shallow and deep groundwater samples collected near sampling point GI5.
- The toxicity test conducted on mussels, based on a 48-hour embryo-larval development acute test, indicated a negligible difference between field blanks and water samples, suggesting a low level of toxicity in both surface and groundwater samples.

Overall, the results indicated that Kaikorai Stream is a disturbed ecosystem both upstream and downstream of the landfill due to the likely presence of several sources of contamination not directly associated with the landfill leachate discharging into the receiving environment (Boffa Miskell, 2023).

3.8 Summary of the Source-Pathway-Receptor linkages

Table 3.5 summarises the exposure scenarios and chemicals that have been considered in more detail in the Tier 2 HHERA. Based on the outcomes of the Tier 1 screening assessment, the chemicals of interest for the Tier 2 HHERA are limited to zinc and PFAS, with both chemicals associated with both the landfill and inputs from the broader catchment.

Table 3.5 Summary of scenarios considered in more detail in the Tier 2 HHERA

Receptors	Exposure scenario	Chemicals of interest	Tier 2 HHERA undertaken?	Rationale
Human users of the Kaikorai Stream and Estuary	Incidental ingestion and contact by recreational users of the stream and estuary	None	No	The chemical concentrations in Kaikorai Stream surface water and onsite ponds were generally lower than the Tier 1 screening criteria for the recreational use of surface water
	Consumption of locally caught aquatic organisms	PFAS	Yes	PFAS is bioaccumulative and Tier 1 screening criteria specific to the consumption of aquatic biota are not available for these chemicals. Local stakeholder groups also have a particular interest in understanding the suitability of locally caught seafood for human consumption.
The environment of Kaikorai Stream and Estuary	Incidental ingestion, contact and uptake by the flora and fauna in the CMA	Zinc	Yes	Samples collected both upstream and downstream of the landfill reported zinc concentrations above the ecological assessment criteria.
		PFAS	No	The PFAS concentrations measured in surface water upstream and downstream of the site were lower than the 95% species protection level, which is applicable to the assessment of direct exposure risks
	Food chain exposures to higher trophic level organisms (e.g., wading birds)	PFAS	Yes	The PFAS concentrations measured in surface water upstream and downstream of the site are higher than the 99% species protection level, which is applicable to the assessment of food chain exposure risks

In addition, concentrations of nitrate above the ecological screening levels were also identified upstream and downstream of the site limited to a single sampling event undertaken in July 2022. A clear link between discharges from the site and increased levels of nitrate in surface water is not apparent in the dataset and therefore nitrate has not been assessed in more detail in this HHERA. It is noted that periodically elevated concentrations of nitrate in the Kaikorai catchment have the potential to adversely affect the aquatic environment, both via direct toxicity and indirect mechanisms (e.g., eutrophication and oxygen depletion).

In addition to the scenarios outlined in

Table 3.5, the Tier 1 screening assessment showed that additional data are needed to assess the nature and extent of any discharge events from the onsite ponds into the Kaikorai Stream and to understand the associated environmental impacts, with a particular focus on aluminium, copper, chromium, lead, ammonia, nitrate and PFAS.

4. Detailed risk assessment

4.1 Introduction

This section presents a more detailed assessment of the risks posed by the zinc and PFAS concentrations identified in the Kaikorai Stream and Estuary, both upstream and downstream of the site.

Based on the outcomes of the Tier 1 screening assessment, this HHERA has focused on impacts to aquatic ecology following direct exposure (zinc only) and food chain exposure (PFAS only) to chemicals in surface water. Consideration has also been given to the potential for PFAS to bioaccumulate in aquatic biota that are caught and consumed downstream of the site.

4.2 Receptor identification

4.2.1 Ecological receptors

The Kaikorai Stream flows in a south westerly direction for approximately 15 km down the Kaikorai Valley into Kaikorai Estuary, where it discharges to the Pacific Ocean. The upper catchment of the Kaikorai Stream is dominated by a mix of kanuka/manuka scrubland and native forest, as well as areas of high producing grassland, whereas the lower catchment is dominated by the urban and industrial areas of the Kaikorai Valley. In addition to the landfill, there are several potential sources of contaminants to the Kaikorai Stream and Estuary, including the Mt Grand Water Treatment Plant and Green Island Wastewater Treatment Plant, and stormwater and overland flow from urban, industrial and rural areas (ORC, 2008).

Observations made during the routine monitoring of the Kaikorai Stream near the landfill indicate that the waterway is approximately 2 m wide, with a predominantly cobble substrate and a riparian zone comprised of native and exotic shrubs and grasses. This reach of the Kaikorai Stream has no significant natural values listed in the Dunedin City District Plan but the Kaikorai Estuary is listed as an *Area of Significant Conservation Value*. The Kaikorai Estuary is comprised of mudflats, saltmarsh, reed swamp, and succulent herb swamp. It has a large brackish water lagoon and extensive marsh, with a high diversity of indigenous flora and fauna, including waterfowl. Cultural values, including those associated with food gathering and processing (mahinga kai) and the protection of nursery and breeding areas for native fish and birds (kohanga), have been identified as important in the Kaikorai Estuary (ORC, 2018).

Native aquatic organisms identified in the Kaikorai Stream and Estuary include whitebait, freshwater crayfish (koura), giant kokopu, long-finned and short-finned eels and freshwater mussels. Ecological monitoring undertaken within the Kaikorai Stream and Estuary indicate the presence of a degraded invertebrate community. This has been linked both to poor water quality (e.g., nutrient enrichment), deoxygenation events and high levels of sediment deposition, occurring as a result of runoff within the catchment (ORC, 2018), with fish kill events reported in recent years and linked to deoxygenation (Ryder Environmental Limited, 2021).

4.2.2 Human receptors

The surface water dataset showed that the concentrations of CoPC in the Kaikorai Stream and Estuary have generally been well below the tier 1 screening criteria relevant to assessing the recreational use of these waterways. However, the recreational criteria do not consider the possibility of exposure to CoPC via the consumption of biota (e.g., fish and/or eels) caught downstream of the site, which is relevant for highly bioaccumulative compounds such as PFAS.

The Kaikorai Stream and Estuary may be used for the gathering and consumption of aquatic biota. Kaikorai Estuary in particular, supports species including trout, perch and eel, although the factors outlined in Section 4.2.1 will impact the populations of fish available for these kinds of activities.

4.3 Ecological risk assessment for zinc in surface water

4.3.1 Summary of zinc concentrations

This section presents an ERA for the zinc concentrations measured in surface water samples collected from within the Kaikorai Stream. The Tier 1 screening assessment of Source-Pathway-Receptor linkages (Section 3) identified the presence of zinc concentrations above the ANZG (2021) protection value for 95% of species (8 µg/L) in the following areas:

- Upstream of the site: both the maximum and 95th percentile zinc concentrations (80 and 70 µg/L respectively) were higher than the ecological screening level.
- Downstream of the site: both the maximum and 95th percentile zinc concentrations (150 and 30 µg/L respectively) were higher than the ecological screening level.

The highest zinc concentrations were identified in sampling location GI5, which is located immediately downstream of the site. Otherwise, a clear distinction between the zinc concentrations identified in upstream and downstream surface water is not apparent in the available dataset. Notably, the zinc concentrations in onsite pond water were all below the ecological screening levels, which suggests a contribution from a source external to the zinc concentrations measured in the Kaikorai Stream. Notwithstanding this, the implications of the zinc concentrations measured in Kaikorai Stream and Estuary for the aquatic environment have been assessed herein for completeness.

4.3.2 Overview of zinc in the estuarine environment

Zinc is widely distributed in the Earth's crust and is an essential trace element for microorganisms, plants and animals. Zinc can enter the aquatic environment via natural processes, like weathering of rocks, as well as via anthropological processes, including stormwater runoff. The chemistry and toxicity of zinc in the marine environment, as described by (ANZG, 2021) can be summarised as follows:

- Zinc exists in the +2-oxidation state and in saline water, most of the zinc is typically present as the free cation (Zn^{2+}) and complexes with chloride also dominate.
- The dissolved form of zinc, particularly the free cation Zn^{2+}, is the most toxic form of zinc.
- The solubility limit of zinc in saline water is approximately 9,000 µg/L.
- Adsorption of zinc to suspended particles, and the consequent sedimentation of these particles, is a major route of removal for zinc from the water column.
- Increases in salinity result in lower concentrations of Zn^{2+} due to complexation with chloride. As a result, the toxicity of zinc to aquatic organisms typically decreases as salinity increases.
- The toxicity of zinc in saline water is also influenced by temperature, with increasing toxicity typically observed with increasing temperature.
- Zinc complexes with organic ligands (such as humic acids) but these processes are less important in controlling the bioavailability of zinc in saline water than with some other metals, as much of the zinc ligand is bound to calcium and magnesium.
- In estuarine water increasing concentrations of cations exchange with zinc attached to organic ligands. This can lead to higher dissolved zinc concentrations in the mid-salinity zone where freshwaters discharge into high-salinity zones.

4.3.3 Review of zinc toxicity in settings estuarine

ANZG (2021) presents the Tier 1 screening criteria for zinc in saline water, derived in accordance with the methodology outlined by Warne *et al.* (2018), as illustrated in Figure 4.1.

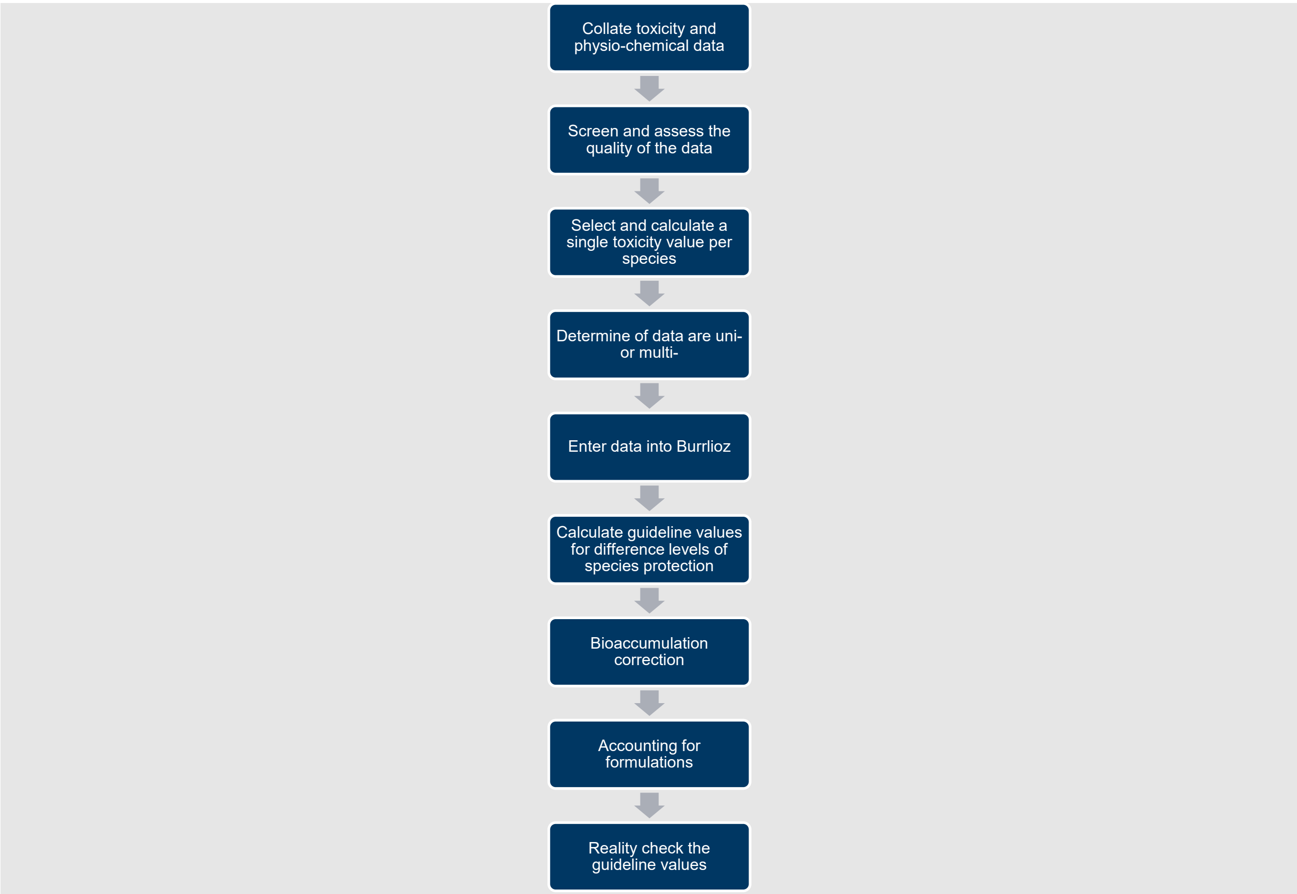

Figure 4.1 ***Schematic representation of the method for deriving guideline values using the species sensitivity distribution approach.***

The toxicity data used to derive the Tier 1 screening criteria can be summarised as follows:

- Chronic effect/inhibition/lethal concentrations ($EC_x/IC_x/LC_x$), where x ≤10%, and no-effect concentration (NEC) are the preferred measures of toxicity in the Warne *et al.* (2018) methodology as they provide an accurate estimation of the no-effect concentrations of chemicals. Chronic no observed effect concentrations (NOEC) and 10% bounded effect concentrations (BEC_{10}) are also acceptable if $EC_{\leq10}/IC_{\leq10}/LC_{\leq10}$ are not available and are treated as equivalent. NOEC values tend to be more conservative than $EC_{\leq10}/IC_{\leq10}/LC_{\leq10}$ however, as the differences between the concentrations tested are arbitrary.
- Acute $EC_{50}/IC_{50}/LC_{50}$ and chronic low observed effect concentrations (LOEC) are the least preferred measures of toxicity in the Warne *et al.* (2018) methodology and are required to be divided by 10 and 2.5 respectively, to provide an indication of chronic toxicity, equivalent to an NOEC.

The toxicity dataset used by ANZG (2021) to derive the zinc guideline is summarised in Table 4.1.

Table 4.1 Summary of toxicity values used in the derivation of the marine water quality guidelines for zinc (ANZG, 2021)

Taxonomic group	Species		Toxicity measure	Toxicity values (µg/L)		Reference
				Reported	Adopted	
Micro and macroalgae	*Entomoneis punctulata*	Diatom	EC50 (Growth)	765	153 [a]	Franklin *et al.* (2001)
	Ceratoneis closterium	Diatom	IC10 (Growth)	84	84	Johnson *et al.* (2007)
	Dunaliella tertiolecta	Green algae	EC50 (Mortality)	270	54 [a]	Hall *et al.* (1998)
	Ulva fasciata	Sea lettuce	NOEC (Growth)	143	143	Hooten and Carr (1998)
	Macrocystis pyrifera	Giant kelp	NOEC (Growth)	1070	1070	Anderson and Hunt (1988)
Annelids	*Hydroides elegans*	Tube worm	EC50 (Development)	119	24 [a]	Gopalakrishnan *et al.* (2008)
Anemone	*Aiptasia pulchella*	Rock anemone	EC10 (Reproduction)	9	9	Howe *et al.* (2014)
Crustaceans	*Allorchestes compressa*	Amphipod	LC10 (Mortailty)	62	62	Ahsanullah *et al.* (1991)
	Callianassa australiensis	Ghost shrimp	EC50 (Immobilsation)	1150	230 [a]	Ahsanullah *et al.* (1981)
Molluscs	*Crassostrea gigas*	Pacific oyster	EC50 (Development)	119	24 [a]	Martin *et al.* (1981)
	Haliotis diversicolor	Abalone	NOEC (Growth)	64	64	Tsai *et al.* (2004)
	Mimachlamys asperrima	Doughboy scallop	NOEC (Development)	5	5	Krassoi *et al.* (1997)
	Mytilus edulis	Blue mussel	EC50 (Development)	175	35 [a]	Martin *et al.* (1981)
	Mytilus galloprovincialis	Mediterranean mussel	EC50 (Development)	182	36 [a]	Williams *et al.* (1999)
	Mytilus trossulus	Bay mussel	EC20 (Development)	64	64	Nadella *et al.* (2009)
	Saccostrea glomerata	Sydney rock oyster	LC50 (Mortality)	10400	2080 [a]	Butterfield (1987)

[a] Values were chronic LC/EC50 values that were converted to chronic NOEC/EC10 values by dividing by 5

The maximum zinc concentrations measured at GI5 (152 µg/L) was higher than approximately half of the ecotoxicity endpoints identified. Most of the studies were however associated with ecotoxicity endpoints of a similar order of magnitude to the 95th percentile zinc concentrations measured upstream and downstream of the site (70 µg/L and 30 µg/L) respectively.

Studies undertaken by Krassoi *et al.* (1997) and Howe *et al.* (2014) on scallops and anemones reported the two lowest chronic endpoints in the dataset (i.e., 5 µg/L and 9 µg/L for development and reproduction). These studies can be summarised as follows:

– Krassoi *et al.* (1997) studied the impact of zinc sulfate dissolved in filtered seawater on the development of doughboy scallop (*Mimachlamys asperrima*) larvae under temperate (18ºC) conditions. The LOEC of the study was 13 µg/L, with the adopted toxicity value (5 µg/L) being the study NOEC. Abnormal larval development was estimated to occur in 50% of test organisms at zinc concentrations of 45 µg/L.
– Howe *et al.* (2014) studied the impact of zinc chloride dissolved in seawater on reproduction of the tropical sea anemone, *Aiptasia pulchella*. Test organisms were exposed to zinc concentrations between 8 µg/L and 717 µg/L for a period of 28-days under tropical (25ºC) conditions. Approximately 40% mortality occurred following a 6-day exposure to 717 µg/L and after a 22-day exposure to this concentration, 100% mortality was observed. The LOEC for reproduction was 140 µg/L and the EC10 was estimated at 9 µg/L, which is marginally above the NOEC of 8 µg/L.

The toxicity of zinc decreases at lower temperatures and in the presence of suspended particulates and organic complexes (ANZG, 2021).The temperatures at which these studies were undertaken, and the approaches used to prepare the test solutions (i.e., the dissolution of highly soluble forms of zinc in filtered water) are expected to have resulted in higher levels of toxicity and bioavailability than would be expected in the receiving environment of the Kaikorai Stream.

Overall, environmental data collected from the Kaikorai Stream, and the toxicity dataset published for zinc in saline water indicates that that there is a low risk that discharges from the landfill are resulting in measurable adverse chronic effects on aquatic organisms but that it is possible that, at a catchment scale, marginal adverse effects on aquatic organisms are possible due to the presence of elevated concentrations of zinc. Given the absence of elevated zinc concentrations in the onsite ponds, this conclusion is likely to remain valid across the range of hydrological conditions, including overflow events.

Additional studies, focused on understanding the bioavailability of zinc in the Kaikorai catchment would assist in better understanding the relationship between the measured zinc concentrations and any associated effects on aquatic ecology.

4.4 Health and ecological risk assessment for PFAS in surface water

4.4.1 Summary of PFAS impacts in the receiving environment

This section presents an assessment of the risks posed by the PFAS concentrations measured in the Kaikorai Stream and Estuary. The full PFAS dataset is provided in Table 1 (surface water), Table 3 (pond waster), and Table 5 (groundwater and leachate) in Appendix B.

HEPA (2020) provides the following screening levels relevant to the assessment of PFOS exposure risk to aquatic ecology, downstream of the site:

Ecological receptors:

– A 95% species protection value of 0.13 µg/L, relevant to the screening level assessment of the potential for direct toxicity in slightly to moderately disturbed waterways, such as the Kaikorai Stream and Estuary; and
– A 99% species protection values of 0.00023 µg/L, relevant to the screening level assessment of the potential for toxicity to occur in association with indirect (food chain) exposures.

Human health receptors:

– A recreational water quality guideline value of 2 µg/L for PFOS, PFHxS and their sum (PFOS+ PFHxS).

The PFAS concentrations measured in the Kaikorai Stream and Estuary are summarised in Table 4.2, with reference to these values.

Table 4.2 Summary of Kaikorai Stream and Estuary PFAS results

Location		PFOS	PFHxS	PFOS+PFHxS	PFOA	Total PFAS
January 2023 – concentrations expressed in µg/L						
Upstream	GI1	**0.001**	<0.001	0.001	0.001	0.002
	GI2	**<0.001**	<0.001	<0.001	<0.001	nd
Downstream	GI3	**0.001**	<0.001	0.001	0.001	0.002
	GI5	**<0.001**	<0.001	<0.001	<0.001	nd
	Estuary	**<0.001**	<0.001	<0.001	0.0014	0.005
April 2023 – concentrations expressed in µg/L						
Downstream	Estuary	**0.005**	<0.0005	0.0047	0.0006	0.005
August 2023 – concentrations expressed in µg/L						
Upstream	GI1	**0.0008**	<0.0005	0.0008	<0.0005	0.0008
	GI2	**0.0004**	<0.0005	0.0004	<0.0005	0.0004
Downstream	GI3	**0.0009**	<0.0005	0.0009	<0.0005	0.0009
	GI5	**0.0028**	<0.0005	0.0028	0.0013	0.006
	Estuary	**0.0009**	<0.0005	0.0009	0.0007	0.0028
Tier 1 screening criteria – concentrations expressed in µg/L						
HEPA (2020) 99% species protection v		**0.00023**	**-**	**-**	**19**	**-**
HEPA (2020) 95% species protection		0.13	-	-	220	-
HEPA (2020) recreational guideline		2	2	2	10	-
Notes: nd = non detected " – " = Not available						

A review of n Table 4.2, with reference to these values.

Table 4.2 indicates the following:

– PFOS is the primary PFAS identified in the receiving environment, comprising the majority of the total PFAS detected at most sampling locations. This likely reflects the high levels of persistence and mobility demonstrated by PFOS, relative to many other PFAS compounds.
– Overall, the concentrations of PFAS measured in surface water up- and down-stream of the site were of the same order of magnitude. As such, discharges from the landfill are not demonstrably influencing the PFAS concentrations in surface water quality within the Kaikorai Stream and the available data suggest the presence of various sources other than the landfill that contribute to the of PFAS concentrations in the Kaikorai Stream. The catchment is a heavily modified and PFAS is ubiquitous in urban settings.
– All surface water samples collected along the Kaikorai Stream and Estuary reported PFOS+PFHxS concentrations below the health-based recreational guidelines. Hence, surface water poses a low risk to people using the stream and estuary for swimming and similar recreational activities. However, these criteria do not incorporate the consumption of biota (e.g., fish) caught from within the stream.
– All samples reported PFOS concentrations below the 95% species protection level. This result provides a high level of confidence that PFOS discharges from the site are unlikely to adversely affect lower trophic level aquatic organisms within the Kaikorai Stream and Estuary.
– The ecological screening criterion for PFOS for the protection of the 99% of species was exceeded at all sampling points including those located upstream of the site. These criteria are applicable to the screening level assessment of the potential for effects on higher trophic level species via indirect (food chain) exposure.
– The PFAS dataset is limited both in terms of temporal and spatial coverage, with only two sampling rounds undertaken to date at a limited number of locations.

As detailed in Section 3, PFAS has also been identified in landfill pond water, with the highest concentrations measured in the Northeastern and Southwestern Ponds. These waterbodies are potential sources of PFAS to the Kaikorai Stream and Estuary, particularly during periods of high rainfall and overflow, which are not adequately captured in the environmental monitoring program undertaken at the site. In particular, the following data gaps are noted:

– Temporal and spatial variability in pond discharges – including surface water sampling of the ponds and along the Kaikorai Stream (upstream and downstream of the site) during periods in which the ponds are discharging into the receiving environment.
– Temporal and spatial variability in groundwater concentrations – including quarterly monitoring for PFAS in groundwater.
– Information to assist in understanding the hydrology of the Southwestern Pond and the source(s) of the PFAS identified in this waterbody.

In summary, based on the available dataset, a clear link is not apparent between discharges from the site and the presence of PFAS in the downstream receiving environment. The surface water dataset demonstrates that PFAS is present within the Kaikorai Stream and Estuary but, to date, the contribution of the landfill to these impacts is not readily distinguishable from the contribution of other sourced within the broader catchment. Based on these results, the more detailed risk assessment presented herein has focused on the PFAS impacts present at the broader catchment scale.

The more detailed risk assessment has considered the risks to both people and aquatic food chains associated with the bioaccumulation of PFOS in aquatic biota. A weight of evidence (WoE) assessment is a method for decision-making that involves consideration of multiple sources of information and lines of evidence. ANZG (2018) suggests the use of a WoE approach to risk assessment in aquatic environments, as this avoids relying solely on any one piece of information or line of evidence and facilitates risk-based decision-making in the context of complex ecological systems. The lines of evidence considered in a risk assessment can vary depending on the scenarios assessed and the amount and type of data available.

A WoE approach has been adopted in this assessment, with the lines of evidence assessed including the following:

– The range of potential sources of PFAS to the environment in urban settings.
– PFOS toxicity, including recent advances in the approach to deriving water quality guidelines.
– Published literature on the tendency for PFOS to bioaccumulate in aquatic biota.

– The nature of the receiving environment and susceptibility of the aquatic food chain to PFOS bioaccumulation and secondary poisoning.

4.4.2 Background levels

PFAS are a large family of manufactured chemicals that have been used in New Zealand and around the world in a variety of commercial processes, household products and specialty applications. The physical and chemical properties of PFAS impart oil and water repellency, temperature resistance and friction reduction, making them useful to consumers and industry. Potential sources of PFAS to surface water within the Kaikorai Stream catchment include:

- Building materials (e.g., additives to wood-based materials, insulation, paints, plumbing materials)
- Paper products and packaging
- Surfactants
- Textiles, including carpet and furniture)
- Domestic products, including cosmetics, waxes
- Class B firefighting foams
- Discharges from wastewater treatment plants, including treated effluent and biosolids

The widespread use of PFAS and the persistence and mobility of some PFAS, have resulted in the presence of these compounds in the environment across the globe. PFAS concentrations in surface water are frequently elevated in surface water in the vicinity of know point sources of PFAS (e.g., facilities where class B firefighting foams are manufactured, stored or used, and wastewater treatment plants).

Although there has been limited data published specific to the background concentrations of PFAS in New Zealand, the ambient sampling programs undertaken by state regulatory agencies in Australia, as detailed in the draft PFAS NEMP 3.0 have also identified that PFAS is widespread in freshwater, estuarine and marine environments not subject to impacts from known PFAS point sources. The PFAS NEMP 3.0 suggests that PFAS concentrations in the environment are likely to reflect the nature (type and intensity) of ambient land use and provides an indication of the PFAS concentrations that are typical in catchments with different land use settings. The PFOS concentrations identified via the ambient sampling programs undertaken in Victoria and Queensland, as detailed in the draft PFAS NEMP 3.0, are summarised in Table 4.3.

Table 4.3 Summary of ambient monitoring undertaken in Victoria and Queensland (HEPA, 2022)

Catchment land use	Victorian sampling program outcomes		Queensland sampling program outcomes	
	Range of PFOS concentrations (µg/L)	Sites with PFOS detections (%)	Range of PFOS concentrations (µg/L)	Sites with PFOS detections (%)
Remote (>85%)	<0.0002 to 0.0002	20%	<0.0001 to 0.0001	11%
Agricultural (>60%)	<0.0002 to 0.009	75%	<0.0001 to 0.0011	53%
Urban (>40-50%)	0.0007 to 0.081	100%	<0.0001 to 0.037	83%

The data presented in Table 4.3 demonstrates that while PFAS are man-made chemicals, due to the diversity of purposes for which they have been used, it is not typically absent in aquatic environments in urban areas. The samples collected from within the Kaikorai Stream and Estuary have demonstrated relatively low concentrations (typically less than ≤0.005 µg/L), that align with those reported in other urban catchments. It is therefore important to consider the exceedances of the 99% species protection value (0.00023 µg/L) in this context.

A well-designed catchment monitoring program would allow regulators to differentiate between ambient (diffuse) and point sources of PFAS to the Kaikorai Stream and Estuary and to evaluate temporal changes in the level of impact (e.g., following wet and dry periods).

4.4.3 Ecotoxicity assessment

The water quality guidelines published by HEPA (2020) were originally derived in 2015, prior to publication of the Warne *et al.*, (2018) *Revised Method for Deriving Australian and New Zealand Water Quality Guideline Values for*

Toxicant. In 2023, ANZG (2023)released a draft for consultation of revised water quality guidelines for PFOS, including the following:

– 99% species protection values: 0.0091 µg/L
– 95% species protection values: 0.48 µg/L
– 90% species protection values: 2.7 µg/L
– 80% species protection values: 17 µg/L

The higher water quality guidelines derived in 2023 reflect the inclusion of toxicity studies published in interim and the application of the Warne *et al.*, (2018) derivation approach. While these values have not been finalised, it is notable that the total PFAS concentrations measured in the Kaikorai Stream and Estuary were below the range of draft values.

Given that PFOS can be highly persistent, environmental exposures are potentially long-term and multi-generational. A summary of a selection of NOEC reported for PFOS in multigeneration studies is provided in Table 4.4. The SSD curve associated with the draft guideline values is illustrated in Figure 4.2 and compared with the maximum PFOS concentration detected in the Kaikorai Stream and Estuary. Notably, all of the ecotoxicity studies report NOEC which are several orders of magnitude higher than the PFOS concentrations measured upstream or downstream of the site.

Table 4.4 Summary of multigeneration PFOS toxicity data for freshwater aquatic species

Taxonomic group	Species	Laboratory study end point	NOEC[a] (µg/L)	References
Mollusc	*P. pomilia*	Reproduction (F1 generation)	10,000	Funkhouser (2014)
Rotifer	*Brachionus calyciflorus*	Population growth	250	Zhang *et al.* (2013)
Insect	*Chironomus riparius*	Development (F6)	3.5	Marzialli *et al.* (2019)
Fish	*Oryzias latipes*	Reproduction (F1 generation)	10	Ji *et al.* (2008)
Fish	*Danio rerio*	Growth (F2 generation)	0.6 µg/L (LOEC)	Keiter, *et al.* (2012)
Fish	*Pimephales promelas*	Reproduction (F0)	230	Ankley *et al.* (2005)

[a] Except as indicated

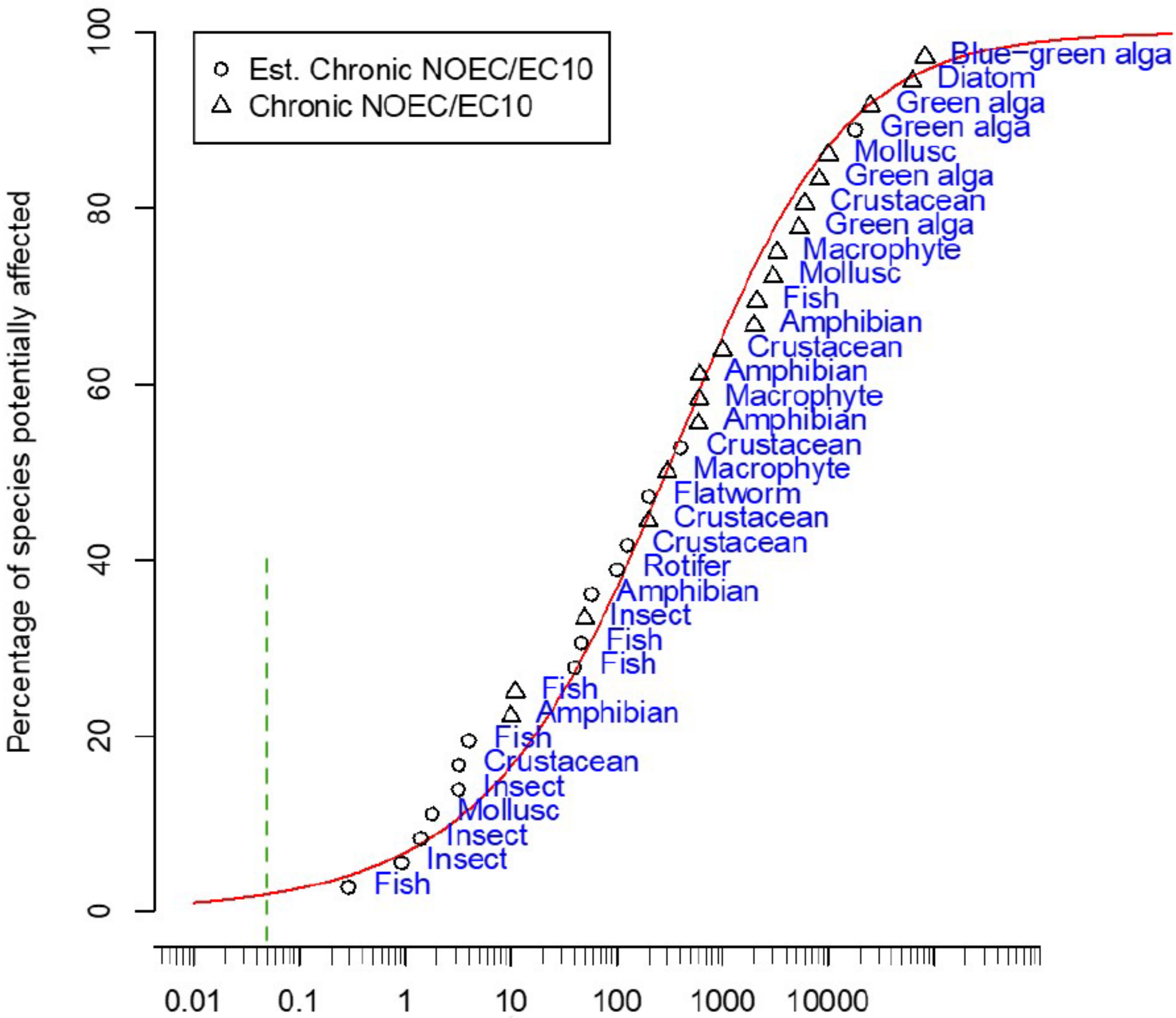

Figure 4.2 *SSD curve associated with the draft toxicant guideline values for PFOS*

▪▪▪▪▪▪▪▪ *represents the maximum PFOS concentration measured in the Kaikorai Stream and Estuary*

4.4.4 Preliminary bioaccumulation assessment

The HEPA (2020) and ANZG (2023) ecological water quality guidelines for the protection of 99% of species and the 2023 draft were not derived based on bioaccumulation endpoints. PFOS bioaccumulation can occur at very low concentrations, particularly in enclosed settings that provide perennial habitat for omnivorous/carnivorous aquatic organisms, as demonstrated for example by Terechovs *et al.* (2019).

Bioconcentration and bioaccumulation both occur when the concentration of a chemical builds up in the tissues of an organism faster than it is removed. Bioconcentration refers specifically to the absorption of the chemical directly from an abiotic media, whereas bioaccumulation also incorporates the absorption of the chemical from food. Bioconcentration and bioaccumulation are quantified as follows:

- Bioconcentration is quantified via a bioconcentration factor (BCF), which is defined as the concentration of a substance in the tissue of an aquatic organism divided by the concentration in water.
- Bioaccumulation is quantified via a bioaccumulation factor (BAF), which is also defined as the concentration of a substance in the tissue of an aquatic organism divided by the concentration in water, in scenarios where both abiotic media and food chain exposures contribute to chemical exposure.

In the absence of biota data collected from within the Kaikorai Stream or Estuary, the potential for PFAS to bioaccumulate in aquatic biota tissue, as a result of inputs across the catchment, has been estimated using BAF, sourced from the published scientific literature and publicly accessible reports. A variety of species inhabit this waterway, including trout, eel, shrimp and aquatic plants. For simplicity, a single animal species has been selected for the purpose of this calculation.

MfE (2018) provides a summary of the BAF estimated for a variety of aquatic species, on the basis of New Zealand studies that incorporated co-located PFAS concentrations in surface water and biota. All of these studies were reported in consultants reports that are not publicly available. The BAF data presented by MfE (2018) for freshwater environments is summarised in Table 4.5.

Table 4.5 Summary of BAF data reported by MfE (2018)

Organism type	BAF (L/kg)	
	PFOS+PFHxS	PFOA
Freshwater fish	23 - 591	Not detected
Freshwater eel	9 - 727	4 - 69

The data presented by MfE (2018) demonstrates that long fin eels can be particularly susceptible to PFAS bioaccumulation and eels have therefore been selected as the indicator for the purpose of this calculation. This aligns with the characteristics of these organisms, with the following factors expected to contribute to their sensitivity to PFAS bioaccumulation[5]:

– Lifespan: longfin eels can live for several decades.
– Habitat: longfin eels can inhabit inland waterways, with limited potential for flushing.
– Foraging habits: long fin eels forage predominantly on the substrate, in close association with sediment, where PFAS can accumulate.
– Diet: long fin eels are predominantly carnivorous, feeding on insects, worms and snails as juveniles and fish, crustaceans and birds as adults.

A review of publicly available data has been undertaken to identify studies that report co-located PFAS concentrations in surface water and eels and to estimate BAF from this data. BAF have been calculated based on the mean PFAS concentrations measured in eel fillets and surface water. It is noted that PFAS in sediment and in the diet will also contribute to the concentrations measured in eel tissue but that the estimated BAF values provide a snapshot of the levels of PFAS bioaccumulation that can be expected in eel populations in different environments. The range of identified BAF are summarised in Table 4.6.

Table 4.6 Summary of mean PFAS BAF calculated from the published literature for eels

Study	PFOS BAF (L/kg)	PFHxS BAF (L/kg)	PFOA BAF (L/kg)
Eels			
RAAF Base East Sale PFAS Investigation (DoD, 2017c)	**7470**	174	168
Unpublished New Zealand study, referenced by MfE (2018)	**727**		Not detected
Field study after an AFFF airport at an airport in the Netherlands, described by Kwadijk *et al.* (2010; 2014)	**234 - 3236**	112 - 354	12- 13
Field study in a captive (pond) environment in China, described by Wang *et al.* (2013)	1100	No data	59
Field study of canals, rivers and streams in Belgium, as described by Teunen *et al.* (2021)	7067	No data	No data
Bold values indicate the BAF adopted in the QHHRA			

PFOS is the primary PFAS identified within the Kaikorai Stream and Estuary and therefore the BAF identified in Table 4.6 have been used to provide an estimate of the extent to which PFOS could bioaccumulate within eel within the Kaikorai Stream and Estuary. The range of PFOS BAF have been considered in these calculations.

[5] https://www.doc.govt.nz/nature/native-animals/freshwater-fish/eels/

It is noted that some of the studies reviewed are likely to overestimate the potential for bioaccumulation within the Kaikorai Stream and Estuary. For example, eel within the Heart of Morass wetland, which is an inland surface water body that receives surface water runoff from RAAF Base East Sale in Victoria, Australia are likely to bioaccumulate higher concentration of PFAS than would occur in a waterbody such as the Kaikorai Stream, which will be subject to greater levels of surface water flow and flushing.

Bioaccumulation factors reflect the ratio of the concentration of a chemical in an organism to the concentration of the chemical in water, as follows:

$$Concentration\ in\ organism\ \left(\frac{ug}{kg}\right) = BAF\ \left(\frac{L}{kg}\right) x\ Concentration\ in\ water\ (\frac{ug}{L})$$

The maximum PFOS concentration measured in the waterway (0.05 µg/L) has been used in the calculations, as a conservative approach.

The PFOS concentrations estimated for eels in Kaikorai Stream and Estuary on the basis of the BAF presented in Table 4.6, are summarised in Table 4.7. The minimum and maximum PFOS concentration measured in the waterway (0.0004 µg/L and 0.005 µg/L) have been used in the calculations.

FSANZ (2017) provides trigger points for PFOS+PFHxS in food, which represent the maximum concentrations in food that 90th percentile (i.e., high level) consumers can eat without exceeding the tolerable daily intake (TDI) of these chemicals (0.02 µg/kg/day). The trigger point for fish is 5.2 µg/kg, which was calculated on the basis of children consuming 72 g/day of fish on average. The FSANZ (2017) trigger point has been included in Table 4.6, in addition to an estimate of the number of servings of eel that an individual child could consume per week, before the TDI was exceeded, at each BAF and PFOS concentration in surface water.

A review of the data in Table 4.6 demonstrates that the extent to which PFAS bioaccumulates within fish tissue within the Kaikorai Stream and Estuary is likely to vary based on the PFAS concentrations in the waterway and the habits and characteristics of individual species and organisms, with the PFOS concentration estimates varying by more than two orders of magnitude across the range of assumptions used. These calculations do however provide a line of evidence to suggest that it is unlikely that recreational users of the waterway could typically consume sufficient locally caught aquatic biota, that consumption would result in levels of PFAS intake that are above the FSANZ (2017) TDI. For greater certainty, a catchment-scale investigation of PFAS could however include:

– The sampling and analysis of aquatic biota samples
– Engagement with local stakeholder groups, to better understand the nature and extent of fishing in the waterway.

Table 4.7 Summary of the range of PFAS concentrations

BAF (L/kg)	PFOS concentrations in eel tissue (µg/kg)	Number of servings* per week before the FSANZ (2017) TDI is exceeded
Calculated based upon 0.0004 µg/L PFOS in water		
234	0.1	379
727	0.3	122
3236	1	27
7470	3	12
Calculated based upon 0.005 µg/L PFOS in water		
234	1	30
727	4	10
3236	16	2
7470	37	1
FSANZ[6] suggests that a child serving of fish equates to approximately 75 g/day. The mean body weight of a child is assumed to be 19 kg based on FSANZ (2017).		

4.4.5 Weight of evidence assessment

The surface water dataset demonstrates that PFAS is present within the Kaikorai Stream and Estuary but, to date, the contribution of the landfill to these impacts is not readily distinguishable from the contribution of other sources within the broader catchment. Based on these results, the more detailed risk assessment has focused on the PFAS impacts present at the broader catchment scale.

Overall, the available evidence does not suggest the PFOS concentrations measured within Kaikorai Stream and Estuary are likely to result in adverse effects on human users of the area of the aquatic environment. Key lines of evidence supporting this conclusion are as follows:

– The measured PFOS concentrations are well below HEPA (2020) 95% species water quality guidelines along the length of the waterway, providing a high level of confidence that PFOS discharges from the site are unlikely to be associated with direct toxicity to aquatic organisms.

– The PFOS concentrations measured in Kaikorai Stream were of a similar order of magnitude to the HEPA (2020) ecological water quality guidelines for the protection of 99% of species and generally below the ANZG (2023) draft values. These results therefore provide a line of evidence to suggest that PFOS discharges from the site are unlikely to adversely affect the aquatic environment.

– PFAS are ubiquitous in urban settings, due to diversity of purposes for which it has been used and the PFOS concentrations measured in Kaikorai Stream and Estuary (typically less than ≤0.005 µg/L) that align with those reported by HEPA (2022) in other urban catchments (up to 0.013 µg/L).

– At the PFAS concentrations measured in the Kaikorai Stream and Estuary, a preliminary (desktop) bioaccumulation assessment suggests a high level of locally caught fish consumption would be required to result in levels of PFAS intake that are above the FSANZ (2017) TDI.

[6] https://www.foodstandards.gov.au/consumer/chemicals/mercury/documents/mif%20brochure.pdf

4.6 Data gaps

Throughout this assessment, a number of gaps have been identified in the data available to evaluate the risks to human health and the environment that are associated with the contamination status of the Kaikorai Stream. These data gaps can be summarised as follows:

- **Characterising temporal variability in discharges from the landfill:** Metals have been identified in onsite pond water at concentrations above the Tier 1 screening criteria for ecological receptors. To date, sampling within the Kaikorai Stream and Estuary have generally been undertaken when the onsite ponds are not actively releasing water into the stream and therefore the current dataset may not adequately capture situations where pulses of surface water from the onsite ponds flow into the Kaikorai Stream. To address these data gaps, additional investigations could be undertaken to assess the hydrology of the onsite ponds and the nature and extent of any discharge events from the onsite ponds into the Kaikorai Stream.
- **Characterising nutrient inputs, toxicity and eutrophication at a catchment scale:** The available dataset suggests that nitrate concentrations in the Kaikorai Stream and Estuary are periodically elevated, both upstream and downstream of the site. These impacts have the potential to adversely affect the aquatic environment, both via direct toxicity and indirect mechanisms (e.g., eutrophication and oxygen depletion). Additional investigation could be undertaken to better understand the nature of these impacts and their implications for the health of the aquatic environment.
- **Characterising metal inputs, bioavailability and toxicity at a catchment scale:** The available dataset suggests that metals and particularly zinc concentrations in the Kaikorai Stream and Estuary are periodically elevated, both upstream and downstream of the site. These impacts have the potential to adversely affect the aquatic environment primarily via direct toxicity. Additional studies, focused on understanding the bioavailability of metals in the Kaikorai catchment would assist in better understanding the relationship between the measured concentrations and any associated effects on aquatic ecology.
- **Characterising PFAS inputs at a catchment-scale:** The PFAS dataset collected form within the Kaikorai catchment to date is limited both in terms of temporal and spatial coverage, with only two sampling rounds undertaken to date at a limited number of locations. A well-designed catchment monitoring program would allow regulators to differentiate between ambient (diffuse) and point sources of PFAS to the Kaikorai Stream and Estuary and to evaluate temporal changes in the level of impact (e.g., following wet and dry periods).
- **Characterising PFAS bioaccumulation and understanding any associated risks:** The sampling and analysis of aquatic biota from across the Kaikorai catchment would provide greater certainty around the extent of PFAS bioaccumulation in aquatic food chains. In addition, engagement with local stakeholder groups would allow for a better understanding the nature and extent of fishing in the waterway.
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5. Conclusions

This HHERA has evaluated whether contamination originating from the landfill may represent a risk to the human users or environment of the catchment. The overarching purposes of this assessment were to:

– Better understand the risk to human health from PFAS which has been measured at low levels in most of the surface water monitoring sites.
– Provide additional information to ORC for potential future use in broader catchment monitoring programs addressing contamination in the Kaikorai Stream.

This HHERA provides an interim assessment, which can be built upon if additional data is collected.

A Tier 1 risk assessment was undertaken, whereby the concentrations of chemicals measured onsite and within the receiving environment were compared with conservative screening levels provided by National or International Guidelines and the chemical concentrations measured upstream of the landfill. This assessment identified that the chemical concentrations measured in surface water samples collected downstream of the landfill have generally been consistent with those measured upstream and/or below the relevant Tier 1 screening criteria. On this basis, it was concluded that discharges from the site into the receiving environment of the Kaikorai Stream generally represent a low risk to human users of the waterway and the aquatic environment.

A number of chemicals, including nitrate, zinc and PFAS were identified at concentrations above the Tier 1 screening criteria, in samples collected both upstream and downstream from the landfill, suggesting contributions from across the catchment. A broader catchment approach to the ongoing monitoring of these contaminants was recommended to inform the public about the risks associated with the recreational use and food gathering within the catchment and to support public engagement that ORC may wish to undertake, with a focus on understanding the following:

– Nutrient inputs, toxicity and eutrophication at a catchment scale.
– Metal inputs, bioavailability and toxicity at a catchment scale.
– PFAS inputs at a catchment-scale.
– PFAS bioaccumulation in the aquatic food chain and the nature and extent of fishing in the waterway.

Whilst the sampling undertaken to date may not adequately capture situations where pulses of surface water from the landfill ponds flow into the Kaikorai Stream, the monitoring data does not indicate a discernible impact to surface water quality from the landfill. However, to address these data gaps, some targeted additional investigations could be undertaken to assess the hydrology of the onsite ponds and the nature and extent of any discharge events from the onsite ponds into the Kaikorai Stream. This could supplement any work that the ORC may wish to progress in terms of a broader programme of work to better understand the catchment water quality issues associated with the historical and current land uses in the Kaikorai Stream catchment.

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Appendices

Appendix A

Figures

Map A
Paper Size A3
0 1,2502,500 5,000 7,500 10,000
Metres

Map Projection: Transverse Mercator
Horizontal Datum: NZGD 2000
Grid: NZGD 2000 New Zealand Transverse Mercator

N

Legend

Site Boundary

GHD

DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

Dunedin City Council

GREEN ISLAND LANDFILL

SITE LOCATION

Job Number	12553867
Revision	A
Date	15 Sep 2022

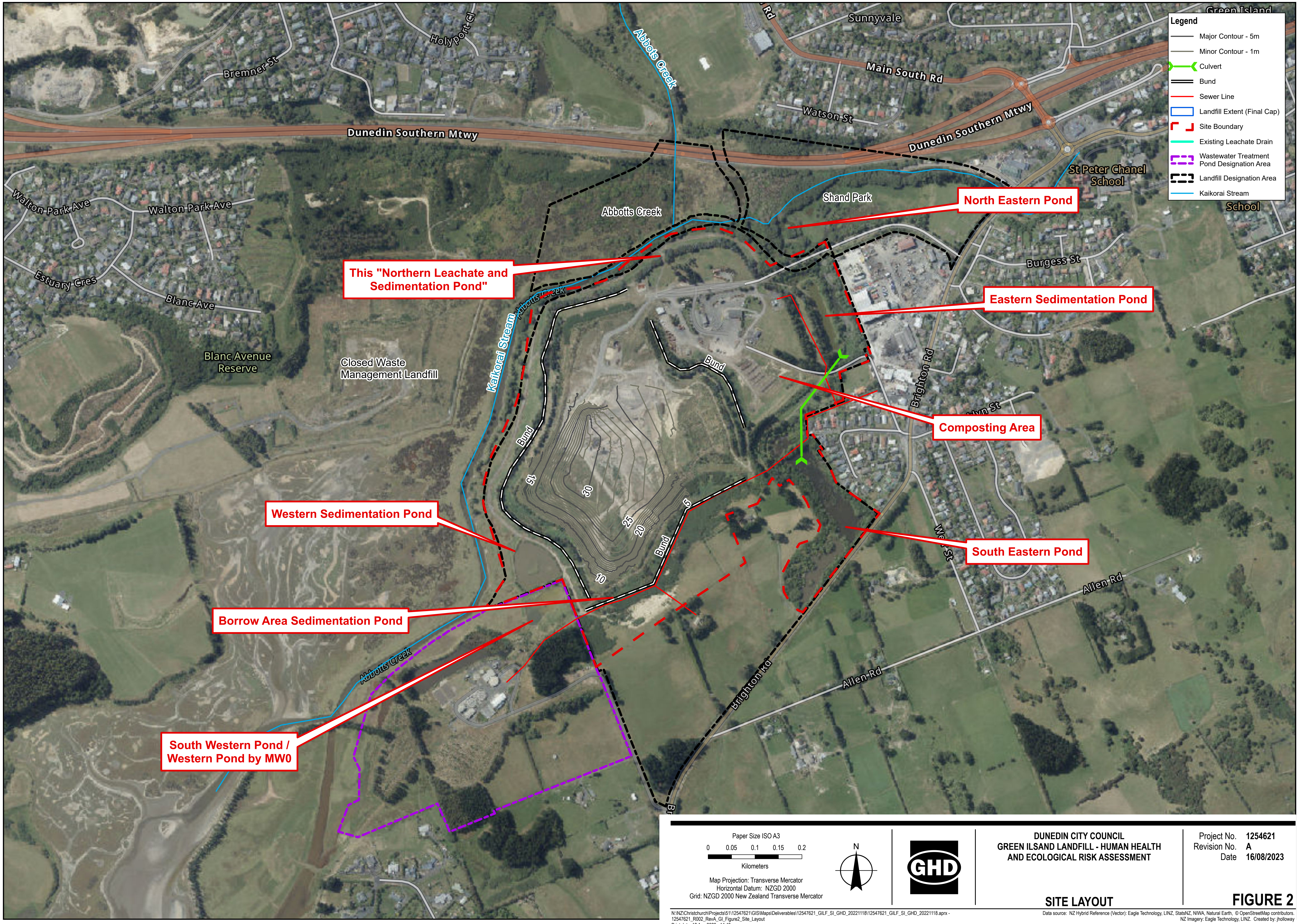
Figure 1

Map B
Paper Size A3
0 250 500 1,000 1,500 2,000
Meters

N:\NZ\Christchurch\Projects\51\12553867\GIS\Maps\Deliverables\GILF\12553867_R001_RevA_GI_Figure1_Location.mxd

Level 3 138 Victoria Street Christchurch 8141 New Zealand **T** 64 3 378 0900 **F** 64 3 377 8575 **E** chcmail@ghd.com **W** www.ghd.com

Data source: Google Earth Pro; Imagery as at April 2019, DCC; GHD_DCC_Urban_Imagery_2013, Data (GI_Site_boundaries_GHD_20180818., Roads_GILF_GHD_clip_Data_warehouse_20180818, GILF_Stream_GHD_20180818) Created by:herasmus



DUNEDIN CITY COUNCIL
GREEN ILSAND LANDFILL - HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

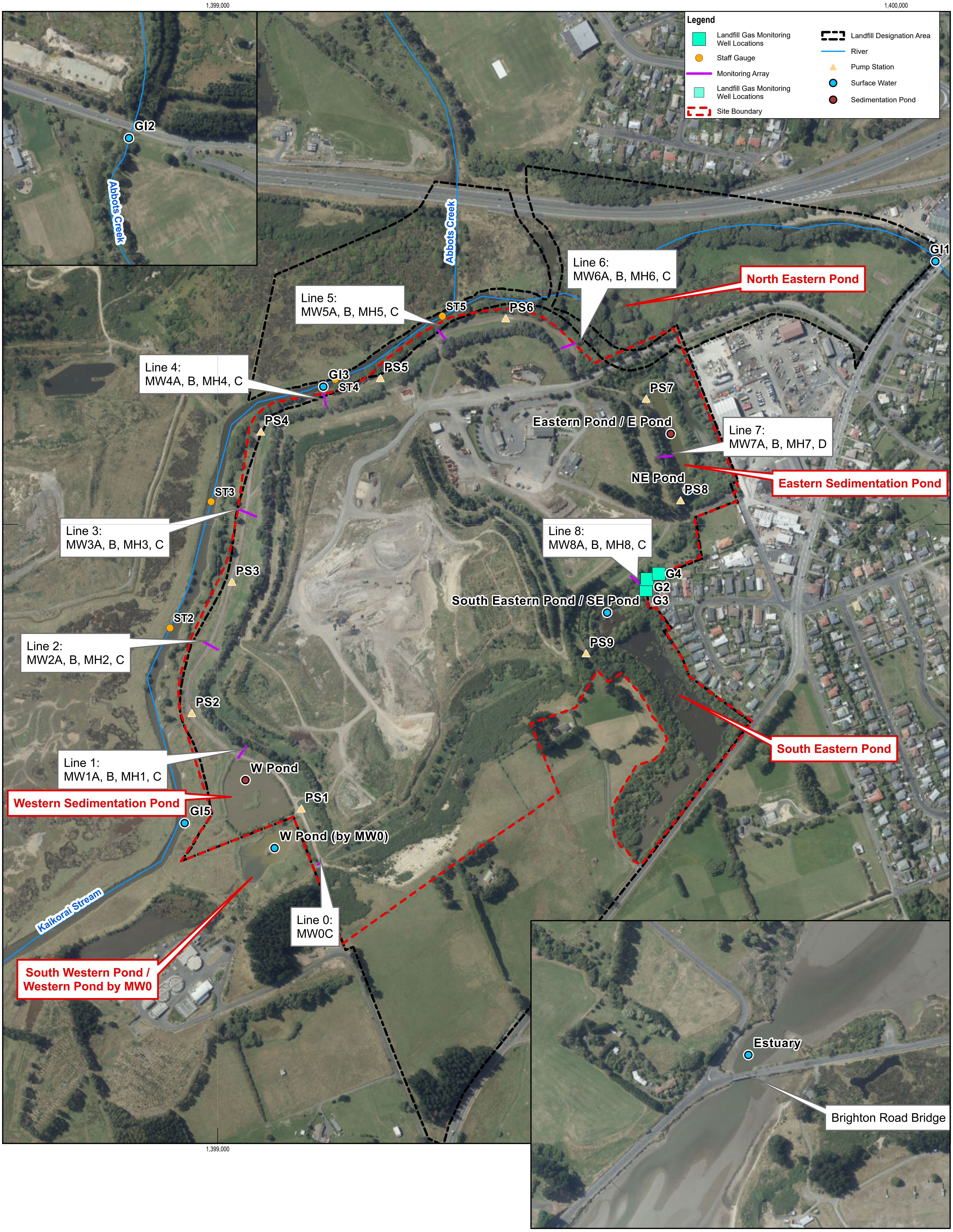
Project No. 1254621
Revision No. A
Date 16/08/2023

SITE LAYOUT

FIGURE 2

N:\NZ\Christchurch\Projects\51\12547621\GIS\Maps\Deliverables\12547621_GILF_SI_GHD_20221118\12547621_GILF_SI_GHD_20221118.aprx - 12547621_R002_RevA_GI_Figure2_Site_Layout
Print date: 18 Aug 2023 - 14:49

Data source: NZ Hybrid Reference (Vector): Eagle Technology, LINZ, StatsNZ, NIWA, Natural Earth, © OpenStreetMap contributors.
NZ Imagery: Eagle Technology, LINZ. Created by: jholloway



Paper Size ISO A3

0 0.035 0.07 0.105 0.14

Kilometers

N

GHD

DUNEDIN CITY COUNCIL
GREEN ISLAND LANDFILL - HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

APPROXIMATE EXTENT OF LANDFILLINGS

Project No. 12547621
Revision No. B
Date 17/08/2023

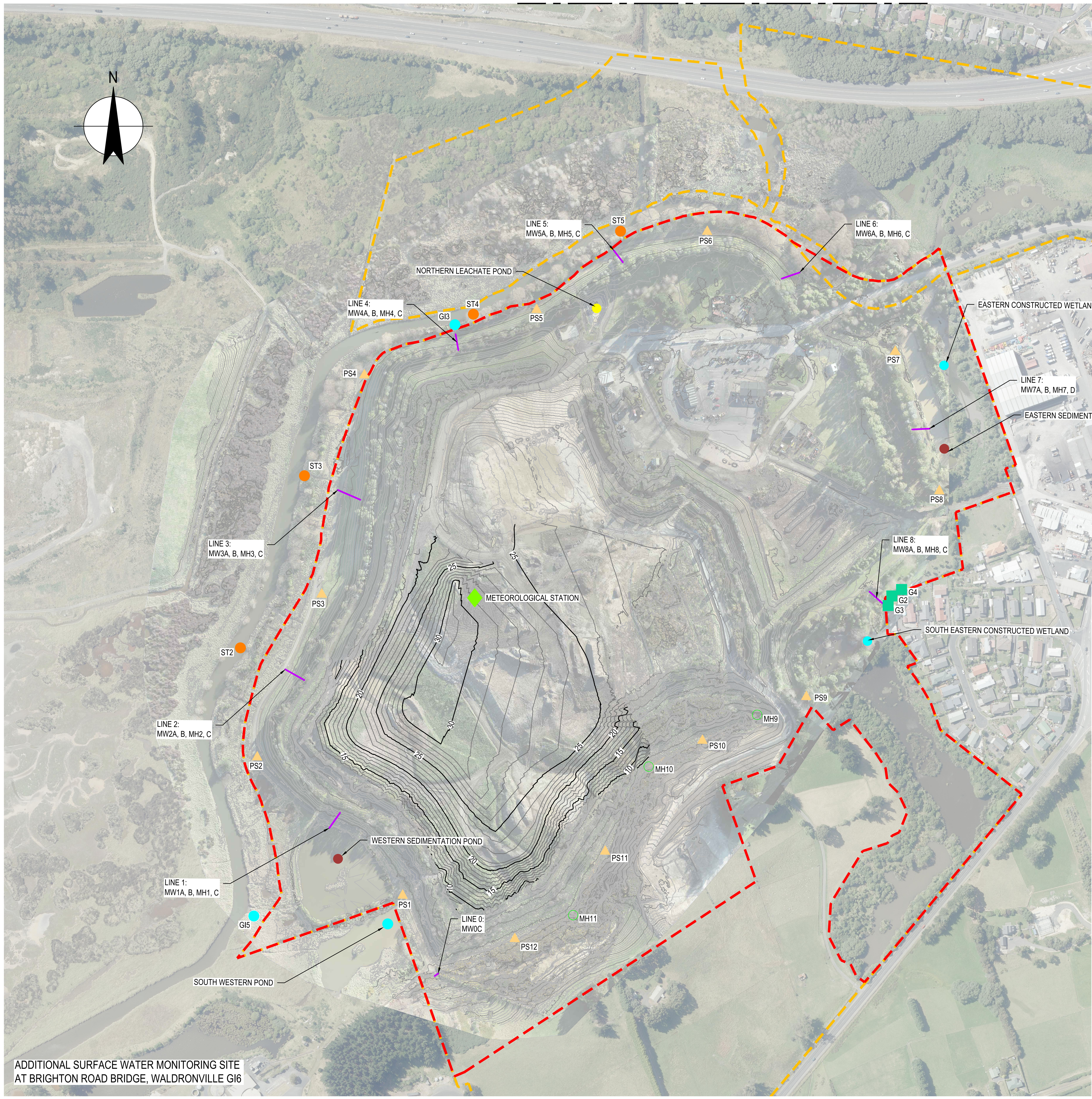
FIGURE 3

N:\NZ\Christchurch\Projects\51\12547621\GIS\Maps\Deliverables\12547621_GILF_SI_GHD_20221118\12547621_GILF_SI_GHD_20221118.aprx - 12547621_R003_RevB_GI_Figure3_Sampling_Locations
Print date: 18 Aug 2023 - 14:52

Data source: Imagery/newzealand: Eagle Technology, Land Information New Zealand, GEBCO, Community maps contributors. Created by: jholloway

Figure 4 *Site Catchments*

FOR CONTINUATION SEE INLET



LEGEND

- EXISITNG CONTOURS
- DESIGN CONTOURS
- LANDFILL OPERATION BOUNDARY
- DESIGNATION BOUNDARY
- LANDFILL GAS MONITORING WELL LOCATION
- STAFF GAUGE
- PUMP STATION
- MANHOLE
- SURFACE WATER MONITORING LOCATION
- SEDIMENT POND MONITORING LOCATION
- LEACHATE POND MONITORING LOCATION
- GROUND WATER MONITORING ARRAY

INLET

ENVIRONMENTAL MONITORING PLAN

SCALE 1:2500

FOR CONSENT NOT FOR CONSTRUCTION

Rev	Description	Checked	Approved	Date
A	PRELIMINARY ISSUE	PM*	PD*	16.12.22

Author R.LOPEZ — Drafting Check
Designer — Design Check

0 25 50 75 100 125m
SCALE 1:2500 AT ORIGINAL SIZE

DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

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www.ghd.com

GHD Limited

Project No. 12547621

Client: DUNEDIN CITY COUNCIL
Project: GREEN ISLAND LANDFILL CLOSURE
Status: PRELIMINARY — Status Code S2
Drawing Title: ENVIRONMENTAL MONITORING PLAN
Size A1
Drawing No. 12547621-C601
Rev A

Plot Date: 13 March 2023 - 8:40 AM Plotted by: Riken Joshua Lopez File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C601.dwg

Appendix B

Consolidated analytical result summary tables

The National Climate Database

NIWA Taihoro Nukurangi

Station information:

Name	Agent Number	Network Number	Latitude (dec.deg)	Longitude (dec.deg)	Height (m)	Position Precision	Observing Authority
Dunedin, Musselburgh Ews	15752	I50954	-45.90129	170.51470	4	H	NIWA

Note: Position precision types are: "W" = based on whole minutes, "T" = estimated to tenth minute, "G" = derived from gridref, "E" = error cases derived from gridref, "H" = based on GPS readings (NZGD49), "D" = by definition i.e. grid points. **For more info**

Back to Database Query Form

Rain: Daily

Station	Date (NZST)	Amount (mm)	SofG	Deficit (mm)	Runoff (mm)	Period (Hrs)	Freq
15752	01/01/2022	0.0	-	112.4	0.0	24	D
15752	02/01/2022	0.0	-	114.5	0.0	24	D
15752	03/01/2022	0.0	-	116.4	0.0	24	D
15752	04/01/2022	0.0	-	118.3	0.0	24	D
15752	05/01/2022	0.0	-	120.0	0.0	24	D
15752	06/01/2022	1.0	-	120.7	0.0	24	D
15752	07/01/2022	0.2	-	122.1	0.0	24	D
15752	08/01/2022	0.8	-	122.9	0.0	24	D
15752	09/01/2022	0.0	-	124.4	0.0	24	D
15752	10/01/2022	2.8	-	123.0	0.0	24	D
15752	11/01/2022	0.0	-	124.5	0.0	24	D
15752	12/01/2022	0.8	-	125.1	0.0	24	D
15752	13/01/2022	0.4	-	126.1	0.0	24	D
15752	14/01/2022	0.0	-	127.4	0.0	24	D
15752	15/01/2022	0.0	-	128.6	0.0	24	D
15752	16/01/2022	0.0	-	129.8	0.0	24	D
15752	17/01/2022	0.0	-	130.9	0.0	24	D
15752	18/01/2022	0.0	-	132.0	0.0	24	D
15752	19/01/2022	7.8	-	125.2	0.0	24	D
15752	20/01/2022	12.6	-	114.0	0.0	24	D
15752	21/01/2022	0.8	-	115.2	0.0	24	D
15752	22/01/2022	0.0	-	117.1	0.0	24	D
15752	23/01/2022	0.0	-	118.9	0.0	24	D
15752	24/01/2022	0.0	-	120.6	0.0	24	D
15752	25/01/2022	0.0	-	122.2	0.0	24	D
15752	26/01/2022	0.0	-	123.8	0.0	24	D
15752	27/01/2022	1.8	-	123.4	0.0	24	D
15752	28/01/2022	0.6	-	124.3	0.0	24	D
15752	29/01/2022	0.0	-	125.7	0.0	24	D
15752	30/01/2022	0.4	-	126.7	0.0	24	D
15752	31/01/2022	0.2	-	127.8	0.0	24	D
15752	01/02/2022	0.0	-	129.0	0.0	24	D
15752	02/02/2022	1.0	-	128.9	0.0	24	D
15752	03/02/2022	1.2	-	128.6	0.0	24	D
15752	04/02/2022	8.6	-	120.9	0.0	24	D
15752	05/02/2022	14.6	-	107.5	0.0	24	D
15752	06/02/2022	0.0	-	109.3	0.0	24	D
15752	07/02/2022	0.2	-	110.8	0.0	24	D
15752	08/02/2022	0.0	-	112.5	0.0	24	D
15752	09/02/2022	0.0	-	114.1	0.0	24	D
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15752	17/02/2022	0.0	-	107.5	0.0	24	D

15752	18/02/2022	0.0	-	109.3	0.0	24	D
15752	19/02/2022	0.0	-	111.0	0.0	24	D
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15752	28/02/2022	0.0	-	115.2	0.0	24	D
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15752	26/03/2022	0.0	-	129.4	0.0	24	D
15752	27/03/2022	0.0	-	130.1	0.0	24	D
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15752	31/03/2022	0.0	-	132.7	0.0	24	D
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15752	20/04/2022	0.0	-	124.8	0.0	24	D
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15752	26/06/2022	0.0	-	99.3	0.0	24	D
15752	27/06/2022	0.0	-	99.9	0.0	24	D

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15752	29/06/2022	0.2	-	91.6	0.0	24	D
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15752	03/07/2022	0.0	-	93.5	0.0	24	D
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15752	05/07/2022	0.0	-	94.6	0.0	24	D
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15752	17/07/2022	0.0	-	0.7	0.0	24	D
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15752	19/07/2022	3.6	-	0.0	1.4	24	D
15752	20/07/2022	3.4	-	0.0	2.7	24	D
15752	21/07/2022	1.0	-	0.0	0.3	24	D
15752	22/07/2022	2.4	-	0.0	1.7	24	D
15752	23/07/2022	0.0	-	0.7	0.0	24	D
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15752	26/07/2022	21.2	-	0.0	18.4	24	D
15752	27/07/2022	52.2	-	0.0	51.5	24	D
15752	28/07/2022	21.2	-	0.0	20.5	24	D
15752	29/07/2022	1.8	-	0.0	1.1	24	D
15752	30/07/2022	0.6	-	0.1	0.0	24	D
15752	31/07/2022	0.0	-	0.9	0.0	24	D
15752	01/08/2022	1.4	-	0.2	0.0	24	D
15752	02/08/2022	0.0	-	1.3	0.0	24	D
15752	03/08/2022	0.0	-	2.4	0.0	24	D
15752	04/08/2022	0.0	-	3.5	0.0	24	D
15752	05/08/2022	0.0	-	4.6	0.0	24	D
15752	06/08/2022	0.0	-	5.7	0.0	24	D
15752	07/08/2022	1.4	-	5.5	0.0	24	D
15752	08/08/2022	8.8	-	0.0	2.2	24	D
15752	09/08/2022	0.2	-	0.9	0.0	24	D
15752	10/08/2022	0.2	-	1.8	0.0	24	D
15752	11/08/2022	2.8	-	0.1	0.0	24	D
15752	12/08/2022	0.0	-	1.2	0.0	24	D
15752	13/08/2022	0.0	-	2.3	0.0	24	D
15752	14/08/2022	0.0	-	3.4	0.0	24	D
15752	15/08/2022	0.0	-	4.5	0.0	24	D
15752	16/08/2022	0.0	-	5.7	0.0	24	D
15752	17/08/2022	0.2	-	6.6	0.0	24	D
15752	18/08/2022	0.0	-	7.7	0.0	24	D
15752	19/08/2022	2.4	-	6.4	0.0	24	D
15752	20/08/2022	0.2	-	7.3	0.0	24	D
15752	21/08/2022	0.0	-	8.4	0.0	24	D
15752	22/08/2022	0.0	-	9.5	0.0	24	D
15752	23/08/2022	0.0	-	10.6	0.0	24	D
15752	24/08/2022	0.4	-	11.3	0.0	24	D
15752	25/08/2022	0.4	-	12.0	0.0	24	D
15752	26/08/2022	0.0	-	13.1	0.0	24	D
15752	27/08/2022	0.0	-	14.2	0.0	24	D
15752	28/08/2022	0.6	-	14.7	0.0	24	D
15752	29/08/2022	0.0	-	15.8	0.0	24	D
15752	30/08/2022	0.0	-	16.9	0.0	24	D
15752	31/08/2022	0.0	-	18.0	0.0	24	D

15752	01/09/2022	0.0	-	19.2	0.0	24	D
15752	02/09/2022	1.0	-	19.8	0.0	24	D
15752	03/09/2022	0.2	-	21.3	0.0	24	D
15752	04/09/2022	1.6	-	21.4	0.0	24	D
15752	05/09/2022	0.4	-	22.7	0.0	24	D
15752	06/09/2022	3.6	-	20.8	0.0	24	D
15752	07/09/2022	0.0	-	22.5	0.0	24	D
15752	08/09/2022	2.8	-	21.4	0.0	24	D
15752	09/09/2022	0.0	-	23.1	0.0	24	D
15752	10/09/2022	0.0	-	24.8	0.0	24	D
15752	11/09/2022	0.0	-	26.5	0.0	24	D
15752	12/09/2022	0.2	-	28.0	0.0	24	D
15752	13/09/2022	8.4	-	21.3	0.0	24	D
15752	14/09/2022	5.0	-	18.0	0.0	24	D
15752	15/09/2022	0.0	-	19.7	0.0	24	D
15752	16/09/2022	2.2	-	19.2	0.0	24	D
15752	17/09/2022	0.0	-	20.8	0.0	24	D
15752	18/09/2022	0.0	-	22.5	0.0	24	D
15752	19/09/2022	0.0	-	24.2	0.0	24	D
15752	20/09/2022	0.0	-	25.9	0.0	24	D
15752	21/09/2022	1.0	-	26.6	0.0	24	D
15752	22/09/2022	0.0	-	28.3	0.0	24	D
15752	23/09/2022	0.0	-	30.0	0.0	24	D
15752	24/09/2022	0.0	-	31.7	0.0	24	D
15752	25/09/2022	0.6	-	32.8	0.0	24	D
15752	26/09/2022	4.2	-	30.3	0.0	24	D
15752	27/09/2022	0.0	-	32.0	0.0	24	D
15752	28/09/2022	0.0	-	33.7	0.0	24	D
15752	29/09/2022	0.0	-	35.4	0.0	24	D
15752	30/09/2022	4.2	-	32.9	0.0	24	D
15752	01/10/2022	0.0	-	34.6	0.0	24	D
15752	02/10/2022	0.0	-	37.3	0.0	24	D
15752	03/10/2022	0.0	-	40.1	0.0	24	D
15752	04/10/2022	0.2	-	42.6	0.0	24	D
15752	05/10/2022	10.2	-	35.2	0.0	24	D
15752	06/10/2022	4.6	-	33.3	0.0	24	D
15752	07/10/2022	5.2	-	30.9	0.0	24	D
15752	08/10/2022	0.0	-	33.6	0.0	24	D
15752	09/10/2022	0.0	-	36.4	0.0	24	D
15752	10/10/2022	0.0	-	39.1	0.0	24	D
15752	11/10/2022	0.0	-	41.9	0.0	24	D
15752	12/10/2022	1.6	-	43.1	0.0	24	D
15752	13/10/2022	0.0	-	45.8	0.0	24	D
15752	14/10/2022	0.0	-	48.6	0.0	24	D
15752	15/10/2022	0.0	-	51.3	0.0	24	D
15752	16/10/2022	0.0	-	54.1	0.0	24	D
15752	17/10/2022	3.2	-	53.6	0.0	24	D
15752	18/10/2022	9.4	-	47.0	0.0	24	D
15752	19/10/2022	0.0	-	49.7	0.0	24	D
15752	20/10/2022	0.4	-	52.1	0.0	24	D
15752	21/10/2022	0.2	-	54.7	0.0	24	D
15752	22/10/2022	0.0	-	57.4	0.0	24	D
15752	23/10/2022	0.0	-	60.2	0.0	24	D
15752	24/10/2022	2.6	-	60.3	0.0	24	D
15752	25/10/2022	1.8	-	61.3	0.0	24	D
15752	26/10/2022	0.0	-	64.0	0.0	24	D
15752	27/10/2022	2.0	-	64.8	0.0	24	D
15752	28/10/2022	13.0	-	54.5	0.0	24	D
15752	29/10/2022	0.4	-	56.9	0.0	24	D
15752	30/10/2022	2.8	-	56.8	0.0	24	D
15752	31/10/2022	0.0	-	59.6	0.0	24	D
15752	01/11/2022	0.0	-	62.4	0.0	24	D
15752	02/11/2022	0.0	-	65.9	0.0	24	D
15752	03/11/2022	1.6	-	67.9	0.0	24	D
15752	04/11/2022	0.0	-	71.4	0.0	24	D

15752	05/11/2022	0.2	-	74.8	0.0	24	D
15752	06/11/2022	0.0	-	78.4	0.0	24	D
15752	07/11/2022	0.0	-	81.8	0.0	24	D
15752	08/11/2022	0.4	-	84.6	0.0	24	D
15752	09/11/2022	0.0	-	87.7	0.0	24	D
15752	10/11/2022	0.0	-	90.7	0.0	24	D
15752	11/11/2022	0.0	-	93.5	0.0	24	D
15752	12/11/2022	0.0	-	96.2	0.0	24	D
15752	13/11/2022	0.0	-	98.7	0.0	24	D
15752	14/11/2022	1.6	-	99.6	0.0	24	D
15752	15/11/2022	0.0	-	102.0	0.0	24	D
15752	16/11/2022	0.8	-	103.5	0.0	24	D
15752	17/11/2022	2.4	-	103.3	0.0	24	D
15752	18/11/2022	0.0	-	105.5	0.0	24	D
15752	19/11/2022	3.8	-	103.8	0.0	24	D
15752	20/11/2022	8.2	-	97.8	0.0	24	D
15752	21/11/2022	2.6	-	97.7	0.0	24	D
15752	22/11/2022	0.2	-	100.0	0.0	24	D
15752	23/11/2022	0.0	-	102.3	0.0	24	D
15752	24/11/2022	0.2	-	104.4	0.0	24	D
15752	25/11/2022	0.0	-	106.6	0.0	24	D
15752	26/11/2022	0.4	-	108.2	0.0	24	D
15752	27/11/2022	0.6	-	109.6	0.0	24	D
15752	28/11/2022	0.0	-	111.5	0.0	24	D
15752	29/11/2022	1.0	-	112.4	0.0	24	D
15752	30/11/2022	2.2	-	112.0	0.0	24	D
15752	01/12/2022	0.6	-	113.2	0.0	24	D
15752	02/12/2022	0.0	-	115.0	0.0	24	D
15752	03/12/2022	3.0	-	113.7	0.0	24	D
15752	04/12/2022	0.0	-	115.5	0.0	24	D
15752	05/12/2022	0.4	-	116.8	0.0	24	D
15752	06/12/2022	1.4	-	117.0	0.0	24	D
15752	07/12/2022	1.6	-	117.0	0.0	24	D
15752	08/12/2022	0.0	-	118.7	0.0	24	D
15752	09/12/2022	0.2	-	120.0	0.0	24	D
15752	10/12/2022	0.0	-	121.5	0.0	24	D
15752	11/12/2022	9.6	-	113.3	0.0	24	D
15752	12/12/2022	0.0	-	115.1	0.0	24	D
15752	13/12/2022	0.0	-	116.8	0.0	24	D
15752	14/12/2022	0.0	-	118.4	0.0	24	D
15752	15/12/2022	0.0	-	120.0	0.0	24	D
15752	16/12/2022	0.0	-	121.5	0.0	24	D
15752	17/12/2022	4.0	-	118.9	0.0	24	D
15752	18/12/2022	0.4	-	120.0	0.0	24	D
15752	19/12/2022	0.2	-	121.3	0.0	24	D
15752	20/12/2022	1.4	-	121.3	0.0	24	D
15752	21/12/2022	2.0	-	120.7	0.0	24	D
15752	22/12/2022	0.0	-	122.1	0.0	24	D
15752	23/12/2022	0.0	-	123.5	0.0	24	D
15752	24/12/2022	0.8	-	124.0	0.0	24	D
15752	25/12/2022	1.2	-	124.1	0.0	24	D
15752	26/12/2022	0.6	-	124.8	0.0	24	D
15752	27/12/2022	0.0	-	126.0	0.0	24	D
15752	28/12/2022	0.0	-	127.2	0.0	24	D
15752	29/12/2022	0.0	-	128.3	0.0	24	D
15752	30/12/2022	2.8	-	126.6	0.0	24	D
15752	31/12/2022	0.0	-	127.7	0.0	24	D
15752	01/01/2023	0.0	-	128.8	0.0	24	D
15752	02/01/2023	0.0	-	130.1	0.0	24	D
15752	03/01/2023	0.0	-	131.3	0.0	24	D
15752	04/01/2023	0.0	-	132.5	0.0	24	D
15752	05/01/2023	0.0	-	133.6	0.0	24	D
15752	06/01/2023	0.4	-	134.2	0.0	24	D
15752	07/01/2023	14.2	-	120.9	0.0	24	D
15752	08/01/2023	0.0	-	122.7	0.0	24	D

15752	09/01/2023	0.0	-	124.4	0.0	24	D
15752	10/01/2023	0.0	-	125.9	0.0	24	D
15752	11/01/2023	0.4	-	127.0	0.0	24	D
15752	12/01/2023	2.6	-	125.8	0.0	24	D
15752	13/01/2023	0.0	-	127.3	0.0	24	D
15752	14/01/2023	0.0	-	128.7	0.0	24	D
15752	15/01/2023	0.0	-	130.0	0.0	24	D
15752	16/01/2023	0.0	-	131.2	0.0	24	D
15752	17/01/2023	0.0	-	132.4	0.0	24	D
15752	18/01/2023	1.4	-	132.0	0.0	24	D
15752	19/01/2023	0.0	-	133.1	0.0	24	D
15752	20/01/2023	0.0	-	134.2	0.0	24	D
15752	21/01/2023	1.8	-	133.3	0.0	24	D
15752	22/01/2023	0.0	-	134.3	0.0	24	D
15752	23/01/2023	0.8	-	134.5	0.0	24	D
15752	24/01/2023	0.0	-	135.5	0.0	24	D
15752	25/01/2023	0.2	-	136.1	0.0	24	D
15752	26/01/2023	0.0	-	137.0	0.0	24	D
15752	27/01/2023	0.0	-	137.8	0.0	24	D
15752	28/01/2023	2.4	-	136.1	0.0	24	D
15752	29/01/2023	0.0	-	137.0	0.0	24	D
15752	30/01/2023	0.0	-	137.8	0.0	24	D
15752	31/01/2023	0.0	-	138.5	0.0	24	D
15752	01/02/2023	0.0	-	139.2	0.0	24	D
15752	02/02/2023	0.4	-	139.4	0.0	24	D
15752	03/02/2023	0.0	-	140.0	0.0	24	D
15752	04/02/2023	0.0	-	140.5	0.0	24	D
15752	05/02/2023	0.0	-	141.0	0.0	24	D
15752	06/02/2023	1.0	-	140.5	0.0	24	D
15752	07/02/2023	0.0	-	141.0	0.0	24	D
15752	08/02/2023	0.2	-	141.3	0.0	24	D
15752	09/02/2023	0.4	-	141.4	0.0	24	D
15752	10/02/2023	0.8	-	141.0	0.0	24	D
15752	11/02/2023	0.0	-	141.5	0.0	24	D
15752	12/02/2023	0.0	-	142.0	0.0	24	D
15752	13/02/2023	0.0	-	142.4	0.0	24	D
15752	14/02/2023	0.0	-	142.8	0.0	24	D
15752	15/02/2023	0.0	-	143.2	0.0	24	D
15752	16/02/2023	0.0	-	143.6	0.0	24	D
15752	17/02/2023	0.0	-	143.9	0.0	24	D
15752	18/02/2023	0.0	-	144.2	0.0	24	D
15752	19/02/2023	0.0	-	144.6	0.0	24	D
15752	20/02/2023	0.0	-	144.8	0.0	24	D
15752	21/02/2023	0.0	-	145.1	0.0	24	D
15752	22/02/2023	23.8	-	121.6	0.0	24	D
15752	23/02/2023	4.2	-	118.9	0.0	24	D
15752	24/02/2023	3.0	-	117.6	0.0	24	D
15752	25/02/2023	0.0	-	119.3	0.0	24	D
15752	26/02/2023	0.0	-	121.0	0.0	24	D
15752	27/02/2023	0.0	-	122.6	0.0	24	D
15752	28/02/2023	0.0	-	124.0	0.0	24	D
15752	01/03/2023	0.0	-	125.4	0.0	24	D
15752	02/03/2023	0.0	-	126.3	0.0	24	D
15752	03/03/2023	0.0	-	127.1	0.0	24	D
15752	04/03/2023	3.2	-	124.6	0.0	24	D
15752	05/03/2023	21.6	-	103.9	0.0	24	D
15752	06/03/2023	0.0	-	105.5	0.0	24	D
15752	07/03/2023	0.0	-	107.0	0.0	24	D
15752	08/03/2023	0.0	-	108.5	0.0	24	D
15752	09/03/2023	0.0	-	109.9	0.0	24	D
15752	10/03/2023	2.0	-	109.2	0.0	24	D
15752	11/03/2023	0.0	-	110.6	0.0	24	D
15752	12/03/2023	0.0	-	111.9	0.0	24	D
15752	13/03/2023	12.6	-	100.6	0.0	24	D
15752	14/03/2023	3.4	-	98.9	0.0	24	D

15752	15/03/2023	0.0	-	100.7	0.0	24	D
15752	16/03/2023	0.0	-	102.3	0.0	24	D
15752	17/03/2023	0.4	-	103.6	0.0	24	D
15752	18/03/2023	11.6	-	93.5	0.0	24	D
15752	19/03/2023	0.0	-	95.4	0.0	24	D
15752	20/03/2023	0.0	-	97.3	0.0	24	D
15752	21/03/2023	18.2	-	80.9	0.0	24	D
15752	22/03/2023	13.0	-	70.2	0.0	24	D
15752	23/03/2023	0.8	-	72.0	0.0	24	D
15752	24/03/2023	0.0	-	74.5	0.0	24	D
15752	25/03/2023	0.4	-	76.7	0.0	24	D
15752	26/03/2023	0.4	-	78.8	0.0	24	D
15752	27/03/2023	0.0	-	81.2	0.0	24	D
15752	28/03/2023	14.6	-	68.9	0.0	24	D
15752	29/03/2023	3.2	-	68.3	0.0	24	D
15752	30/03/2023	0.4	-	70.4	0.0	24	D
15752	31/03/2023	0.0	-	73.0	0.0	24	D
15752	01/04/2023	0.2	-	75.3	0.0	24	D
15752	02/04/2023	0.4	-	76.4	0.0	24	D
15752	03/04/2023	0.8	-	77.1	0.0	24	D
15752	04/04/2023	0.0	-	78.5	0.0	24	D
15752	05/04/2023	0.0	-	80.0	0.0	24	D
15752	06/04/2023	0.0	-	81.4	0.0	24	D
15752	07/04/2023	0.0	-	82.7	0.0	24	D
15752	08/04/2023	0.0	-	84.1	0.0	24	D
15752	09/04/2023	0.0	-	85.4	0.0	24	D
15752	10/04/2023	0.8	-	85.9	0.0	24	D
15752	11/04/2023	4.8	-	82.4	0.0	24	D
15752	12/04/2023	3.6	-	80.1	0.0	24	D
15752	13/04/2023	2.4	-	79.1	0.0	24	D
15752	14/04/2023	0.2	-	80.3	0.0	24	D
15752	15/04/2023	0.0	-	81.7	0.0	24	D
15752	16/04/2023	0.0	-	83.1	0.0	24	D
15752	17/04/2023	0.0	-	84.4	0.0	24	D
15752	18/04/2023	3.0	-	82.7	0.0	24	D
15752	19/04/2023	2.0	-	82.1	0.0	24	D
15752	20/04/2023	0.0	-	83.4	0.0	24	D
15752	21/04/2023	0.0	-	84.7	0.0	24	D
15752	22/04/2023	0.0	-	86.0	0.0	24	D
15752	23/04/2023	0.0	-	87.3	0.0	24	D
15752	24/04/2023	0.6	-	88.0	0.0	24	D
15752	25/04/2023	0.0	-	89.2	0.0	24	D
15752	26/04/2023	10.8	-	79.6	0.0	24	D
15752	27/04/2023	0.0	-	81.0	0.0	24	D
15752	28/04/2023	0.0	-	82.4	0.0	24	D
15752	29/04/2023	0.0	-	83.8	0.0	24	D
15752	30/04/2023	0.0	-	85.1	0.0	24	D
15752	01/05/2023	0.0	-	86.4	0.0	24	D
15752	02/05/2023	0.0	-	87.1	0.0	24	D
15752	03/05/2023	0.0	-	87.7	0.0	24	D
15752	04/05/2023	0.0	-	88.4	0.0	24	D
15752	05/05/2023	0.0	-	89.1	0.0	24	D
15752	06/05/2023	0.4	-	89.3	0.0	24	D
15752	07/05/2023	0.0	-	90.0	0.0	24	D
15752	08/05/2023	0.0	-	90.6	0.0	24	D
15752	09/05/2023	0.0	-	91.3	0.0	24	D
15752	10/05/2023	2.4	-	89.5	0.0	24	D
15752	11/05/2023	10.0	-	80.2	0.0	24	D
15752	12/05/2023	4.6	-	76.3	0.0	24	D
15752	13/05/2023	0.0	-	77.1	0.0	24	D
15752	14/05/2023	0.2	-	77.7	0.0	24	D
15752	15/05/2023	23.6	-	54.9	0.0	24	D
15752	16/05/2023	0.0	-	55.7	0.0	24	D
15752	17/05/2023	1.0	-	55.5	0.0	24	D
15752	18/05/2023	33.8	-	22.5	0.0	24	D

15752	19/05/2023	3.4	-	19.9	0.0	24	D
15752	20/05/2023	5.6	-	15.1	0.0	24	D
15752	21/05/2023	3.4	-	12.5	0.0	24	D
15752	22/05/2023	0.0	-	13.3	0.0	24	D
15752	23/05/2023	0.0	-	14.2	0.0	24	D
15752	24/05/2023	0.2	-	14.8	0.0	24	D
15752	25/05/2023	0.0	-	15.6	0.0	24	D
15752	26/05/2023	0.0	-	16.4	0.0	24	D
15752	27/05/2023	0.0	-	17.2	0.0	24	D
15752	28/05/2023	0.0	-	18.0	0.0	24	D
15752	29/05/2023	0.0	-	18.8	0.0	24	D
15752	30/05/2023	0.0	-	19.6	0.0	24	D
15752	31/05/2023	1.2	-	19.2	0.0	24	D

Back to Database Query Form
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UserName is = **davide.menozzi@ghd.com**
Total number of rows output = 516
Number of rows remaining in subscription = 1991184

Comments to: *cliflo@niwa.co.nz*

Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type
GI1	13 Jul 2017	170713_GI2	Up gradient	Normal	17-16826	SW
GI1	02 Oct 2017	GI1	Up gradient	Normal	17-23979	SW
GI1	24 Jan 2018	GI1	Up gradient	Normal	18-02540	SW
GI1	17 Apr 2018	GI1	Up gradient	Normal	18-13881	SW
GI1	17 Jul 2018	GI1	Up gradient	Normal	18-24403	SW
GI1	16 Oct 2018	GI1	Up gradient	Normal	18-32716	SW
GI1	16 Jan 2019	GI1	Up gradient	Normal	19-01241	SW
GI1	11 Apr 2019	GI1	Up gradient	Normal	19-12447	SW
GI1	02 Jul 2019	GI1	Up gradient	Normal	19-22599	SW
GI1	07 Oct 2019	GL1	Up gradient	Normal	19-35071	SW
GI1	14 Jan 2020	GI1	Up gradient	Normal	20-01148	SW
GI1	20 May 2020	GI1	Up gradient	Normal	20-18076	SW
GI1	15 Jul 2020	GI1	Up gradient	Normal	20-25960	SW
GI1	20 Oct 2020	GI1	Up gradient	Normal	20-39688	SW
GI1	26 Jan 2021	GI1	Up gradient	Normal	21-03136	SW
GI1	16 Apr 2021	GI1	Up gradient	Normal	21-17430	SW
GI1	23 Jul 2021	GI1	Up gradient	Normal	21-32698	SW
GI1	19 Oct 2021	GI1	Up gradient	Normal	21-44167	SW
GI1	25 Jan 2022	GI1	Up gradient	Normal	2842291	SW
GI1	05 Apr 2022	GI1	Up gradient	Normal	2946978	SW
GI1	15 Jul 2022	GI1	Up gradient	Normal	3035296	SW
GI1	12 Oct 2022	GI1	Up gradient	Normal	3095310	SW
GI1	18 Jan 2023	GI1	Up gradient	Normal	23-01714	SW
GI1	13 Apr 2023	GI1	Up gradient	Normal	23-10977	SW
GI1	29/08/2023	GI1	Up gradient	Normal	ES2332296007	SW
GI2	14 Jul 2017	170714_GIAB	Up gradient	Normal	17-16826	SW
GI2	02 Oct 2017	GI2	Up gradient	Normal	17-23979	SW
GI2	24 Jan 2018	GI2	Up gradient	Normal	18-02540	SW
GI2	17 Apr 2018	GI2	Up gradient	Normal	18-13881	SW
GI2	17 Jul 2018	GI2	Up gradient	Normal	18-24403	SW
GI2	16 Oct 2018	GI2	Up gradient	Normal	18-32716	SW
GI2	16 Jan 2019	GI2	Up gradient	Normal	19-01241	SW
GI2	11 Apr 2019	GI2	Up gradient	Normal	19-12447	SW
GI2	02 Jul 2019	GI2	Up gradient	Normal	19-22599	SW
GI2	07 Oct 2019	GL2	Up gradient	Normal	19-35071	SW
GI2	14 Jan 2020	GI2	Up gradient	Normal	20-01148	SW
GI2	20 May 2020	GI2	Up gradient	Normal	20-18076	SW
GI2	15 Jul 2020	GI2	Up gradient	Normal	20-25960	SW
GI2	20 Oct 2020	GI2	Up gradient	Normal	20-39688	SW
GI2	26 Jan 2021	GI2	Up gradient	Normal	21-03136	SW
GI2	16 Apr 2021	GI2	Up gradient	Normal	21-17430	SW
GI2	23 Jul 2021	GI2	Up gradient	Normal	21-32698	SW
GI2	19 Oct 2021	GI2	Up gradient	Normal	21-44167	SW
GI2	25 Jan 2022	GI2	Up gradient	Normal	2842291	SW
GI2	05 Apr 2022	GI2	Up gradient	Normal	2946978	SW
GI2	15 Jul 2022	GI2	Up gradient	Normal	3035296	SW
GI2	12 Oct 2022	GI2	Up gradient	Normal	3095310	SW
GI2	18 Jan 2023	Dup 01	Up gradient	Field_D	23-01704	SW
GI2	18 Jan 2023	GI2	Up gradient	Normal	23-01714	SW
GI2	13 Apr 2023	GI2	Up gradient	Normal	23-10977	SW
GI2	29/08/2023	GI2	Up gradient	Normal	ES2332296008	SW

Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type
GI3	13 Jul 2017	170713_GI3	Down gradient	Normal	17-16826	SW
GI3	03 Oct 2017	GI3	Down gradient	Normal	17-23979	SW
GI3	24 Jan 2018	GI3	Down gradient	Normal	18-02540	SW
GI3	17 Apr 2018	GI3	Down gradient	Normal	18-13881	SW
GI3	17 Jul 2018	GI3	Down gradient	Normal	18-24403	SW
GI3	16 Oct 2018	GI3	Down gradient	Normal	18-32716	SW
GI3	16 Jan 2019	GI3	Down gradient	Normal	19-01241	SW
GI3	11 Apr 2019	GI3	Down gradient	Normal	19-12447	SW
GI3	02 Jul 2019	GI3	Down gradient	Normal	19-22599	SW
GI3	07 Oct 2019	GL3	Down gradient	Normal	19-35071	SW
GI3	14 Jan 2020	GI3	Down gradient	Normal	20-01148	SW
GI3	20 May 2020	GI3	Down gradient	Normal	20-18076	SW
GI3	15 Jul 2020	GI3	Down gradient	Normal	20-25960	SW
GI3	20 Oct 2020	GI3	Down gradient	Normal	20-39688	SW
GI3	26 Jan 2021	GI3	Down gradient	Normal	21-03136	SW
GI3	16 Apr 2021	GI3	Down gradient	Normal	21-17430	SW
GI3	23 Jul 2021	GI3	Down gradient	Normal	21-32698	SW
GI3	19 Oct 2021	GI3	Down gradient	Normal	21-44167	SW
GI3	25 Jan 2022	GI3	Down gradient	Normal	2842291	SW
GI3	05 Apr 2022	GI3	Down gradient	Normal	2946978	SW
GI3	15 Jul 2022	GI3	Down gradient	Normal	3035296	SW
GI3	12 Oct 2022	GI3	Down gradient	Normal	3095310	SW
GI3	18 Jan 2023	GI3	Down gradient	Normal	23-01714	SW
GI3	13 Apr 2023	GI3	Down gradient	Normal	23-10977	SW
GI3	29/08/2023	GI3	Down gradient	Normal	ES2332296009	SW
GI5	14 Jul 2017	170714_GI5	Down gradient	Normal	17-16826	SW
GI5	26 Jul 2017	G15	Down gradient	Normal	17-17747	SW
GI5	03 Oct 2017	GI5	Down gradient	Normal	17-23979	SW
GI5	24 Jan 2018	GI5	Down gradient	Normal	18-02540	SW
GI5	17 Apr 2018	GI5	Down gradient	Normal	18-13881	SW
GI5	17 Jul 2018	GI5	Down gradient	Normal	18-24403	SW
GI5	16 Oct 2018	GI5	Down gradient	Normal	18-32716	SW
GI5	16 Jan 2019	GI5	Down gradient	Normal	19-01241	SW
GI5	11 Apr 2019	GI5	Down gradient	Normal	19-12447	SW
GI5	02 Jul 2019	GI5	Down gradient	Normal	19-22599	SW
GI5	07 Oct 2019	GL5	Down gradient	Normal	19-35071	SW
GI5	14 Jan 2020	GI5	Down gradient	Normal	20-01148	SW
GI5	20 May 2020	GI5	Down gradient	Normal	20-18076	SW
GI5	15 Jul 2020	GI5	Down gradient	Normal	20-25960	SW
GI5	20 Oct 2020	GI5	Down gradient	Normal	20-39688	SW
GI5	26 Jan 2021	GI5	Down gradient	Normal	21-03136	SW
GI5	16 Apr 2021	GI5	Down gradient	Normal	21-17430	SW
GI5	23 Jul 2021	GI5	Down gradient	Normal	21-32698	SW
GI5	19 Oct 2021	GI5	Down gradient	Normal	21-44167	SW
GI5	25 Jan 2022	GI5	Down gradient	Normal	2842291	SW
GI5	05 Apr 2022	GI5	Down gradient	Normal	2946978	SW
GI5	15 Jul 2022	GI5	Down gradient	Normal	3035296	SW
GI5	12 Oct 2022	GI5	Down gradient	Normal	3095310	SW
GI5	18 Jan 2023	GI5	Down gradient	Normal	23-01714	SW
GI5	13 Apr 2023	GI5	Down gradient	Normal	23-10977	SW
GI5	29/08/2023	GI5	Down gradient	Normal	ES2332296010	SW
Estuary	18 Oct 2021	Estuary	Down gradient	Normal	21-44426	SW
Estuary	25 Jan 2022	Estuary	Down gradient	Normal	2842292	SW
Estuary	02 Apr 2022	Estuary	Down gradient	Normal	2942228	SW
Estuary	14 Jul 2022	Estuary	Down gradient	Normal	3034726	SW
Estuary	12 Oct 2022	Estuary	Down gradient	Normal	3095333	SW
Estuary	18 Jan 2023	Estuary	Down gradient	Normal	23-01704	SW
Estuary	08 Feb 2023	Estuary	Down gradient	Normal	3168264	SW
Estuary	11 Apr 2023	Estuary	Down gradient	Normal	23-11202	SW
Estuary	11 Apr 2023	ESTUARY	Down gradient	Normal	ES2313255	SW
Estuary	29/08/2023	ESTUARY	Down gradient	Normal	ES2332296006	SW

Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	PFHxS (di-branched)	PFHxS (mono-branched)	PFHxS (Total)	PFOS (di-branched)	PFOS (mono-branched)	PFOS (Total)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecanesulfonic acid (PFDS)
							µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
GI1	13 Jul 2017	170713_GI2	Up gradient	Normal	17-16826	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	02 Oct 2017	GI1	Up gradient	Normal	17-23979	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	24 Jan 2018	GI1	Up gradient	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	17 Apr 2018	GI1	Up gradient	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	17 Jul 2018	GI1	Up gradient	Normal	18-24403	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	16 Oct 2018	GI1	Up gradient	Normal	18-32716	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	16 Jan 2019	GI1	Up gradient	Normal	19-01241	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	11 Apr 2019	GI1	Up gradient	Normal	19-12447	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	02 Jul 2019	GI1	Up gradient	Normal	19-22599	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	07 Oct 2019	GL1	Up gradient	Normal	19-35071	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	14 Jan 2020	GI1	Up gradient	Normal	20-01148	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	20 May 2020	GI1	Up gradient	Normal	20-18076	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	15 Jul 2020	GI1	Up gradient	Normal	20-25960	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	20 Oct 2020	GI1	Up gradient	Normal	20-39688	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	26 Jan 2021	GI1	Up gradient	Normal	21-03136	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	16 Apr 2021	GI1	Up gradient	Normal	21-17430	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	23 Jul 2021	GI1	Up gradient	Normal	21-32698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	19 Oct 2021	GI1	Up gradient	Normal	21-44167	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	25 Jan 2022	GI1	Up gradient	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	05 Apr 2022	GI1	Up gradient	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	15 Jul 2022	GI1	Up gradient	Normal	3035296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	12 Oct 2022	GI1	Up gradient	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	18 Jan 2023	GI1	Up gradient	Normal	23-01714	SW	<0.010	<0.010	0.002	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	-	<0.0010
GI1	13 Apr 2023	GI1	Up gradient	Normal	23-10977	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	29/08/2023	GI1	Up gradient	Normal	ES2332296007	SW	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	-	<0.0005
GI2	14 Jul 2017	170714_GIAB	Up gradient	Normal	17-16826	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	02 Oct 2017	GI2	Up gradient	Normal	17-23979	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	24 Jan 2018	GI2	Up gradient	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	17 Apr 2018	GI2	Up gradient	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	17 Jul 2018	GI2	Up gradient	Normal	18-24403	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	16 Oct 2018	GI2	Up gradient	Normal	18-32716	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	16 Jan 2019	GI2	Up gradient	Normal	19-01241	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	11 Apr 2019	GI2	Up gradient	Normal	19-12447	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	02 Jul 2019	GI2	Up gradient	Normal	19-22599	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	07 Oct 2019	GL2	Up gradient	Normal	19-35071	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	14 Jan 2020	GI2	Up gradient	Normal	20-01148	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	20 May 2020	GI2	Up gradient	Normal	20-18076	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	15 Jul 2020	GI2	Up gradient	Normal	20-25960	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	20 Oct 2020	GI2	Up gradient	Normal	20-39688	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	26 Jan 2021	GI2	Up gradient	Normal	21-03136	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	16 Apr 2021	GI2	Up gradient	Normal	21-17430	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	23 Jul 2021	GI2	Up gradient	Normal	21-32698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	19 Oct 2021	GI2	Up gradient	Normal	21-44167	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	25 Jan 2022	GI2	Up gradient	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	05 Apr 2022	GI2	Up gradient	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	15 Jul 2022	GI2	Up gradient	Normal	3035296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	12 Oct 2022	GI2	Up gradient	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	18 Jan 2023	Dup 01	Up gradient	Field_D	23-01704	SW	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010
GI2	18 Jan 2023	GI2	Up gradient	Normal	23-01714	SW	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010
GI2	13 Apr 2023	GI2	Up gradient	Normal	23-10977	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	29/08/2023	GI2	Up gradient	Normal	ES2332296008	SW	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0004		<0.0005

Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	PFHxS (di-branched)	PFHxS (mono-branched)	PFHxS (Total)	PFOS (di-branched)	PFOS (mono-branched)	PFOS (Total)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecanesulfonic acid (PFDS)
							µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
GI3	13 Jul 2017	170713_GI3	Down gradient	Normal	17-16826	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	03 Oct 2017	GI3	Down gradient	Normal	17-23979	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	24 Jan 2018	GI3	Down gradient	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	17 Apr 2018	GI3	Down gradient	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	17 Jul 2018	GI3	Down gradient	Normal	18-24403	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	16 Oct 2018	GI3	Down gradient	Normal	18-32716	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	16 Jan 2019	GI3	Down gradient	Normal	19-01241	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	11 Apr 2019	GI3	Down gradient	Normal	19-12447	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	02 Jul 2019	GI3	Down gradient	Normal	19-22599	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	07 Oct 2019	GL3	Down gradient	Normal	19-35071	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	14 Jan 2020	GI3	Down gradient	Normal	20-01148	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	20 May 2020	GI3	Down gradient	Normal	20-18076	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	15 Jul 2020	GI3	Down gradient	Normal	20-25960	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	20 Oct 2020	GI3	Down gradient	Normal	20-39688	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	26 Jan 2021	GI3	Down gradient	Normal	21-03136	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	16 Apr 2021	GI3	Down gradient	Normal	21-17430	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	23 Jul 2021	GI3	Down gradient	Normal	21-32698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	19 Oct 2021	GI3	Down gradient	Normal	21-44167	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	25 Jan 2022	GI3	Down gradient	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	05 Apr 2022	GI3	Down gradient	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	15 Jul 2022	GI3	Down gradient	Normal	3035296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	12 Oct 2022	GI3	Down gradient	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	18 Jan 2023	GI3	Down gradient	Normal	23-01714	SW	<0.010	<0.010	<0.0010	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	-	<0.0010
GI3	13 Apr 2023	GI3	Down gradient	Normal	23-10977	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	29/08/2023	GI3	Down gradient	Normal	ES2332296009	SW	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	-	<0.0005
GI5	14 Jul 2017	170714_GI5	Down gradient	Normal	17-16826	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	26 Jul 2017	G15	Down gradient	Normal	17-17747	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	03 Oct 2017	GI5	Down gradient	Normal	17-23979	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	24 Jan 2018	GI5	Down gradient	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	17 Apr 2018	GI5	Down gradient	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	17 Jul 2018	GI5	Down gradient	Normal	18-24403	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	16 Oct 2018	GI5	Down gradient	Normal	18-32716	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	16 Jan 2019	GI5	Down gradient	Normal	19-01241	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	11 Apr 2019	GI5	Down gradient	Normal	19-12447	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	02 Jul 2019	GI5	Down gradient	Normal	19-22599	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	07 Oct 2019	GL5	Down gradient	Normal	19-35071	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	14 Jan 2020	GI5	Down gradient	Normal	20-01148	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	20 May 2020	GI5	Down gradient	Normal	20-18076	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	15 Jul 2020	GI5	Down gradient	Normal	20-25960	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	20 Oct 2020	GI5	Down gradient	Normal	20-39688	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	26 Jan 2021	GI5	Down gradient	Normal	21-03136	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	16 Apr 2021	GI5	Down gradient	Normal	21-17430	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	23 Jul 2021	GI5	Down gradient	Normal	21-32698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	19 Oct 2021	GI5	Down gradient	Normal	21-44167	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	25 Jan 2022	GI5	Down gradient	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	05 Apr 2022	GI5	Down gradient	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	15 Jul 2022	GI5	Down gradient	Normal	3035296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	12 Oct 2022	GI5	Down gradient	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	18 Jan 2023	GI5	Down gradient	Normal	23-01714	SW	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010
GI5	13 Apr 2023	GI5	Down gradient	Normal	23-10977	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	29/08/2023	GI5	Down gradient	Normal	ES2332296010	SW	<0.0020	<0.0005	0.0019	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0028	-	<0.0005
Estuary	18 Oct 2021	Estuary	Down gradient	Normal	21-44426	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	25 Jan 2022	Estuary	Down gradient	Normal	2842292	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	02 Apr 2022	Estuary	Down gradient	Normal	2942228	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	14 Jul 2022	Estuary	Down gradient	Normal	3034726	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	12 Oct 2022	Estuary	Down gradient	Normal	3095333	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	18 Jan 2023	Estuary	Down gradient	Normal	23-01704	SW	<0.010	<0.010	0.003	0.001	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010
Estuary	08 Feb 2023	Estuary	Down gradient	Normal	3168264	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	11 Apr 2023	Estuary	Down gradient	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	11 Apr 2023	ESTUARY	Down gradient	Normal	ES2313255	SW	<0.002	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.005	-	<0.0005
Estuary	29/08/2023	ESTUARY	Down gradient	Normal	ES2332296006	SW	<0.0020	<0.0005	0.0012	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	-	<0.0005

Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	Sum (PFHxS (Total) + PFOS (Total))*	Sum (PFOS (Total) + PFOA (Total))*	Sum of PFAS (n=10)*	Sum of PFAS (n=31)*	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*	PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	PFAS (Sum of Total)(WA DER List)
							µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
GI1	13 Jul 2017	170713_GI2	Up gradient	Normal	17-16826	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	02 Oct 2017	GI1	Up gradient	Normal	17-23979	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	24 Jan 2018	GI1	Up gradient	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	17 Apr 2018	GI1	Up gradient	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	17 Jul 2018	GI1	Up gradient	Normal	18-24403	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	16 Oct 2018	GI1	Up gradient	Normal	18-32716	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	16 Jan 2019	GI1	Up gradient	Normal	19-01241	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	11 Apr 2019	GI1	Up gradient	Normal	19-12447	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	02 Jul 2019	GI1	Up gradient	Normal	19-22599	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	07 Oct 2019	GL1	Up gradient	Normal	19-35071	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	14 Jan 2020	GI1	Up gradient	Normal	20-01148	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	20 May 2020	GI1	Up gradient	Normal	20-18076	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	15 Jul 2020	GI1	Up gradient	Normal	20-25960	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	20 Oct 2020	GI1	Up gradient	Normal	20-39688	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	26 Jan 2021	GI1	Up gradient	Normal	21-03136	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	16 Apr 2021	GI1	Up gradient	Normal	21-17430	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	23 Jul 2021	GI1	Up gradient	Normal	21-32698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	19 Oct 2021	GI1	Up gradient	Normal	21-44167	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	25 Jan 2022	GI1	Up gradient	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	05 Apr 2022	GI1	Up gradient	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	15 Jul 2022	GI1	Up gradient	Normal	3035296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	12 Oct 2022	GI1	Up gradient	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	18 Jan 2023	GI1	Up gradient	Normal	23-01714	SW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	0.002	0.001	0.002	0.004	0.004	0.0010	-	-	-	-
GI1	13 Apr 2023	GI1	Up gradient	Normal	23-10977	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI1	29/08/2023	GI1	Up gradient	Normal	ES2332296007	SW	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	0.0008	-	-	0.001	0.0008	-	-	-	0.0008
GI2	14 Jul 2017	170714_GIAB	Up gradient	Normal	17-16826	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	02 Oct 2017	GI2	Up gradient	Normal	17-23979	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	24 Jan 2018	GI2	Up gradient	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	17 Apr 2018	GI2	Up gradient	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	17 Jul 2018	GI2	Up gradient	Normal	18-24403	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	16 Oct 2018	GI2	Up gradient	Normal	18-32716	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	16 Jan 2019	GI2	Up gradient	Normal	19-01241	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	11 Apr 2019	GI2	Up gradient	Normal	19-12447	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	02 Jul 2019	GI2	Up gradient	Normal	19-22599	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	07 Oct 2019	GL2	Up gradient	Normal	19-35071	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	14 Jan 2020	GI2	Up gradient	Normal	20-01148	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	20 May 2020	GI2	Up gradient	Normal	20-18076	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	15 Jul 2020	GI2	Up gradient	Normal	20-25960	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	20 Oct 2020	GI2	Up gradient	Normal	20-39688	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	26 Jan 2021	GI2	Up gradient	Normal	21-03136	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	16 Apr 2021	GI2	Up gradient	Normal	21-17430	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	23 Jul 2021	GI2	Up gradient	Normal	21-32698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	19 Oct 2021	GI2	Up gradient	Normal	21-44167	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	25 Jan 2022	GI2	Up gradient	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	05 Apr 2022	GI2	Up gradient	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	15 Jul 2022	GI2	Up gradient	Normal	3035296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	12 Oct 2022	GI2	Up gradient	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	18 Jan 2023	Dup 01	Up gradient	Field_D	23-01704	SW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	<0.001	-	-	-	-
GI2	18 Jan 2023	GI2	Up gradient	Normal	23-01714	SW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	<0.001	-	-	-	-
GI2	13 Apr 2023	GI2	Up gradient	Normal	23-10977	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI2	29/08/2023	GI2	Up gradient	Normal	ES2332296008	SW	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	0.0004	-	-	0.0004	-	0.0004	-	-	0.0004	

Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	Sum (PFHxS (Total) + PFOS (Total))*	Sum (PFOS (Total) + PFOA (Total))*	Sum of PFAS (n=10)*	Sum of PFAS (n=31)*	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*	PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	PFAS (Sum of Total)(WA DER List)
							µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
GI3	13 Jul 2017	170713_GI3	Down gradient	Normal	17-16826	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	03 Oct 2017	GI3	Down gradient	Normal	17-23979	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	24 Jan 2018	GI3	Down gradient	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	17 Apr 2018	GI3	Down gradient	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	17 Jul 2018	GI3	Down gradient	Normal	18-24403	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	16 Oct 2018	GI3	Down gradient	Normal	18-32716	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	16 Jan 2019	GI3	Down gradient	Normal	19-01241	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	11 Apr 2019	GI3	Down gradient	Normal	19-12447	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	02 Jul 2019	GI3	Down gradient	Normal	19-22599	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	07 Oct 2019	GL3	Down gradient	Normal	19-35071	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	14 Jan 2020	GI3	Down gradient	Normal	20-01148	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	20 May 2020	GI3	Down gradient	Normal	20-18076	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	15 Jul 2020	GI3	Down gradient	Normal	20-25960	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	20 Oct 2020	GI3	Down gradient	Normal	20-39688	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	26 Jan 2021	GI3	Down gradient	Normal	21-03136	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	16 Apr 2021	GI3	Down gradient	Normal	21-17430	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	23 Jul 2021	GI3	Down gradient	Normal	21-32698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	19 Oct 2021	GI3	Down gradient	Normal	21-44167	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	25 Jan 2022	GI3	Down gradient	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	05 Apr 2022	GI3	Down gradient	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	15 Jul 2022	GI3	Down gradient	Normal	3035296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	12 Oct 2022	GI3	Down gradient	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	18 Jan 2023	GI3	Down gradient	Normal	23-01714	SW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	0.002	0.001	0.002	0.002	0.002	0.0010	-	-	-	-
GI3	13 Apr 2023	GI3	Down gradient	Normal	23-10977	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI3	29/08/2023	GI3	Down gradient	Normal	ES2332296009	SW	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	0.0009	-	-	0.001	0.0009	-	-	-	0.0009
GI5	14 Jul 2017	170714_GI5	Down gradient	Normal	17-16826	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	26 Jul 2017	G15	Down gradient	Normal	17-17747	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	03 Oct 2017	GI5	Down gradient	Normal	17-23979	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	24 Jan 2018	GI5	Down gradient	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	17 Apr 2018	GI5	Down gradient	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	17 Jul 2018	GI5	Down gradient	Normal	18-24403	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	16 Oct 2018	GI5	Down gradient	Normal	18-32716	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	16 Jan 2019	GI5	Down gradient	Normal	19-01241	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	11 Apr 2019	GI5	Down gradient	Normal	19-12447	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	02 Jul 2019	GI5	Down gradient	Normal	19-22599	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	07 Oct 2019	GL5	Down gradient	Normal	19-35071	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	14 Jan 2020	GI5	Down gradient	Normal	20-01148	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	20 May 2020	GI5	Down gradient	Normal	20-18076	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	15 Jul 2020	GI5	Down gradient	Normal	20-25960	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	20 Oct 2020	GI5	Down gradient	Normal	20-39688	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	26 Jan 2021	GI5	Down gradient	Normal	21-03136	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	16 Apr 2021	GI5	Down gradient	Normal	21-17430	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	23 Jul 2021	GI5	Down gradient	Normal	21-32698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	19 Oct 2021	GI5	Down gradient	Normal	21-44167	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	25 Jan 2022	GI5	Down gradient	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	05 Apr 2022	GI5	Down gradient	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	15 Jul 2022	GI5	Down gradient	Normal	3035296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	12 Oct 2022	GI5	Down gradient	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	18 Jan 2023	GI5	Down gradient	Normal	23-01714	SW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	<0.001	-	-	-	-
GI5	13 Apr 2023	GI5	Down gradient	Normal	23-10977	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GI5	29/08/2023	GI5	Down gradient	Normal	ES2332296010	SW	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	0.0028	-	-	0.006	0.0028	-	-	-	0.006
Estuary	18 Oct 2021	Estuary	Down gradient	Normal	21-44426	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	25 Jan 2022	Estuary	Down gradient	Normal	2842292	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	02 Apr 2022	Estuary	Down gradient	Normal	2942228	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	14 Jul 2022	Estuary	Down gradient	Normal	3034726	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	12 Oct 2022	Estuary	Down gradient	Normal	3095333	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	18 Jan 2023	Estuary	Down gradient	Normal	23-01704	SW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	0.001	N/A	0.001	0.005	0.005	-	-	-	-	-
Estuary	08 Feb 2023	Estuary	Down gradient	Normal	3168264	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	11 Apr 2023	Estuary	Down gradient	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuary	11 Apr 2023	ESTUARY	Down gradient	Normal	ES2313255	SW	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	0.005	-	-	-	0.0047	-	0.005	-	0.005
Estuary	29/08/2023	ESTUARY	Down gradient	Normal	ES2332296006	SW	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	0.0009	-	-	0.0028	0.0009	-	-	-	0.0028

		Upstream				Downstream											
		GI1		GI2		GI3				GI5				Estuary			
Chemical		Maximum	Median	Maximum	Median	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*
pH (Lab)	pH Units	9.4	8.3	7.1	6.8	7.6	-19%	7.3	-12%	7.6	-19%	7.45	-10%	8.4	-11%	7.8	-6%
Electrical conductivity (lab)	µS/cm	21600	211	42900	359	51200	19%	325	-9%	131500	207%	1275	255%	2400000	5494%	131100	36418%
Dissolved Oxygen (Lab) (filtered)	mg/L	10.71	9.3	10.26	9.225	9.76	-9%	9.62	3%	10.99	3%	9.65	4%	-	-	-	-
Cyanide (Total)	mg/L	0.083	0.083	0.024	0.012	0.003	-96%	0.0025	-97%	0.07	-16%	0.0355	-57%	<0.02	-	-	-
Total Organic Carbon (Carbon)	µg/L	10400	5000	13000	3800	13700	5%	5300	6%	24400	88%	5450	9%	5800	-55%	5800	16%
Chloride (filtered)	mg/L	32.6	18.1	37.1	24.2	2330	7047%	49.65	105%	1850	4887%	174	619%	16466.71	44285%	4530	18619%
Ammonia as N (filtered)	mg/L	0.38	0.016	0.26	0.11	0.57	50%	0.15	36%	2.44	542%	0.165	50%	0.1	-74%	0.03	-73%
Nitrate (as N)	mg/L	2.6	0.35	2.8	0.21	2.8	0%	0.25	-28%	3.2	14%	0.21	-40%	0	-100%	-	-
Nitrate (as N) (filtered)	mg/L	0.998	0.409	0.595	0.266	1.03	3%	0.3	-27%	0.982	-2%	0.241	-41%	2.2	120%	0.008	-98%
Nitrite (as N) (filtered)	mg/L	0.009	0.006	0.009	0.003	0.014	56%	0.009	-36%	0.06	567%	0.012	100%	0.015	67%	0.0068	13%
Nitrogen (Total Oxidised) (as N) (filtered)	mg/L	2.6	0.36	2.8	0.2105	2.8	0%	0.263	-27%	3.3	18%	0.21	-42%	2.3	-18%	0.0065	-98%
Carbonaceous Biochemical Oxygen Demand (cBOD5)	g/m3	<1	-	<1	-	<1	-	-	-	1.61	-	1.61	-	-	-	-	-
BOD	mg/L	<1	-	<1	-	5	-	3.5	-	5	-	4.45	-	-	-	-	-
Aluminium (filtered)	mg/L	0.31	0.04	0.53	0.026	0.38	-28%	0.031	-23%	0.42	-21%	0.0295	-26%	0.41	-23%	0.037	-8%
Arsenic (filtered)	mg/L	<0.001	-	<0.001	-	<0.001	-	-	-	0.0014	-	0.0014	-	<0.005	-	-	-
Cadmium (filtered)	mg/L	0.00028	0.00011	0.00015	0.000098	0.000042	-85%	0.00002	-82%	0.00018	-36%	0.000025	-77%	<0.0002	-	-	-
Chromium (III+VI) (filtered)	mg/L	0.00079	0.00035	0.0007	0.0004	0.0012	52%	0.0003	-25%	0.0016	103%	0.000315	-21%	0.0018	128%	0.001105	176%
Copper (filtered)	mg/L	0.004	0.0018	0.0029	0.0011	0.0029	0%	0.0015	-17%	0.0037	-8%	0.0015	-17%	0.0037	-8%	0.0018	0%
Iron (filtered)	mg/L	0.34	0.32	1.02	0.47	0.46	-55%	0.38	-19%	0.61	-40%	0.46	-2%	0.4	-61%	0.052	-89%
Lead (filtered)	mg/L	0.00058	0.0002	0.00061	0.0001	0.00056	-8%	0.0002	0%	0.0008	31%	0.000205	2%	0.0005	-18%	0.0005	150%
Nickel (filtered)	mg/L	0.0238	0.00076	0.0173	0.008	0.003	-87%	0.0022	-73%	0.014	-41%	0.0023	-71%	0.0021	-91%	0.00152	-81%
Zinc (filtered)	mg/L	0.077	0.013	0.059	0.027	0.028	-64%	0.0152	-44%	0.152	97%	0.014	-48%	0.02	-74%	0.005	-81%
Total Organic Fluorine	µg/L	<5,000	-	<5000	-	<5,000	-	-	-	<5,000	-	-	-	<5,000	-	-	-
Perfluorobutanoic acid (PFBA)	µg/L	<0.010	-	<0.010	-	<0.010	-	-	-	<0.010	-	-	-	<0.010	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	<0.010	-	<0.010	-	<0.010	-	-	-	<0.010	-	-	-	<0.010	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	<0.0010	-	<0.0010	-	-	-	0.0019	-5%	-	-	0.0025	25%	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	0.0011	-	-	-
Perfluorooctanoic acid (PFOA)	µg/L	0.0011	-	<0.0010	-	0.0012	9%	-	-	0.0013	18%	-	-	0.0014	27%	-	-
Perfluorononanoic acid (PFNA)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluoroundecanoic acid (PFUnDA)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluorododecanoic acid (PFDoDA)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
PFHxS (di-branched)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
PFHxS (mono-branched)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
PFHxS (Total)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
PFOS (di-branched)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
PFOS (mono-branched)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
PFOS (Total)	µg/L	0.001	-	<0.0010	-	0.0012	20%	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluoropropanesulfonic acid (PFPrS)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluorobutane sulfonic acid (PFBS)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluorohexane sulfonic acid (PFHxS)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	<0.001	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.001	-	0.0004	-	0.0012	20%	-	-	0.0028	180%	-	-	0.0047	370%	-	-
Perfluorononanesulfonic acid (PFNS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanesulfonic acid (PFDS)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
Perfluorooctane sulfonamide (FOSA)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	<0.0050	-	<0.0050	-	<0.0050	-	-	-	<0.0050	-	-	-	<0.0050	-	-	-
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	<0.0010	-	<0.0010	-	<0.0010	-	-	-	<0.0010	-	-	-	<0.0010	-	-	-
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	-	-	<0.0010	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Sum of PFHxS and PFOS	µg/L	0.001	-	-	-	0.0012	20%	-	-	0.0028	180%	-	-	0.0047	370%	-	-
PFAS (Sum of Total)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.0053	-	-	-

Notes:
* % differences have been calculated based on the highest maximum and median concentration detected at locations GI1 and GI2.
Medians were not calculated for PFAS because 2-3 sampling rounds are insufficient to derive meaningful values.

							Inorganics															Unassigned	Major Ions													Nutrients
							Conductivity of Water (mS/m)	Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	Nitrate-N (NO3-N) (filtered)	Sum of Anions*	Sum of Cations*	Total Alkalinity (CaCO3)	Weak Acid Dissociable (WAD) Cyanide	EC/10* (EC/10)	pH (Lab)	Electrical conductivity (lab)	Dissolved Oxygen (Lab) (filtered)	Cyanide (Free)	Cyanide (Total)	Cyanide (Total) (filtered)	Cyanide (WAD)	Carbon	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3) (filtered)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium (filtered)	Magnesium (filtered)	Potassium	Potassium (filtered)	Sodium (filtered)	Chloride (filtered)	Sulfate (filtered)	Cations Total	Cations Total (filtered)	Anions Total	Ammonia as N (filtered)
							mS/m	g/m3	g/m3	meq/L	meq/L	g CaCO3/m3	g/m3	(mS/m)/10	pH Units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	meq/L	mg/L
EQL							0.02	0.002	0.002	0.01	0.01	1		0.002	1	0.2	0.1	0.001	0.001	0.001	0.001	500	1	1	1		0.05	0.01	0.05	0.05	0.01	0.5	0.15	0.01	0.01	0.01	0.005
Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type																															
E Pond	26/07/2017	E Spond	Onsite	Normal	17-17753	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23700	-	-	109	-	-	-	13.69	-	-	43.1	-	-	-	-	0.42
E Pond	6/10/2017	E_Sed_Pond	Onsite	Normal	17-24362	SW	-	-	-	-	-	-	-	-	7.9	669	7.99	-	<0.005	-	-	18400	-	-	-	-	-	-	-	-	-	45.1	-	-	-	-	0.26
E Pond	24/01/2018	Eastern Pond	Onsite	Normal	18-02540	SW	-	-	-	-	-	-	-	-	8.6	920	10.59	-	-	-	-	32000	-	-	291	-	-	-	26.49	-	-	115	-	-	-	-	0.015
E Pond	17/04/2018	Eastern Pond	Onsite	Normal	18-13881	SW	-	-	-	-	-	-	-	-	8	743	7.88	-	-	-	-	33100	-	-	172	-	-	-	25	-	-	118	-	-	-	-	0.034
E Pond	17/07/2018	E-Pond	Onsite	Normal	18-24296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30100	-	-	229	-	-	-	20.9	-	-	84.2	-	-	-	-	0.32
E Pond	16/10/2018	E_Pond	Onsite	Normal	18-32717	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30200	-	-	216	-	-	-	-	19.5	-	81.9	-	-	-	-	<0.010
E Pond	16/01/2019	E Pond	Onsite	Normal	19-01204	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43000	-	-	200	-	-	-	-	19.3	-	66.4	-	-	-	-	0.37
E Pond	11/04/2019	Eastern Pond	Onsite	Normal	19-12443	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47600	-	-	284	-	-	-	-	24.6	-	143	-	-	-	-	1.6
E Pond	2/07/2019	Eastern Pond	Onsite	Normal	19-22606	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30700	-	-	229	-	-	-	-	22.8	-	108	-	-	-	-	3.15
E Pond	7/10/2019	E Pond	Onsite	Normal	19-35048	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26800	-	-	205	-	-	-	23.4	-	-	136	-	-	-	-	0.4
E Pond	14/01/2020	E Pond	Onsite	Normal	20-01151	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24100	-	-	239	-	-	-	30.1	-	-	93	-	-	-	-	4.14
E Pond	22/05/2020	E Ponds	Onsite	Normal	20-18493	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19400	-	-	227	-	-	-	32	-	-	205	-	-	-	-	6.55
E Pond	15/07/2020	E POND	Onsite	Normal	20-25874	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23800	-	-	176	-	-	-	21.9	-	-	88.7	-	-	-	-	1.98
E Pond	20/10/2020	E Pond	Onsite	Normal	20-39694	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18700	-	-	216	-	-	-	23.8	-	-	169	-	-	-	-	4.14
E Pond	26/01/2021	E POND	Onsite	Normal	21-03140	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18900	-	-	193	-	-	-	21.6	-	-	70.8	-	-	-	-	0.58
E Pond	16/04/2021	E POND	Onsite	Normal	21-17432	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32000	-	-	210	-	-	-	32.2	-	-	384	-	-	-	-	1.52
E Pond	23/07/2021	E POND	Onsite	Normal	21-32693	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25200	-	-	207	-	-	-	25.8	-	-	97	-	-	-	-	2.15
E Pond	19/10/2021	E POND	Onsite	Normal	21-44163	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21100	-	-	177	-	-	-	20	-	-	105	-	-	-	-	1.06
E Pond	24/01/2022	E Pond	Onsite	Normal	2840662	SW	-	-	-	-	-	-	-	-	-	117500	-	-	-	-	-	-	-	-	220	-	-	-	29	-	-	196	-	-	-	-	0.098
E Pond	6/04/2022	E Pond	Onsite	Normal	2948345	SW	-	-	-	-	-	-	-	-	-	156700	-	-	-	-	-	-	-	-	210	-	-	-	35	-	-	290	-	-	-	-	1.01
E Pond	14/07/2022	E Pond	Onsite	Normal	3034727	SW	-	-	-	-	-	-	-	-	-	34700	-	-	-	-	-	-	-	-	58	-	-	-	11.3	-	-	46	-	-	-	-	0.53
E Pond	12/10/2022	E Pond	Onsite	Normal	3095310	SW	-	-	-	-	-	-	-	-	8.4	104900	-	-	-	-	-	-	-	-	240	-	-	-	26	-	-	150	-	-	-	-	0.113
E Pond	18/01/2023	E Pond	Onsite	Normal	23-01371	SW	203	-	-	-	-	-	-	-	-	2030	-	-	-	-	-	86000	-	-	242	-	-	-	45.1	-	-	494	-	-	-	-	<0.005
E Pond	12/04/2023	E Pond	Onsite	Normal	23-11603	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34600	-	-	193	-	-	-	-	33.8	-	202	-	-	-	-	<0.005
E Pond	13/04/2023	Eastern Pond	Onsite	Normal	23-11285	SW	110	-	-	-	-	-	-	10.96	7.9	1100	-	-	<0.02	-	-	35000	-	-	203	-	38.5	21.1	-	30.1	168	201	35.8	11.83	-	10.54	0.87
E Pond	13/04/2023	EASTERN POND	Onsite	Normal	ES2313258	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	29/08/2023	Eastern Pond	Onsite	Normal	ES2332296003	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	18/10/2021	NE Wetland	Onsite	Normal	21-44426		127	-	-	-	-	-	-	12.7	7.4	1270	-	0.001	0.005	-	-	-	-	-	317	-	48.8	69	-	29.6	573	162	12.8	-	35.26	11.21	20.8
NE Pond	2/12/2021	NE Wetland	Onsite	Normal	21-50430		173	-	-	-	-	-	-	17.25	7.5	1730	-	0.013	0.016	-	-	-	-	-	493	-	39.6	28.1	-	28.7	226	268	4.85	-	17.97	17.57	41.8
NE Pond	26/01/2022	NE Wetland	Onsite	Normal	2840646		-	-	-	-	-	-	-	-	7.4	267000	-	-	0.018	0.016	-	-	1030	-	840	290	51	40	-	51	360	420	1.1	-	30	29	101
NE Pond	2/03/2022	NE Wetland	Onsite	Normal	2901160		-	-	-	-	-	-	-	-	7.7	387000	-	-	<0.004	<0.002	-	-	1350	-	1110	440	68	67	-	79	540	610	0.5	-	41	39	95
NE Pond	2/04/2022	NE Wetland	Onsite	Normal	2942228		-	-	-	-	-	-	-	-	7.7	682000	-	-	0.07	0.05	-	-	2500	-	2000	770	107	121	-	151	980	1080	6	-	75	71	188
NE Pond	4/05/2022	NE Wetland	Onsite	Normal	2977305		-	-	-	-	-	-	-	-	7.8	515000	-	-	0.06	0.06	-	-	1800	-	1490	500	76	75	-	106	660	870	2.1	-	52	54	149
NE Pond	1/06/2022	NE Wetland	Onsite	Normal	3004871		-	-	-	-	-	-	-	-	7.7	193800	-	-	0.01	0.01	-	-	580	-	480	240	41	34	-	30	260	300	8	-	20	18.2	41
NE Pond	14/07/2022	NE Wetland	Onsite	Normal	3034726		-	-	-	-	-	-	-	-	7.2	34400	-	-	<0.002	<0.002	-	-	36	-	30	62	14.6	6.3	-	7.3	37	52	27	-	3.3	2.8	0.43
NE Pond	10/08/2022	NE Wetland	Onsite	Normal	3052140		-	-	-	-	-	-	-	-	7.6	94300	-	-	0.006	0.005	-	-	260	-	210	151	32	17.4	-	13.5	106	132	47	-	9.1	8.9	13.7
NE Pond	6/09/2022	NE Wetland	Onsite	Normal	3070876		-	-	-	-	-	-	-	-	7.9	47100	-	-	<0.002	-	-	-	127	-	105	103	27	8.3	-	4.9	51	62	21	-	4.6	4.3	2.6
NE Pond	7/10/2022	NE Wetland	Onsite	Normal	3092289		-	-	-	-	-	-	-	-	7.7	57700	-	-	<0.002	<0.002	-	-	128	-	105	103	23	10.8	-	5.9	69	95	23	-	5.3	5.3	1.19
NE Pond	15/11/2022	NE Wetland	Onsite	Normal	22-41869		430	-	-	-	-	-	-	43.03	7.9	4300	-	-	0.001	0.023	<0.001	-	-	-	1309	-	84.3	69.6	-	79.5	613	613	5.73	-	47.26	43.87	119
NE Pond	14/12/2022	NE Wetland	Onsite	Normal	22-45801		169	0.018	0.894	17.24	17.15	481	-	16.89	7.7	1690	-	-	-	-	-	-	-	-	-	-	48	27.6	-	28.8	211	256	13	-	-	-	-
NE Pond	14/12/2022	NE Wetland	Onsite	Normal	3174733		-	-	-	-	-	-	<0.02	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	18/01/2023	NE Pond	Onsite	Normal	23-01704		698	<0.002	0.175	85.75	84.48	2516	-	69.84	8.1	6980	-	-	-	-	-	-	-	-	-	-	116	126	-	165	1110	1220	<1.50	-	-	-	-
NE Pond	18/01/2023	NE Pond	Onsite	Normal	3168264		-	-	-	-	-	-	<0.02	-	-	-	-	-	0.07	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/02/2023	NE Pond	Onsite	Normal	3177138		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	12/04/2023	NE Wetland	Onsite	Normal	23-11173		72	-	-	-	-	-	-	7.17	7.6	717	-	-	0.003	-	-	-	-	-	193	-	45.8	16.9	-	15.8	117	103	17.6	10.15	-	7.17	13.5
NE Pond	29/08/2023	NE Wetland	Onsite	Normal	ES2332296001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	18/10/2021	SE Wetland	Onsite	Normal	21-44426		52	-	-	-	-	-	-	5.19	7.4	519	-	<0.001	<0.001	-	-	-	-	-	97.3	-	23.5	9.49	-	5.45	58.3	74.8	12.6	-	4.71	4.33	0.22
SE Pond	2/12/2021	SE Wetland	Onsite	Normal	21-50430		45	-	-	-	-	-	-	4.53	7.3	453	-	<0.001	<0.001	-	-	-	-	-	92.8	-	19.8	8.12	-	4	64.4	83.5	6.34	-	4.64	4.35	0.16
SE Pond	26/01/2022	SE Wetland	Onsite	Normal	2840646		-	-	-	-	-	-	-	-	7	49800	-	-	<0.002	<0.002	-	-	147	-	120	89	22	8.4	-	6.2	65	81	1.8	-	4.9	4.7	1.02
SE Pond	2/03/2022	SE Wetland	Onsite	Normal	2901160		-	-	-	-	-	-	-	-	7.5	59000	-	-	<0.002	<0.002	-	-	173	-	142	109	25	11.2	-	7.6	76	90	0.7	-	5.9	5.4	2.5
SE Pond	2/04/2022	SE Wetland	Onsite	Normal	2942228		-	-	-	-	-	-	-	-	7.4	34600	-	-	<0.002	<0.002	-	-	102	-	84	79	19	7.6	-	5.8	41	46	9.7	-	3.7	3.2	1.91
SE Pond	4/05/2022	SE Wetland	Onsite	Normal	2977305		-	-	-	-	-	-	-	-	7.8	57000	-	-	<0.002	<0.002	-	-	147	-	122	112	26	11.4	-	6.7	80	95	8	-	6	5.3	1.42
SE Pond	1/06/2022	SE Wetland	Onsite	Normal	3004871		-	-	-	-	-	-	-	-	7.7	72800	-	-	<0.002	<0.002	-	-	162	-	134	127	28	14	-	7.4	100	129	10	-	7.3	6.5	2.7
SE Pond	14/07/2022	SE Wetland	Onsite	Normal	3034726		-	-	-	-	-	-	-	-	7.2	36000	-	-	<0.002	<0.002	-	-	34	-	28	70	15.8	7.5	-	7.3	37	53	34	-	3.4	3	0.22
SE Pond	10/08/2022	SE Wetland	Onsite	Normal	3052140		-	-	-	-	-	-	-	-	7.5	54000	-	-	<0.002	<0.002	-	-	81	-	67	104	24	10.7	-	6.4	59	83	51	-	5	4.8	0.87
SE Pond	6/09/2022	SE Wetland	Onsite	Normal	3070876		-	-	-	-	-	-	-	-	7.8	48300	-	-	<0.002	-	-	-	79	-	65	87	21	8.8	-	5.4	64	83	32	-	4.7	4.3	0.165
SE Pond	7/10/2022	SE Wetland	Onsite	Normal	3092289		-	-	-	-	-	-	-	-	7.7	56200	-	-	<0.002	<0.002	-	-	119	-	98	107	25	10.9	-	5.7	72	95	24	-	5.5	5.1	0.114
SE Pond	15/11/2022	SE Wetland	Onsite	Normal	22-41869		51	-	-	-	-	-	-	5.09	7.5	509	-	-	0.003	<0.010	<0.001	-	-	-	107	-	23.3	9.43	-	5	79.2	91.2	10.3	-	5.64	4.93	0.66
SE Pond	14/12/2022	SE Wetland	Onsite	Normal	22-45801		54	0.305	11.4	6.17	5.28	120	-	5.38	7.4	538	-	-	-	-	-	-	-	-	-	-	22.4	8.93	-	4.4	73.8	96.4	10.8	-	-	-	-
SE Pond	14/12/2022	SE Wetland	Onsite	Normal	3174733		-	-	-	-	-	-	<0.02	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	18/01/2023	SE Pond	Onsite	Normal	23-01704		14	0.149	0.102	1.37	1.57	40.1	-	1.43	7.3	143	-	-	-	-	-	-	-	-	-	-	9.73	2.75	-	2.4	16.1	15.7	5.71	-	-	-	-
SE Pond	18/01/2023	SE Pond	Onsite	Normal	3168264		-	-	-	-	-	-	<0.02	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/02/2023	SE Wetland	Onsite	Normal	3177138		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	12/04/2023	SE Wetland	Onsite	Normal	23-11173		11	-	-	-	-	-	-	1.08	6.9	108	-	-	<0.002	-	-	-	-	-	27.4	-	9.06	2.56	-	2.7	12.7	11.1	3.77	1.31	-	0.98	0.17
SE Pond	29/08/2023	SE Wetland	Onsite	Normal	ES2332296002		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

							Inorganics															Unassigned	Major Ions														Nutrients
							Conductivity of Water (mS/m)	Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	Nitrate-N (NO3-N) (filtered)	Sum of Anions*	Sum of Cations*	Total Alkalinity (CaCO3)	Weak Acid Dissociable (WAD) Cyanide	EC/10* (EC/10)	pH (Lab)	Electrical conductivity (lab)	Dissolved Oxygen (Lab) (filtered)	Cyanide (Free)	Cyanide (Total)	Cyanide (Total) (filtered)	Cyanide (WAD)	Carbon	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3) (filtered)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium (filtered)	Magnesium (filtered)	Potassium	Potassium (filtered)	Sodium (filtered)	Chloride (filtered)	Sulfate (filtered)	Cations Total	Cations Total (filtered)	Anions Total	Ammonia as N (filtered)
							mS/m	g/m3	g/m3	meq/L	meq/L	g CaCO3/m3	g/m3	(mS/m)/10	pH Units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	meq/L	mg/L
EQL							0.02	0.002	0.002	0.01	0.01	1		0.002	1	0.2	0.1	0.001	0.001	0.001	0.001	500	1	1	1		0.05	0.01	0.05	0.05	0.01	0.5	0.15	0.01	0.01	0.01	0.005
Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type																															
W Pond	26/07/2017	W Spond	Onsite	Normal	17-17753	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17300	-	-	88	-	-	-	11.59	-	-	76.1	-	-	-	-	2.83
W Pond	6/10/2017	W_Sed_Pond	Onsite	Normal	17-24362	SW	-	-	-	-	-	-	-	-	8.8	903	7.2	-	<0.005	-	-	30300	-	-	-	-	-	-	-	-	-	116	-	-	-	-	1
W Pond	24/01/2018	Western Pond	Onsite	Normal	18-02540	SW	-	-	-	-	-	-	-	-	8.6	2450	3.71	-	-	-	-	186000	-	-	375	-	-	-	57.31	-	-	695	-	-	-	-	<0.10
W Pond	17/04/2018	Western Pond	Onsite	Normal	18-13881	SW	-	-	-	-	-	-	-	-	8.9	1770	2.87	-	-	-	-	83200	-	-	220	-	-	-	38.1	-	-	461	-	-	-	-	<0.10
W Pond	17/07/2018	W-Pond	Onsite	Normal	18-24296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54700	-	-	255	-	-	-	35.6	-	-	270	-	-	-	-	4.96
W Pond	16/10/2018	W_Pond	Onsite	Normal	18-32717	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54900	-	-	226	-	-	-	-	34	-	292	-	-	-	-	0.06
W Pond	16/01/2019	W Pond	Onsite	Normal	19-01204	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50900	-	-	332	-	-	-	-	43.1	-	301	-	-	-	-	2.84
W Pond	11/04/2019	Western Pond	Onsite	Normal	19-12443	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77500	-	-	495	-	-	-	-	57.3	-	666	-	-	-	-	1.46
W Pond	2/07/2019	Western Pond	Onsite	Normal	19-22606	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31300	-	-	270	-	-	-	-	47.4	-	703	-	-	-	-	0.5
W Pond	7/10/2019	W Pond	Onsite	Normal	19-35048	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16800	-	-	160	-	-	-	59.2	-	-	1840	-	-	-	-	0.19
W Pond	14/01/2020	W Pond	Onsite	Normal	20-01151	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30600	-	-	193	-	-	-	64	-	-	1410	-	-	-	-	<0.005
W Pond	20/05/2020	W Pond	Onsite	Normal	20-18080	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28500	-	-	211	-	-	-	83.6	-	-	2280	-	-	-	-	0.76
W Pond	15/07/2020	W POND	Onsite	Normal	20-25874	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18100	-	-	171	-	-	-	59.4	-	-	1450	-	-	-	-	0.43
W Pond	20/10/2020	W Pond	Onsite	Normal	20-39694	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19100	-	-	139	-	-	-	77.5	-	-	1650	-	-	-	-	0.23
W Pond	26/01/2021	W POND	Onsite	Normal	21-03140	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24700	-	-	194	-	-	-	61.3	-	-	1510	-	-	-	-	0.06
W Pond	16/04/2021	W POND	Onsite	Normal	21-17432	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30200	-	-	200	-	-	-	77.5	-	-	374	-	-	-	-	0.03
W Pond	23/07/2021	W POND	Onsite	Normal	21-32693	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11200	-	-	140	-	-	-	46.3	-	-	1460	-	-	-	-	0.11
W Pond	18/10/2021	W POND	Onsite	Normal	21-44162	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13700	-	-	143	-	-	-	36.5	-	-	1130	-	-	-	-	0.46
W Pond	25/01/2022	W Pond	Onsite	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	613000	-	-	-	-	-	-	-	-	310	-	-	-	58	-	-	1850	-	-	-	-	<0.010
W Pond	5/04/2022	W Pond	Onsite	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	571000	-	-	-	-	-	-	-	-	340	-	-	-	56	-	-	1710	-	-	-	-	3
W Pond	14/07/2022	W Pond	Onsite	Normal	3034727	SW	-	-	-	-	-	-	-	-	-	461000	-	-	-	-	-	-	-	-	112	-	-	-	36	-	-	1240	-	-	-	-	1.7
W Pond	12/10/2022	W Pond	Onsite	Normal	3095310	SW	-	-	-	-	-	-	-	-	8	635000	-	-	-	-	-	-	-	-	132	-	-	-	44	-	-	2000	-	-	-	-	0.097
W Pond	18/01/2023	W Pond	Onsite	Normal	23-01371	SW	817	-	-	-	-	-	-	-	-	8170	-	-	-	-	-	31200	-	-	221	-	-	-	63.6	-	-	2210	-	-	-	-	0.65
W Pond	12/04/2023	Western Pond	Onsite	Normal	23-11202	SW	652	-	-	-	-	-	-	65.24	7.9	6520	-	-	<0.02	-	-	28800	-	-	239	-	80.1	134	-	53.3	1080	1840	96.1	63.61	-	58.74	4.05
W Pond	12/04/2023	WESTERN POND	Onsite	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	29/08/2023	Western Pond	Onsite	Normal	ES2332296004	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	18/10/2021	W Pond (by MW0)	Onsite	Normal	21-44426	SW	398	-	-	-	-	-	-	39.83	7.4	3980	-	<0.001	<0.001	-	-	-	-	-	90.8	-	32.9	18.9	-	19.3	140	974	143	-	9.8	32.28	0.03
W Pond (by MW0)	25/01/2022	W Pond (by MW0)	Onsite	Normal	2842292	SW	-	-	-	-	-	-	-	-	7.7	286000	-	-	<0.002	<0.002	-	-	85	-	70	320	38	55	-	21	420	800	122	-	25	26	0.043
W Pond (by MW0)	2/03/2022	W Pond (by MW0)	Onsite	Normal	2901160	SW	-	-	-	-	-	-	-	-	8	171500	-	-	<0.002	<0.002	-	-	94	-	78	199	23	34	-	15.4	260	420	71	-	15.9	14.9	0.012
W Pond (by MW0)	2/04/2022	W Pond (by MW0)	Onsite	Normal	2942228	SW	-	-	-	-	-	-	-	-	7.5	803000	-	-	<0.002	<0.004	-	-	74	-	61	1020	87	196	-	46	1390	2900	400	-	82	91	<0.010
W Pond (by MW0)	4/05/2022	W Pond (by MW0)	Onsite	Normal	2977305	SW	-	-	-	-	-	-	-	-	7.5	1386000	-	-	<0.02	<0.002	-	-	93	-	76	1480	110	290	-	83	2500	4300	590	-	141	134	0.29
W Pond (by MW0)	1/06/2022	W Pond (by MW0)	Onsite	Normal	3004871	SW	-	-	-	-	-	-	-	-	7.5	1083000	-	-	<0.002	<0.002	-	-	114	-	94	1100	93	210	-	67	1820	3500	390	-	103	109	0.35
W Pond (by MW0)	14/07/2022	W Pond (by MW0)	Onsite	Normal	3034726	SW	-	-	-	-	-	-	-	-	7.4	130100	-	-	0.003	0.002	-	-	68	-	56	189	32	27	-	16	177	270	95	-	12	11.3	1.55
W Pond (by MW0)	10/08/2022	W Pond (by MW0)	Onsite	Normal	3052140	SW	-	-	-	-	-	-	-	-	8.1	288000	-	-	<0.002	<0.002	-	-	159	-	132	360	48	58	-	30	460	700	220	-	28	27	0.57
W Pond (by MW0)	6/09/2022	W Pond (by MW0)	Onsite	Normal	3070876	SW	-	-	-	-	-	-	-	-	7.8	540000	-	-	<0.002	-	-	-	72	-	59	590	56	110	-	37	970	1590	260	-	55	51	0.129
W Pond (by MW0)	7/10/2022	W Pond (by MW0)	Onsite	Normal	3092289	SW	-	-	-	-	-	-	-	-	7.5	553000	-	-	<0.02	<0.02	-	-	-	-	77	-	59	117	-	39	940	-	-	-	-	-	0.135
W Pond (by MW0)	15/11/2022	W Pond (By MW0)	Onsite	Normal	22-41869	SW	375	-	-	-	-	-	-	37.51	8	3750	-	-	<0.001	<0.010	<0.001	-	-	-	115	-	46.7	68.8	-	29.4	657	1050	153	-	37.35	34.98	0.12
W Pond (by MW0)	14/12/2022	W Pond (by MW0)	Onsite	Normal	3174733	SW	-	-	-	-	-	-	<0.02	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	14/12/2022	W Pond (By MW0)	Onsite	Normal	22-45801	SW	225	0.006	0.0173	24.4	23.46	52.3	-	22.53	7.3	2250	-	-	-	-	-	-	-	-	-	-	30	48.6	-	20.4	401	734	127	-	-	-	-
W Pond (by MW0)	27/01/2023	W Pond (by MW0)	Onsite	Normal	23-02828	SW	494	0.008	0.0047	44.55	46.09	76.7	-	49.36	7.3	4940	-	-	<0.02	-	-	-	-	-	-	-	57.6	102	-	32.2	780	1360	220	-	-	-	-
W Pond (by MW0)	14/02/2023	W pond (by MW0)	Onsite	Normal	3177138	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	12/04/2023	Western Pond (by MW0)	Onsite	Normal	23-11202	SW	516	-	-	-	-	-	-	51.6	6.9	5160	-	-	<0.02	-	-	7700	-	-	53.9	-	53.9	108	-	33.6	882	1360	171	50.82	-	43.08	0.13
W Pond (by MW0)	12/04/2023	WESTERN POND (BY MW0)	Onsite	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	12/04/2023	W Pond (by MW0)	Onsite	Normal	23-11173	SW	662	-	-	-	-	-	-	66.21	7.9	6620	-	-	<0.002	-	-	-	-	-	236	-	82.1	141	-	54.4	1200	1910	116	69.64	-	60.99	4.43
W Pond (by MW0)	29/08/2023	W Pond (by MW0)	Onsite	Normal	ES2332296005	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes

^ It is assumed that ammonia has been quantified as total ammonia nitrogen [NH3-N]

															Organic Indicators			Metals																			
							Nitrate (as N)	Nitrate (as N) (filtered)	Nitrite (as N) (filtered)	Nitrogen (Total Oxidised) (as N) (filtered)	Nitrate (as NO3-) (filtered)	Nitrite (as NO2-) (filtered)	Reactive Phosphorus as P (filtered)	Ammonia (filtered)^	Carbonaceous Biochemical Oxygen Demand (cBOD5)	BOD	Total Organic Carbon	Aluminium	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Iron	Iron (filtered)	Lead	Lead (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)
							mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	g/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL							0.002	0.002	0.001		0.002	0.001	0.002	0.005	1	1		0.001	0.001	0.0005	0.0005	0.005	0.005	0.00001	0.00001	0.0002	0.0002	0.0002	0.0002	0.005	0.005	0.00005	0.00005	0.0005	0.0005	0.00008	0.00008
Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type																															
E Pond	26/07/2017	E Spond	Onsite	Normal	17-17753	SW	-	-	-	-	1.24	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00002	-	0.0006	-	0.0051	-	-	-	0.0002	-	-	-	-
E Pond	6/10/2017	E_Sed_Pond	Onsite	Normal	17-24362	SW	-	-	-	-	0.74	-	-	-	-	-	-	-	0.013	-	-	-	-	-	0.00005	-	0.0004	-	0.0026	-	-	-	0.0002	-	-	-	-
E Pond	24/01/2018	Eastern Pond	Onsite	Normal	18-02540	SW	-	-	-	-	0.0056	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0004	-	0.0008	-	-	-	<0.00005	-	-	-	-
E Pond	17/04/2018	Eastern Pond	Onsite	Normal	18-13881	SW	-	-	-	-	0.092	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0004	-	0.0015	-	-	-	0.0001	-	-	-	-
E Pond	17/07/2018	E-Pond	Onsite	Normal	18-24296	SW	-	-	-	-	0.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0006	-	0.0014	-	-	-	0.0003	-	-	-	-
E Pond	16/10/2018	E_Pond	Onsite	Normal	18-32717	SW	-	-	-	-	<0.0020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0004	-	0.0007	-	-	-	0.00005	-	-	-	-
E Pond	16/01/2019	E Pond	Onsite	Normal	19-01204	SW	-	-	-	-	<0.0020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0002	-	0.0008	-	-	-	0.0002	-	-	-	-
E Pond	11/04/2019	Eastern Pond	Onsite	Normal	19-12443	SW	-	-	-	-	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0004	-	0.0005	-	-	-	<0.00005	-	-	-	-
E Pond	2/07/2019	Eastern Pond	Onsite	Normal	19-22606	SW	-	-	-	-	0.0447	-	-	-	9.24	-	-	-	-	-	-	-	-	-	-	-	<0.0020	-	0.0026	-	-	-	0.00763	-	-	-	-
E Pond	7/10/2019	E Pond	Onsite	Normal	19-35048	SW	-	-	-	-	0.117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00038	-	0.0019	-	-	-	<0.000050	-	-	-	-
E Pond	14/01/2020	E Pond	Onsite	Normal	20-01151	SW	-	-	-	-	0.0141	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	-	<0.0020	-	-	-	<0.00050	-	-	-	-
E Pond	22/05/2020	E Ponds	Onsite	Normal	20-18493	SW	-	-	-	-	0.0965	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	-	<0.0020	-	-	-	<0.00050	-	-	-	-
E Pond	15/07/2020	E POND	Onsite	Normal	20-25874	SW	-	-	-	-	0.101	-	-	-	-	8.1	-	-	-	-	-	-	-	-	-	-	0.00042	-	0.0021	-	-	-	0.0002	-	-	-	-
E Pond	20/10/2020	E Pond	Onsite	Normal	20-39694	SW	-	-	-	-	0.0537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00039	-	0.0013	-	-	-	0.000064	-	-	-	-
E Pond	26/01/2021	E POND	Onsite	Normal	21-03140	SW	-	-	-	-	0.068	-	-	-	-	4.9	-	-	-	-	-	-	-	-	-	-	0.00036	-	0.0014	-	-	-	<0.000050	-	-	-	-
E Pond	16/04/2021	E POND	Onsite	Normal	21-17432	SW	-	0.023	-	-	-	-	-	-	-	2.9	-	-	-	-	-	-	-	-	-	-	0.0005	-	0.00028	-	-	-	<0.000050	-	-	-	-
E Pond	23/07/2021	E POND	Onsite	Normal	21-32693	SW	-	0.0702	-	-	-	-	-	-	-	11.8	-	-	-	-	-	-	-	-	-	-	0.00045	-	0.0015	-	-	-	0.000063	-	-	-	-
E Pond	19/10/2021	E POND	Onsite	Normal	21-44163	SW	-	0.109	-	-	-	-	-	-	-	3.9	-	-	-	-	-	-	-	-	-	-	0.00072	-	0.0017	-	-	-	0.00044	-	-	-	-
E Pond	24/01/2022	E Pond	Onsite	Normal	2840662	SW	0.011	-	0.011	0.022	-	-	-	-	-	-	36	-	-	-	-	-	-	-	-	-	<0.0005	-	0.001	1.43	0.03	-	<0.00010	-	-	-	-
E Pond	6/04/2022	E Pond	Onsite	Normal	2948345	SW	0.039	-	0.018	0.057	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-	<0.0005	-	<0.0005	2.8	0.07	-	0.00013	-	-	-	-
E Pond	14/07/2022	E Pond	Onsite	Normal	3034727	SW	1.25	-	0.025	1.28	-	-	-	-	-	-	18.2	-	-	-	-	-	-	-	-	-	0.0016	-	0.0037	3.4	0.65	-	0.00133	-	-	-	-
E Pond	12/10/2022	E Pond	Onsite	Normal	3095310	SW	0.62	-	0.026	0.64	-	-	-	-	-	-	31	-	-	-	-	-	-	-	-	-	0.0006	-	0.0038	-	0.2	-	0.00044	-	-	-	-
E Pond	18/01/2023	E Pond	Onsite	Normal	23-01371	SW	-	0.394	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0014	-	0.0015	-	-	-	0.0013	-	-	-	-
E Pond	12/04/2023	E Pond	Onsite	Normal	23-11603	SW	-	0.915	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0011	-	0.00026	-	-	-	0.00024	-	-	-	-
E Pond	13/04/2023	Eastern Pond	Onsite	Normal	23-11285	SW	-	0.11	-	-	-	-	<0.002	-	-	-	-	1.99	0.096	0.0041	0.0021	0.784	1.04	0.000039	<0.000020	0.0039	0.0011	0.0051	0.00047	4.13	0.22	0.00764	0.00025	0.339	0.235	<0.00010	<0.000080
E Pond	13/04/2023	EASTERN POND	Onsite	Normal	ES2313258	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	29/08/2023	Eastern Pond	Onsite	Normal	ES2332296003	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	18/10/2021	NE Wetland	Onsite	Normal	21-44426		-	0.151	0.0278	-	-	-	0.085	-	-	-	-	0.13	<0.0030	0.002	0.00084	0.878	0.37	<0.000020	<0.000020	0.0021	0.00081	0.0028	0.0024	-	0.043	0.001	<0.000050	0.433	0.0823	<0.00010	<0.000080
NE Pond	2/12/2021	NE Wetland	Onsite	Normal	21-50430		-	0.0882	0.0164	-	-	-	0.035	-	-	-	-	0.041	0.021	0.0016	0.0016	1.54	1.5	<0.000020	<0.000020	0.003	0.0029	0.00062	0.00029	-	3.82	0.00067	0.00023	0.4	0.394	<0.00010	<0.000080
NE Pond	26/01/2022	NE Wetland	Onsite	Normal	2840646		-	0.019	0.012	0.031	-	-	-	-	-	-	-	0.03	0.011	0.002	0.0017	2.8	2.7	<0.000053	<0.00005	0.0053	0.0045	0.00071	<0.0005	7.4	2.8	0.00054	0.0001	1.2	1.15	<0.00008	<0.00008
NE Pond	2/03/2022	NE Wetland	Onsite	Normal	2901160		-	0.031	0.014	0.045	-	-	-	-	-	-	-	0.026	0.007	0.0024	0.0021	4	4.2	<0.000053	<0.00005	0.0071	0.0055	<0.00053	<0.0005	9.7	1.35	0.00059	<0.00010	1.22	1.25	<0.00008	<0.00008
NE Pond	2/04/2022	NE Wetland	Onsite	Normal	2942228		-	0.181	0.029	0.21	-	-	-	-	-	-	-	0.022	0.011	0.0033	0.0026	8.2	8.8	<0.000053	<0.00005	0.0138	0.012	0.00161	0.0007	12.3	0.59	0.00099	<0.00010	0.26	0.24	<0.00008	<0.00008
NE Pond	4/05/2022	NE Wetland	Onsite	Normal	2977305		-	0.187	0.032	0.22	-	-	-	-	-	-	-	0.0196	0.008	0.0026	0.0023	5.2	6.2	<0.000053	<0.00005	0.01	0.0083	<0.00053	<0.0005	9.2	1.66	0.00085	0.00012	0.28	0.25	<0.00008	<0.00008
NE Pond	1/06/2022	NE Wetland	Onsite	Normal	3004871		-	0.183	0.031	0.21	-	-	-	-	-	-	-	0.042	0.016	<0.0021	<0.005	1.56	1.61	<0.00011	<0.0003	0.003	<0.003	<0.0011	<0.003	3.7	3	0.00053	<0.0005	0.3	0.29	<0.00008	<0.00008
NE Pond	14/07/2022	NE Wetland	Onsite	Normal	3034726		-	3	0.034	3	-	-	-	-	-	-	-	1.74	1.39	0.0016	0.0013	0.061	0.055	0.000061	<0.00005	0.003	0.0019	0.0063	0.0045	2.2	1.04	0.00188	0.00061	0.178	0.115	<0.00008	<0.00008
NE Pond	10/08/2022	NE Wetland	Onsite	Normal	3052140		-	0.34	0.019	0.36	-	-	-	-	-	-	-	0.4	0.142	<0.0053	<0.005	0.56	0.54	<0.00027	<0.0003	<0.0053	<0.003	<0.0053	<0.003	4	2.3	0.0009	0.0006	0.35	0.193	<0.00008	<0.00008
NE Pond	6/09/2022	NE Wetland	Onsite	Normal	3070876		-	0.52	0.014	0.54	-	-	-	-	-	-	-	0.29	0.065	<0.0053	<0.0010	0.197	0.18	<0.00027	<0.00005	<0.0027	0.0007	0.0041	0.0025	1.22	0.58	0.00157	0.00039	0.109	0.09	<0.00008	-
NE Pond	7/10/2022	NE Wetland	Onsite	Normal	3092289		-	0.128	0.017	0.145	-	-	-	-	-	-	-	0.15	0.103	<0.0053	0.0012	0.116	0.1	<0.00027	<0.00005	<0.0027	0.0006	<0.0027	0.0013	1.5	1.14	0.00064	0.00039	0.22	0.187	<0.00008	<0.00008
NE Pond	15/11/2022	NE Wetland	Onsite	Normal	22-41869		-	0.0963	0.0201	-	-	-	0.037	-	-	-	-	0.051	0.013	0.0027	0.0018	5.23	4.47	<0.000020	<0.000020	0.008	0.007	0.0011	0.00035	-	3.47	0.00083	0.00014	0.508	0.524	<0.00010	<0.000080
NE Pond	14/12/2022	NE Wetland	Onsite	Normal	22-45801		-	-	-	-	-	0.177	-	34.8	-	-	-	0.22	0.03	0.0031	0.0021	1.65	1.6	<0.000020	<0.000020	0.0032	0.0027	0.0033	0.0015	5.92	1.93	0.0016	0.00045	0.63	0.42	<0.00010	<0.000080
NE Pond	14/12/2022	NE Wetland	Onsite	Normal	3174733		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	18/01/2023	NE Pond	Onsite	Normal	23-01704		-	-	-	-	-	0.0575	-	221	-	-	-	0.023	<0.030	0.0032	<0.0050	7.72	9.71	0.00003	<0.00020	0.018	0.014	0.0004	<0.0020	-	0.669	0.0011	<0.00050	0.368	0.259	<0.00010	<0.000080
NE Pond	18/01/2023	NE Pond	Onsite	Normal	3168264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/02/2023	NE Pond	Onsite	Normal	3177138		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	12/04/2023	NE Wetland	Onsite	Normal	23-11173		-	0.225	0.0742	-	-	-	0.062	-	-	-	-	0.095	0.05	0.0016	0.0014	0.653	0.757	<0.000020	0.000025	0.0015	0.002	0.0044	0.004	1.4	0.598	0.00095	0.00053	0.216	0.262	<0.00010	<0.000080
NE Pond	29/08/2023	NE Wetland	Onsite	Normal	ES2332296001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	18/10/2021	SE Wetland	Onsite	Normal	21-44426		-	<0.0020	0.007	-	-	-	0.248	-	-	-	-	0.19	0.043	0.0018	0.0017	0.079	0.079	<0.000020	<0.000020	0.00054	0.00036	0.0016	0.00089	-	1.33	0.0012	0.00054	0.576	0.343	<0.00010	<0.000080
SE Pond	2/12/2021	SE Wetland	Onsite	Normal	21-50430		-	0.0128	0.0054	-	-	-	0.285	-	-	-	-	0.063	0.027	0.0015	0.0014	0.023	0.022	<0.000020	<0.000020	0.0018	0.00025	0.00072	0.00066	-	1.46	0.00042	0.00024	0.502	0.408	<0.00010	<0.000080
SE Pond	26/01/2022	SE Wetland	Onsite	Normal	2840646		-	<0.002	0.003	<0.002	-	-	-	-	-	-	-	0.131	0.03	0.0014	0.0012	0.062	0.062	<0.000053	<0.00005	0.00067	<0.0005	0.0031	0.0009	4.1	1.77	0.00155	0.0002	2.2	1.16	<0.00008	<0.00008
SE Pond	2/03/2022	SE Wetland	Onsite	Normal	2901160		-	<0.002	0.006	0.006	-	-	-	-	-	-	-	0.067	0.012	0.0015	0.0012	0.098	0.051	<0.000053	<0.00005	<0.00053	<0.0005	0.00087	<0.0005	4.6	0.22	0.00037	<0.00010	2.2	0.071	<0.00008	<0.00008
SE Pond	2/04/2022	SE Wetland	Onsite	Normal	2942228		-	0.106	0.009	0.115	-	-	-	-	-	-	-	0.075	0.025	0.0016	0.0014	0.061	0.063	<0.000053	<0.00005	0.00069	0.0007	0.0036	0.0026	1.77	0.84	0.00072	0.00029	0.69	0.74	<0.00008	<0.00008
SE Pond	4/05/2022	SE Wetland	Onsite	Normal	2977305		-	0.084	0.012	0.097	-	-	-	-	-	-	-	0.038	0.019	0.0017	0.0015	0.08	0.076	<0.000053	<0.00005	<0.00053	<0.0005	0.00137	0.0007	1.19	0.75	0.00035	0.0002	0.28	0.22	<0.00008	<0.00008
SE Pond	1/06/2022	SE Wetland	Onsite	Normal	3004871		-	0.123	0.027	0.15	-	-	-	-	-	-	-	0.08	0.031	0.0012	0.0011	0.123	0.139	<0.000053	<0.00005	<0.00053	<0.0005	0.00073	<0.0005	0.97	0.7	0.00047	0.0002	0.33	0.32	<0.00008	<0.00008
SE Pond	14/07/2022	SE Wetland	Onsite	Normal	3034726		-	3	0.032	3	-	-	-	-	-	-	-	1.69	1.23	0.0015	0.0012	0.051	0.055	0.000056	<0.00005	0.0028	0.0021	0.0061	0.0046	2	0.95	0.00176	0.0006	0.153	0.128	<0.00008	<0.00008
SE Pond	10/08/2022	SE Wetland	Onsite	Normal	3052140		-	0.33	0.032	0.36	-	-	-	-	-	-	-	0.29	0.161	0.0011	<0.0010	0.079	0.071	<0.000053	<0.00005	0.00103	0.0008	0.0034	0.0025	1.65	0.88	0.0009	0.00049	0.41	0.31	<0.00008	<0.00008
SE Pond	6/09/2022	SE Wetland	Onsite	Normal	3070876		-	0.056	0.006	0.062	-	-	-	-	-	-	-	0.094	0.061	0.0012	0.0011	0.063	0.058	<0.000053	<0.00005	<0.00053	<0.0005	0.00174	0.0016	0.9	0.73	0.00063	0.00038	0.144	0.141	<0.00008	-
SE Pond	7/10/2022	SE Wetland	Onsite	Normal	3092289		-	0.055	0.01	0.065	-	-	-	-	-	-	-	0.31	0.116	0.0015	0.0012	0.07	0.068	<0.000053	<0.00005	0.00058	<0.0005	0.00189	0.0011	1.59	1.14	0.00133	0.00047	0.29	0.26	<0.00008	<0.00008
SE Pond	15/11/2022	SE Wetland	Onsite	Normal	22-41869		-	0.0572	0.00755	-	-	-	0.288	-	-	-	-	0.16	0.041	0.0024	0.002	0.057	0.056	<0.000020	<0.000020	0.00042	0.0007	0.0021	0.0015	-	1.27	0.00081	0.0005	0.91	0.907	<0.00010	<0.000080
SE Pond	14/12/2022	SE Wetland	Onsite	Normal	22-45801		-	-	-	-	-	0.0272	-	0.51	-	-	-	0.15	0.02	0.0022	0.002	0.088	0.088	<0.000020	<0.000020	0.00033	0.00036	0.0018	0.00064	2.09	1.26	0.00093	0.00024	1.22	0.555	<0.00010	<0.000080
SE Pond	14/12/2022	SE Wetland	Onsite	Normal	3174733		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	18/01/2023	SE Pond	Onsite	Normal	23-01704		-	-	-	-	-	0.0145	-	0.76	-	-	-	0.19	0.059	0.0026	0.0024	0.045	0.051	<0.000020	<0.000020	0.00075	0.00085	0.0047	0.0037	-	0.821	0.0012	0.00065	0.212	0.222	<0.00010	<0.000080
SE Pond	18/01/2023	SE Pond	Onsite	Normal	3168264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/02/2023	SE Wetland	Onsite	Normal	3177138		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	12/04/2023	SE Wetland	Onsite	Normal	23-11173		-	0.578	0.0141	-	-	-	0.062	-	-	-	-	0.411	0.078	0.00085	0.0023	0.078	0.023	<0.000020	0.000021	0.001	0.0012	0.0049	0.0033	0.69	0.3	0.0027	0.00057	0.035	0.117	<0.00010	<0.000080
SE Pond	29/08/2023	SE Wetland	Onsite	Normal	ES2332296002		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

															Organic Indicators			Metals																			
							Nitrate (as N)	Nitrate (as N) (filtered)	Nitrite (as N) (filtered)	Nitrogen (Total Oxidised) (as N) (filtered)	Nitrate (as NO3-) (filtered)	Nitrite (as NO2-) (filtered)	Reactive Phosphorus as P (filtered)	Ammonia (filtered)^	Carbonaceous Biochemical Oxygen Demand (cBOD5)	BOD	Total Organic Carbon	Aluminium	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Iron	Iron (filtered)	Lead	Lead (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)
							mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	g/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL							0.002	0.002	0.001		0.002	0.001	0.002	0.005	1	1		0.001	0.001	0.0005	0.0005	0.005	0.005	0.00001	0.00001	0.0002	0.0002	0.0002	0.0002	0.005	0.005	0.00005	0.00005	0.0005	0.0005	0.00008	0.00008
Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type																															
W Pond	26/07/2017	W Spond	Onsite	Normal	17-17753	SW	-	-	-	-	1.68	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	0.0009	-	0.0036	-	-	-	0.0002	-	-	-	-
W Pond	6/10/2017	W_Sed_Pond	Onsite	Normal	17-24362	SW	-	-	-	-	0.56	-	-	-	-	-	-	-	0.039	-	-	-	-	-	0.00007	-	0.0013	-	0.0035	-	-	-	0.0003	-	-	-	-
W Pond	24/01/2018	Western Pond	Onsite	Normal	18-02540	SW	-	-	-	-	<0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0044	-	0.0022	-	-	-	<0.0005	-	-	-	-
W Pond	17/04/2018	Western Pond	Onsite	Normal	18-13881	SW	-	-	-	-	<0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0022	-	0.0011	-	-	-	0.00006	-	-	-	-
W Pond	17/07/2018	W-Pond	Onsite	Normal	18-24296	SW	-	-	-	-	1.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0018	-	0.0009	-	-	-	0.00009	-	-	-	-
W Pond	16/10/2018	W_Pond	Onsite	Normal	18-32717	SW	-	-	-	-	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0027	-	0.0026	-	-	-	0.0001	-	-	-	-
W Pond	16/01/2019	W Pond	Onsite	Normal	19-01204	SW	-	-	-	-	0.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0023	-	0.0026	-	-	-	0.0001	-	-	-	-
W Pond	11/04/2019	Western Pond	Onsite	Normal	19-12443	SW	-	-	-	-	0.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0025	-	0.0015	-	-	-	<0.00005	-	-	-	-
W Pond	2/07/2019	Western Pond	Onsite	Normal	19-22606	SW	-	-	-	-	1.21	-	-	-	<1.00	-	-	-	-	-	-	-	-	-	-	-	<0.0020	-	<0.0020	-	-	-	<0.00050	-	-	-	-
W Pond	7/10/2019	W Pond	Onsite	Normal	19-35048	SW	-	-	-	-	0.374	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	0.0022	-	-	-	<0.000050	-	-	-	-
W Pond	14/01/2020	W Pond	Onsite	Normal	20-01151	SW	-	-	-	-	<0.0020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	-	<0.0020	-	-	-	<0.00050	-	-	-	-
W Pond	20/05/2020	W Pond	Onsite	Normal	20-18080	SW	-	-	-	-	0.371	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0014	-	0.00059	-	-	-	<0.000050	-	-	-	-
W Pond	15/07/2020	W POND	Onsite	Normal	20-25874	SW	-	-	-	-	1.3	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	0.0011	-	0.0011	-	-	-	<0.000050	-	-	-	-
W Pond	20/10/2020	W Pond	Onsite	Normal	20-39694	SW	-	-	-	-	0.427	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0012	-	0.0015	-	-	-	<0.000050	-	-	-	-
W Pond	26/01/2021	W POND	Onsite	Normal	21-03140	SW	-	-	-	-	<0.0020	-	-	-	-	9.7	-	-	-	-	-	-	-	-	-	-	0.0017	-	0.0012	-	-	-	<0.000050	-	-	-	-
W Pond	16/04/2021	W POND	Onsite	Normal	21-17432	SW	-	<0.0020	-	-	-	-	-	-	-	2.8	-	-	-	-	-	-	-	-	-	-	0.0012	-	0.00042	-	-	-	<0.000050	-	-	-	-
W Pond	23/07/2021	W POND	Onsite	Normal	21-32693	SW	-	0.315	-	-	-	-	-	-	-	3.6	-	-	-	-	-	-	-	-	-	-	0.00072	-	0.00083	-	-	-	<0.000050	-	-	-	-
W Pond	18/10/2021	W POND	Onsite	Normal	21-44162	SW	-	0.207	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	0.00096	-	0.0011	-	-	-	<0.000050	-	-	-	-
W Pond	25/01/2022	W Pond	Onsite	Normal	2842291	SW	<0.02	-	<0.02	<0.02	-	-	-	-	-	-	64	-	-	-	-	-	-	-	-	-	0.0019	-	0.001	2.3	0.05	-	0.0003	-	-	-	-
W Pond	5/04/2022	W Pond	Onsite	Normal	2946978	SW	0.023	-	0.133	0.156	-	-	-	-	-	-	51	-	-	-	-	-	-	-	-	-	0.0019	-	0.0005	2	0.09	-	0.00024	-	-	-	-
W Pond	14/07/2022	W Pond	Onsite	Normal	3034727	SW	18.3	-	0.28	18.6	-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	-	0.001	-	0.0048	1.02	0.11	-	0.00027	-	-	-	-
W Pond	12/10/2022	W Pond	Onsite	Normal	3095310	SW	0.03	-	0.008	0.038	-	-	-	-	-	-	13.6	-	-	-	-	-	-	-	-	-	<0.005	-	<0.005	-	<0.2	-	<0.0010	-	-	-	-
W Pond	18/01/2023	W Pond	Onsite	Normal	23-01371	SW	-	0.0787	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0018	-	0.00056	-	-	-	0.00021	-	-	-	-
W Pond	12/04/2023	Western Pond	Onsite	Normal	23-11202	SW	-	0.0172	-	-	-	-	0.11	-	-	-	-	0.726	0.019	0.013	0.0082	0.49	0.535	0.000045	<0.000020	0.0068	0.0019	0.0028	0.0012	1.48	0.2	0.00505	0.000078	0.652	0.718	<0.00010	<0.000080
W Pond	12/04/2023	WESTERN POND	Onsite	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	29/08/2023	Western Pond	Onsite	Normal	ES2332296004	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	18/10/2021	W Pond (by MW0)	Onsite	Normal	21-44426	SW	-	0.0057	0.0019	-	-	-	0.007	-	-	-	-	0.621	0.018	0.0015	0.0014	0.34	0.926	0.00004	<0.000020	0.003	0.0015	0.0036	0.0017	-	0.931	0.0015	0.00016	0.157	0.0703	<0.00010	<0.000080
W Pond (by MW0)	25/01/2022	W Pond (by MW0)	Onsite	Normal	2842292	SW	-	0.049	0.004	0.052	-	-	-	-	-	-	-	3.9	0.017	0.0059	0.0013	0.27	0.26	0.000095	<0.00005	0.0134	<0.0005	0.0073	0.0007	10.2	0.11	0.0098	<0.00010	0.62	0.53	<0.00008	<0.00008
W Pond (by MW0)	2/03/2022	W Pond (by MW0)	Onsite	Normal	2901160	SW	-	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	0.83	0.038	0.0025	0.0013	0.21	0.21	<0.000053	<0.00005	0.0039	<0.0005	0.0029	0.0011	1.94	0.06	0.0027	0.00011	0.13	0.102	<0.00008	<0.00008
W Pond (by MW0)	2/04/2022	W Pond (by MW0)	Onsite	Normal	2942228	SW	-	0.006	<0.002	0.007	-	-	-	-	-	-	-	0.064	0.004	0.0011	0.001	0.54	0.62	<0.000053	<0.00005	<0.00053	<0.0005	0.00095	0.0008	0.41	0.2	0.00022	<0.00010	0.26	0.28	<0.00008	<0.00008
W Pond (by MW0)	4/05/2022	W Pond (by MW0)	Onsite	Normal	2977305	SW	-	0.032	0.012	0.045	-	-	-	-	-	-	-	0.185	<0.06	0.0019	<0.02	0.89	0.99	<0.000053	<0.0010	0.00112	<0.010	0.00112	<0.010	1.04	<0.4	0.0005	<0.002	0.87	0.93	<0.00008	<0.00008
W Pond (by MW0)	1/06/2022	W Pond (by MW0)	Onsite	Normal	3004871	SW	-	0.09	0.015	0.106	-	-	-	-	-	-	-	1.92	<0.06	<0.021	<0.02	0.79	0.79	<0.0011	<0.0010	<0.011	<0.010	<0.011	<0.010	5.3	<0.4	0.0056	<0.002	0.89	0.88	<0.00008	<0.00008
W Pond (by MW0)	14/07/2022	W Pond (by MW0)	Onsite	Normal	3034726	SW	-	9.2	0.172	9.3	-	-	-	-	-	-	-	1.2	0.24	0.0018	0.0013	0.21	0.24	0.000072	0.00007	0.0028	0.0015	0.0066	0.0046	1.98	0.44	0.00194	0.00041	0.156	0.139	<0.00008	<0.00008
W Pond (by MW0)	10/08/2022	W Pond (by MW0)	Onsite	Normal	3052140	SW	-	0.31	0.028	0.34	-	-	-	-	-	-	-	3.4	0.054	0.0055	0.0011	0.4	0.4	0.000094	<0.00005	0.0146	0.0008	0.0081	0.0017	7.7	0.06	0.0092	<0.00010	0.24	0.156	<0.00008	<0.00008
W Pond (by MW0)	6/09/2022	W Pond (by MW0)	Onsite	Normal	3070876	SW	-	0.44	0.014	0.46	-	-	-	-	-	-	-	0.39	0.029	0.0013	<0.0010	0.44	0.42	<0.000053	<0.00005	0.00164	<0.0005	0.0022	0.0013	1.13	0.09	0.00141	0.00011	0.22	0.22	<0.00008	-
W Pond (by MW0)	7/10/2022	W Pond (by MW0)	Onsite	Normal	3092289	SW	-	0.172	0.0084	0.18	-	-	-	-	-	-	-	0.184	0.062	<0.0042	<0.004	0.47	0.43	<0.00021	<0.0002	<0.0011	<0.0010	0.0016	0.0016	0.47	0.5	<0.0011	<0.0010	0.21	0.194	<0.00008	<0.00008
W Pond (by MW0)	15/11/2022	W Pond (By MW0)	Onsite	Normal	22-41869	SW	-	0.0935	0.0104	-	-	-	0.015	-	-	-	-	0.774	0.046	0.003	0.0016	0.5	0.4	0.000032	<0.000020	0.0025	0.00073	0.0021	0.0011	-	0.083	0.0013	0.0001	0.184	0.186	<0.00010	<0.000080
W Pond (by MW0)	14/12/2022	W Pond (by MW0)	Onsite	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	14/12/2022	W Pond (By MW0)	Onsite	Normal	22-45801	SW	-	-	-	-	-	0.0035	-	0.06	-	-	-	0.19	0.025	0.002	0.0012	0.28	0.25	<0.000020	<0.000020	0.00083	0.00043	0.0023	0.0013	0.662	0.2	0.00089	0.00014	0.123	0.106	<0.00010	<0.000080
W Pond (by MW0)	27/01/2023	W Pond (By MW0)	Onsite	Normal	23-02828	SW	-	-	-	-	-	0.006	-	0.11	-	-	-	0.52	0.0098	0.0034	0.0012	0.37	0.39	<0.000020	<0.000020	0.0018	<0.00020	0.0017	0.00074	-	0.083	0.00088	0.000094	0.458	0.462	<0.00010	<0.000080
W Pond (by MW0)	14/02/2023	W pond (by MW0)	Onsite	Normal	3177138	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	12/04/2023	Western Pond (by MW0)	Onsite	Normal	23-11202	SW	-	0.107	-	-	-	-	0.009	-	-	-	-	0.042	0.013	0.0013	0.00098	0.31	0.3	<0.000020	<0.000020	0.00049	0.00072	0.0013	0.00099	0.46	0.28	0.00038	0.000079	0.216	0.251	<0.00010	<0.000080
W Pond (by MW0)	12/04/2023	WESTERN POND (BY MW0)	Onsite	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	12/04/2023	W Pond (by MW0)	Onsite	Normal	23-11173	SW	-	0.0154	0.0372	-	-	-	0.093	-	-	-	-	0.722	0.025	0.011	0.0097	0.67	0.648	0.000021	<0.000020	0.0046	0.0017	0.0018	<0.00020	1.28	0.15	0.0033	0.0001	0.673	0.756	<0.00010	<0.000080
W Pond (by MW0)	29/08/2023	W Pond (by MW0)	Onsite	Normal	ES2332296005	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes

^ It is assumed that ammonia has been quantified as total ammonia nitrogen [NH3-N]

											BTEXN	TRH - NEP	Organic Fl	TPH			PFAS - Perfluoroalkyl Carboxylic Acids											PFAS - Perfluoroalkyl Sulfonic Acids			
							Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Naphthalene (BTEXN suite)	C10-C14 Fraction	Total Organic Fluorine	C15-C36	C7-C36	C7-C9	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	PFHxS (di-branched)	PFHxS (mono-branched)	PFHxS (Total)	PFOS (di-branched)
							mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL							0.0002	0.0002	0.001	0.001	2	200	5000	300	500	200	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.001	0.001	0.001
Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type																									
E Pond	26/07/2017	E Spond	Onsite	Normal	17-17753	SW	-	0.0022	-	0.0074	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	6/10/2017	E_Sed_Pond	Onsite	Normal	17-24362	SW	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	24/01/2018	Eastern Pond	Onsite	Normal	18-02540	SW	-	0.0028	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	17/04/2018	Eastern Pond	Onsite	Normal	18-13881	SW	-	0.0024	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	17/07/2018	E-Pond	Onsite	Normal	18-24296	SW	-	0.0034	-	0.0018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	16/10/2018	E_Pond	Onsite	Normal	18-32717	SW	-	0.0023	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	16/01/2019	E Pond	Onsite	Normal	19-01204	SW	-	0.0023	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	11/04/2019	Eastern Pond	Onsite	Normal	19-12443	SW	-	0.003	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	2/07/2019	Eastern Pond	Onsite	Normal	19-22606	SW	-	0.0031	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	7/10/2019	E Pond	Onsite	Normal	19-35048	SW	-	0.0034	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	14/01/2020	E Pond	Onsite	Normal	20-01151	SW	-	0.0033	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	22/05/2020	E Ponds	Onsite	Normal	20-18493	SW	-	0.0031	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	15/07/2020	E POND	Onsite	Normal	20-25874	SW	-	0.0039	-	0.0022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	20/10/2020	E Pond	Onsite	Normal	20-39694	SW	-	0.0033	-	0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	26/01/2021	E POND	Onsite	Normal	21-03140	SW	-	0.0028	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	16/04/2021	E POND	Onsite	Normal	21-17432	SW	-	0.0039	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	23/07/2021	E POND	Onsite	Normal	21-32693	SW	-	0.0041	-	0.0016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	19/10/2021	E POND	Onsite	Normal	21-44163	SW	-	0.0032	-	0.0022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	24/01/2022	E Pond	Onsite	Normal	2840662	SW	-	0.0037	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	6/04/2022	E Pond	Onsite	Normal	2948345	SW	-	0.0048	-	0.0047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	14/07/2022	E Pond	Onsite	Normal	3034727	SW	-	0.0019	-	0.0146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	12/10/2022	E Pond	Onsite	Normal	3095310	SW	-	0.0047	-	0.0018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	18/01/2023	E Pond	Onsite	Normal	23-01371	SW	-	0.0074	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	12/04/2023	E Pond	Onsite	Normal	23-11603	SW	-	0.0043	-	0.0039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	13/04/2023	Eastern Pond	Onsite	Normal	23-11285	SW	0.0071	0.0047	0.024	0.0037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	13/04/2023	EASTERN POND	Onsite	Normal	ES2313258	SW	-	-	-	-	-	-	-	-	-	-	0.075	<0.0005	0.0357	0.0123	0.0222	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-
E Pond	29/08/2023	Eastern Pond	Onsite	Normal	ES2332296003	SW	-	-	-	-	-	-	-	-	-	-	<0.0200	0.031	0.0324	0.0109	0.0164	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0100	-	-	-	-
NE Pond	18/10/2021	NE Wetland	Onsite	Normal	21-44426		0.0037	0.0034	0.033	0.0048	-	<200	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	2/12/2021	NE Wetland	Onsite	Normal	21-50430		0.0045	0.0044	0.033	0.045	-	<200	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	26/01/2022	NE Wetland	Onsite	Normal	2840646		0.0079	0.0072	0.0056	0.0036	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	2/03/2022	NE Wetland	Onsite	Normal	2901160		0.0101	0.0097	0.0034	0.0016	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	2/04/2022	NE Wetland	Onsite	Normal	2942228		0.0199	0.0198	0.0131	0.0071	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	4/05/2022	NE Wetland	Onsite	Normal	2977305		0.0157	0.013	0.0058	0.0033	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	1/06/2022	NE Wetland	Onsite	Normal	3004871		0.0045	0.004	0.0056	<0.005	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/07/2022	NE Wetland	Onsite	Normal	3034726		0.0033	0.0028	0.036	0.025	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	10/08/2022	NE Wetland	Onsite	Normal	3052140		0.003	0.003	0.0118	0.007	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	6/09/2022	NE Wetland	Onsite	Normal	3070876		<0.0027	0.0013	0.078	0.062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	7/10/2022	NE Wetland	Onsite	Normal	3092289		<0.0027	0.0015	0.0089	0.0066	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	15/11/2022	NE Wetland	Onsite	Normal	22-41869		0.012	0.01	0.01	0.0076	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/12/2022	NE Wetland	Onsite	Normal	22-45801		0.0054	0.0047	0.029	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/12/2022	NE Wetland	Onsite	Normal	3174733		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	18/01/2023	NE Pond	Onsite	Normal	23-01704		0.0234	0.0225	0.006	<0.010	-	-	-	-	-	-	0.88	<0.20	0.17	0.079	0.18	0.0024	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.016	0.069	0.0026
NE Pond	18/01/2023	NE Pond	Onsite	Normal	3168264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/02/2023	NE Pond	Onsite	Normal	3177138		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	12/04/2023	NE Wetland	Onsite	Normal	23-11173		0.0022	0.0025	0.039	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	29/08/2023	NE Wetland	Onsite	Normal	ES2332296001		-	-	-	-	-	-	-	-	-	-	0.0226	<0.0040	0.0085	<0.0040	0.0088	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0100	-	-	-	-
SE Pond	18/10/2021	SE Wetland	Onsite	Normal	21-44426		0.0026	0.0024	0.01	0.0019	-	<200	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	2/12/2021	SE Wetland	Onsite	Normal	21-50430		0.0012	0.0014	0.0044	0.0042	-	<200	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	26/01/2022	SE Wetland	Onsite	Normal	2840646		0.00111	0.0007	0.031	0.0045	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	2/03/2022	SE Wetland	Onsite	Normal	2901160		0.00074	0.0007	0.008	0.0013	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	2/04/2022	SE Wetland	Onsite	Normal	2942228		0.00109	0.0008	0.056	0.045	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	4/05/2022	SE Wetland	Onsite	Normal	2977305		0.00089	0.0007	0.0091	0.0052	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	1/06/2022	SE Wetland	Onsite	Normal	3004871		0.0011	0.0009	0.0063	0.0036	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/07/2022	SE Wetland	Onsite	Normal	3034726		0.0036	0.0028	0.031	0.024	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	10/08/2022	SE Wetland	Onsite	Normal	3052140		0.0023	0.0019	0.011	0.0082	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	6/09/2022	SE Wetland	Onsite	Normal	3070876		0.00139	0.0015	0.021	0.0179	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	7/10/2022	SE Wetland	Onsite	Normal	3092289		0.0017	0.0015	0.0121	0.0024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	15/11/2022	SE Wetland	Onsite	Normal	22-41869		0.0015	0.0011	0.013	0.0092	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/12/2022	SE Wetland	Onsite	Normal	22-45801		0.0016	0.00096	0.021	0.0037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/12/2022	SE Wetland	Onsite	Normal	3174733		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	18/01/2023	SE Pond	Onsite	Normal	23-01704		0.00073	0.00061	0.047	0.045	-	-	-	-	-	-	<0.010	<0.010	0.0032	0.0018	0.0046	0.0012	0.0015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
SE Pond	18/01/2023	SE Pond	Onsite	Normal	3168264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/02/2023	SE Wetland	Onsite	Normal	3177138		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	12/04/2023	SE Wetland	Onsite	Normal	23-11173		0.0011	0.00067	0.033	0.072	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	29/08/2023	SE Wetland	Onsite	Normal	ES2332296002		-	-	-	-	-	-	-	-	-	-	<0.0200	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0100	-	-	-	-

											BTEXN	TRH - NEPI	Organic Flu	TPH			PFAS - Perfluoroalkyl Carboxylic Acids											PFAS - Perfluoroalkyl Sulfonic Acids			
							Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Naphthalene (BTEXN suite)	C10-C14 Fraction	Total Organic Fluorine	C15-C36	C7-C36	C7-C9	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	PFHxS (di-branched)	PFHxS (mono-branched)	PFHxS (Total)	PFOS (di-branched)
							mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL							0.0002	0.0002	0.001	0.001	2	200	5000	300	500	200	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.001	0.001	0.001
Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type																									
W Pond	26/07/2017	W Spond	Onsite	Normal	17-17753	SW	-	0.0019	-	0.0081	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	6/10/2017	W_Sed_Pond	Onsite	Normal	17-24362	SW	-	0.0046	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	24/01/2018	Western Pond	Onsite	Normal	18-02540	SW	-	0.0084	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	17/04/2018	Western Pond	Onsite	Normal	18-13881	SW	-	0.0039	-	0.0027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	17/07/2018	W-Pond	Onsite	Normal	18-24296	SW	-	0.0045	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	16/10/2018	W_Pond	Onsite	Normal	18-32717	SW	-	0.0052	-	0.0017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	16/01/2019	W Pond	Onsite	Normal	19-01204	SW	-	0.0053	-	0.0018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	11/04/2019	Western Pond	Onsite	Normal	19-12443	SW	-	0.0061	-	0.0011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	2/07/2019	Western Pond	Onsite	Normal	19-22606	SW	-	0.0044	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	7/10/2019	W Pond	Onsite	Normal	19-35048	SW	-	0.0027	-	0.0015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	14/01/2020	W Pond	Onsite	Normal	20-01151	SW	-	0.0038	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	20/05/2020	W Pond	Onsite	Normal	20-18080	SW	-	0.004	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	15/07/2020	W POND	Onsite	Normal	20-25874	SW	-	0.0028	-	0.0014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	20/10/2020	W Pond	Onsite	Normal	20-39694	SW	-	0.0035	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	26/01/2021	W POND	Onsite	Normal	21-03140	SW	-	0.0037	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	16/04/2021	W POND	Onsite	Normal	21-17432	SW	-	0.0031	-	0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	23/07/2021	W POND	Onsite	Normal	21-32693	SW	-	0.0018	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	18/10/2021	W POND	Onsite	Normal	21-44162	SW	-	0.0021	-	0.0021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	25/01/2022	W Pond	Onsite	Normal	2842291	SW	-	0.0037	-	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	5/04/2022	W Pond	Onsite	Normal	2946978	SW	-	0.0036	-	0.0013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	14/07/2022	W Pond	Onsite	Normal	3034727	SW	-	0.0025	-	0.0098	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	12/10/2022	W Pond	Onsite	Normal	3095310	SW	-	<0.005	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	18/01/2023	W Pond	Onsite	Normal	23-01371	SW	-	0.0025	-	0.0028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	12/04/2023	Western Pond	Onsite	Normal	23-11202	SW	0.0034	0.0018	0.013	0.0028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	12/04/2023	WESTERN POND	Onsite	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	<0.002	0.0163	0.0212	0.0059	0.0137	0.0024	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-
W Pond	29/08/2023	Western Pond	Onsite	Normal	ES2332296004	SW	-	-	-	-	-	-	-	-	-	-	<0.0200	0.0831	0.0828	0.0116	0.016	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0100	-	-	-	-
W Pond (by MW0)	18/10/2021	W Pond (by MW0)	Onsite	Normal	21-44426	SW	0.0041	0.0034	0.015	0.008	-	<200	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	25/01/2022	W Pond (by MW0)	Onsite	Normal	2842292	SW	0.0085	0.0026	0.065	0.0027	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	2/03/2022	W Pond (by MW0)	Onsite	Normal	2901160	SW	0.0034	0.0021	0.0176	0.0012	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	2/04/2022	W Pond (by MW0)	Onsite	Normal	2942228	SW	0.0024	0.0022	0.0078	0.0062	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	4/05/2022	W Pond (by MW0)	Onsite	Normal	2977305	SW	<0.011	<0.010	0.02	<0.02	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	1/06/2022	W Pond (by MW0)	Onsite	Normal	3004871	SW	<0.011	<0.010	0.042	<0.02	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	14/07/2022	W Pond (by MW0)	Onsite	Normal	3034726	SW	0.0087	0.0071	0.028	0.0195	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	10/08/2022	W Pond (by MW0)	Onsite	Normal	3052140	SW	0.0083	0.0038	0.064	0.0022	-	<200	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	6/09/2022	W Pond (by MW0)	Onsite	Normal	3070876	SW	0.0029	0.0027	0.0189	0.0073	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	7/10/2022	W Pond (by MW0)	Onsite	Normal	3092289	SW	<0.0070	<0.007	0.0101	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	15/11/2022	W Pond (By MW0)	Onsite	Normal	22-41869	SW	0.0037	0.0024	0.0089	0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	14/12/2022	W Pond (by MW0)	Onsite	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	14/12/2022	W Pond (By MW0)	Onsite	Normal	22-45801	SW	0.002	0.0017	0.012	0.0064	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	27/01/2023	W Pond (by MW0)	Onsite	Normal	23-02828	SW	0.0028	0.0012	0.0073	0.0054	-	-	-	-	-	-	<0.010	<0.010	0.0021	<0.0010	0.002	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
W Pond (by MW0)	14/02/2023	W pond (by MW0)	Onsite	Normal	3177138	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	12/04/2023	Western Pond (by MW0)	Onsite	Normal	23-11202	SW	0.0021	0.0018	0.011	0.0084	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	12/04/2023	WESTERN POND (BY MW0)	Onsite	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	<0.002	<0.0005	0.002	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-
W Pond (by MW0)	12/04/2023	W Pond (by MW0)	Onsite	Normal	23-11173	SW	0.0029	0.0019	0.012	0.0017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	29/08/2023	W Pond (by MW0)	Onsite	Normal	ES2332296005	SW	-	-	-	-	-	-	-	-	-	-	<0.0020	0.0055	0.0064	0.0022	0.0063	0.0008	0.001	<0.0005	<0.0005	<0.0005	<0.0010	-	-	-	-

Notes
^ It is assumed that ammonia has been quantified as total ammonia nitrogen [NH3-N]

																		PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids				PFAS - Sums									
							PFOS (mono-branched)	PFOS (Total)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	Sum (PFHxS (Total) + PFOS (Total))*	Sum (PFOS (Total) + PFOA (Total))*	Sum of PFAS (n=10)*	Sum of PFAS (n=31)*	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*	PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	PFAS (Sum of Total)(WA DER List)
							µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL							0.001	0.001	0.001	0.0005	0.0005	0.0005	0.0005	0.0003	0.001	0.0005	0.0005	0.001	0.001	0.0005	0.001	0.001	0.0005	0.001	0.001	0.001	0.001	0	0	0	0	0	0.0003	0.001	0.0003	0.001	0.0003
Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type																															
E Pond	26/07/2017	E Spond	Onsite	Normal	17-17753	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	6/10/2017	E_Sed_Pond	Onsite	Normal	17-24362	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	24/01/2018	Eastern Pond	Onsite	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	17/04/2018	Eastern Pond	Onsite	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	17/07/2018	E-Pond	Onsite	Normal	18-24296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	16/10/2018	E_Pond	Onsite	Normal	18-32717	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	16/01/2019	E Pond	Onsite	Normal	19-01204	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	11/04/2019	Eastern Pond	Onsite	Normal	19-12443	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	2/07/2019	Eastern Pond	Onsite	Normal	19-22606	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	7/10/2019	E Pond	Onsite	Normal	19-35048	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	14/01/2020	E Pond	Onsite	Normal	20-01151	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	22/05/2020	E Ponds	Onsite	Normal	20-18493	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	15/07/2020	E POND	Onsite	Normal	20-25874	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	20/10/2020	E Pond	Onsite	Normal	20-39694	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	26/01/2021	E POND	Onsite	Normal	21-03140	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	16/04/2021	E POND	Onsite	Normal	21-17432	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	23/07/2021	E POND	Onsite	Normal	21-32693	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	19/10/2021	E POND	Onsite	Normal	21-44163	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	24/01/2022	E Pond	Onsite	Normal	2840662	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	6/04/2022	E Pond	Onsite	Normal	2948345	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	14/07/2022	E Pond	Onsite	Normal	3034727	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	12/10/2022	E Pond	Onsite	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	18/01/2023	E Pond	Onsite	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	12/04/2023	E Pond	Onsite	Normal	23-11603	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	13/04/2023	Eastern Pond	Onsite	Normal	23-11285	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E Pond	13/04/2023	EASTERN POND	Onsite	Normal	ES2313258	SW	-	0.011	-	0.0031	<0.0005	0.0043	<0.0005	0.011	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	0.002	<0.001	0.001	<0.001	<0.001	-	0.0153	-	-	-	0.0153	-	0.167	-	0.165
E Pond	29/08/2023	Eastern Pond	Onsite	Normal	ES2332296003	SW	-	-	-	<0.0040	<0.0040	0.0044	<0.0040	0.015		<0.0040	<0.0040	<0.010	<0.010	<0.0040	<0.010	<0.010	<0.0040	<0.004	<0.004	<0.004	<0.004	-	0.0194	-	-	0.11	0.0194	-	-	-	0.11
NE Pond	18/10/2021	NE Wetland	Onsite	Normal	21-44426		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	2/12/2021	NE Wetland	Onsite	Normal	21-50430		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	26/01/2022	NE Wetland	Onsite	Normal	2840646		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	2/03/2022	NE Wetland	Onsite	Normal	2901160		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	2/04/2022	NE Wetland	Onsite	Normal	2942228		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	4/05/2022	NE Wetland	Onsite	Normal	2977305		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	1/06/2022	NE Wetland	Onsite	Normal	3004871		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/07/2022	NE Wetland	Onsite	Normal	3034726		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	10/08/2022	NE Wetland	Onsite	Normal	3052140		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	6/09/2022	NE Wetland	Onsite	Normal	3070876		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	7/10/2022	NE Wetland	Onsite	Normal	3092289		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	15/11/2022	NE Wetland	Onsite	Normal	22-41869		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/12/2022	NE Wetland	Onsite	Normal	22-45801		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/12/2022	NE Wetland	Onsite	Normal	3174733		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	18/01/2023	NE Pond	Onsite	Normal	23-01704		0.015	0.031	0.0067	0.019	0.01	0.053	0.0013	0.031	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.011	<0.0010	-	0.29	0.1	0.22	1.4	1.5	0.1	-	-	-	-
NE Pond	18/01/2023	NE Pond	Onsite	Normal	3168264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	14/02/2023	NE Pond	Onsite	Normal	3177138		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	12/04/2023	NE Wetland	Onsite	Normal	23-11173		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NE Pond	29/08/2023	NE Wetland	Onsite	Normal	ES2332296001		-	-	-	<0.0040	<0.0040	0.0046	<0.0040	<0.0040		<0.0040	<0.0040	<0.010	<0.010	<0.0040	<0.010	<0.010	<0.0040	<0.004	<0.004	<0.004	<0.004	-	0.0046	-	-	0.0445	0.0046	-	-	-	0.0445
SE Pond	18/10/2021	SE Wetland	Onsite	Normal	21-44426		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	2/12/2021	SE Wetland	Onsite	Normal	21-50430		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	26/01/2022	SE Wetland	Onsite	Normal	2840646		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	2/03/2022	SE Wetland	Onsite	Normal	2901160		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	2/04/2022	SE Wetland	Onsite	Normal	2942228		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	4/05/2022	SE Wetland	Onsite	Normal	2977305		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	1/06/2022	SE Wetland	Onsite	Normal	3004871		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/07/2022	SE Wetland	Onsite	Normal	3034726		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	10/08/2022	SE Wetland	Onsite	Normal	3052140		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	6/09/2022	SE Wetland	Onsite	Normal	3070876		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	7/10/2022	SE Wetland	Onsite	Normal	3092289		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	15/11/2022	SE Wetland	Onsite	Normal	22-41869		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/12/2022	SE Wetland	Onsite	Normal	22-45801		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/12/2022	SE Wetland	Onsite	Normal	3174733		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	18/01/2023	SE Pond	Onsite	Normal	23-01704		<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	0.0059	0.0013	0.0059	0.011	0.014	0.0013	-	-	-	-
SE Pond	18/01/2023	SE Pond	Onsite	Normal	3168264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	14/02/2023	SE Wetland	Onsite	Normal	3177138		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	12/04/2023	SE Wetland	Onsite	Normal	23-11173		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE Pond	29/08/2023	SE Wetland	Onsite	Normal	ES2332296002		-	-	-	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	-	<0.0040	<0.0040	<0.010	<0.010	<0.0040	<0.010	<0.010	<0.0040	<0.004	<0.004	<0.004	<0.004	-	<0.0040	-	-	<0.0040	-	-	-	-	<0.0040

																	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids				PFAS - Sums									
							PFOS (mono-branched)	PFOS (Total)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	Sum (PFHxS (Total) + PFOS (Total))*	Sum (PFOS (Total) + PFOA (Total))*	Sum of PFAS (n=10)*	Sum of PFAS (n=31)*	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*	PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	PFAS (Sum of Total)(WA DER List)
							µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL							0.001	0.001	0.001	0.0005	0.0005	0.0005	0.0005	0.0003	0.001	0.0005	0.0005	0.001	0.001	0.0005	0.001	0.001	0.0005	0.001	0.001	0.001	0.001	0	0	0	0	0	0.0003	0.001	0.0003	0.001	0.0003
Location Code	Date	Field ID	Category	Sample Type	Lab Report Number	Location Type																															
W Pond	26/07/2017	W Spond	Onsite	Normal	17-17753	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	6/10/2017	W_Sed_Pond	Onsite	Normal	17-24362	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	24/01/2018	Western Pond	Onsite	Normal	18-02540	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	17/04/2018	Western Pond	Onsite	Normal	18-13881	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	17/07/2018	W-Pond	Onsite	Normal	18-24296	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	16/10/2018	W_Pond	Onsite	Normal	18-32717	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	16/01/2019	W Pond	Onsite	Normal	19-01204	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	11/04/2019	Western Pond	Onsite	Normal	19-12443	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	2/07/2019	Western Pond	Onsite	Normal	19-22606	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	7/10/2019	W Pond	Onsite	Normal	19-35048	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	14/01/2020	W Pond	Onsite	Normal	20-01151	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	20/05/2020	W Pond	Onsite	Normal	20-18080	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	15/07/2020	W POND	Onsite	Normal	20-25874	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	20/10/2020	W Pond	Onsite	Normal	20-39694	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	26/01/2021	W POND	Onsite	Normal	21-03140	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	16/04/2021	W POND	Onsite	Normal	21-17432	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	23/07/2021	W POND	Onsite	Normal	21-32693	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	18/10/2021	W POND	Onsite	Normal	21-44162	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	25/01/2022	W Pond	Onsite	Normal	2842291	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	5/04/2022	W Pond	Onsite	Normal	2946978	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	14/07/2022	W Pond	Onsite	Normal	3034727	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	12/10/2022	W Pond	Onsite	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	18/01/2023	W Pond	Onsite	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	12/04/2023	Western Pond	Onsite	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond	12/04/2023	WESTERN POND	Onsite	Normal	ES2313255	SW	-	0.0126	-	0.0049	<0.0005	<0.0005	<0.0005	0.0126	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0043	<0.001	<0.001	<0.001	<0.001	-	0.0126	-	-	-	0.0126	-	0.0813	-	0.0746
W Pond	29/08/2023	Western Pond	Onsite	Normal	ES2332296004	SW	-	-	-	0.0245	<0.0040	0.0058	<0.0040	0.0043		<0.0040	<0.0040	<0.010	<0.010	<0.0040	<0.010	<0.010	<0.0040	<0.004	<0.004	<0.004	<0.004	-	0.0101	-	-	0.228	-	-	-	-	0.228
W Pond (by MW0)	18/10/2021	W Pond (by MW0)	Onsite	Normal	21-44426	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	25/01/2022	W Pond (by MW0)	Onsite	Normal	2842292	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	2/03/2022	W Pond (by MW0)	Onsite	Normal	2901160	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	2/04/2022	W Pond (by MW0)	Onsite	Normal	2942228	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	4/05/2022	W Pond (by MW0)	Onsite	Normal	2977305	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	1/06/2022	W Pond (by MW0)	Onsite	Normal	3004871	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	14/07/2022	W Pond (by MW0)	Onsite	Normal	3034726	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	10/08/2022	W Pond (by MW0)	Onsite	Normal	3052140	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	6/09/2022	W Pond (by MW0)	Onsite	Normal	3070876	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	7/10/2022	W Pond (by MW0)	Onsite	Normal	3092289	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	15/11/2022	W Pond (By MW0)	Onsite	Normal	22-41869	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	14/12/2022	W Pond (by MW0)	Onsite	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	14/12/2022	W Pond (By MW0)	Onsite	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	27/01/2023	W Pond (by MW0)	Onsite	Normal	23-02828	SW	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	0.0031	0.0011	0.0031	0.0052	0.0052	-	-	-	-	-
W Pond (by MW0)	14/02/2023	W pond (by MW0)	Onsite	Normal	3177138	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	12/04/2023	Western Pond (by MW0)	Onsite	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	12/04/2023	WESTERN POND (BY MW0)	Onsite	Normal	ES2313255	SW	-	0.0018	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0018	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	0.0018	-	-	-	0.0018	-	0.0052	-	0.0052
W Pond (by MW0)	12/04/2023	W Pond (by MW0)	Onsite	Normal	23-11173	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W Pond (by MW0)	29/08/2023	W Pond (by MW0)	Onsite	Normal	ES2332296005	SW	-	-	-	<0.0005	<0.0005	0.0013	<0.0005	0.0139		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	0.0152	-	-	0.0374	-	-	-	-	0.0356

Notes

^ It is assumed that ammonia has been quantified as total ammonia nitrogen [NH3-N]

Location C	Date	Field ID	Matrix Typ	Sample Ty	Lab Repor	Location Group	Location Type
N Pond	06 Mar 2023	N_Sed_Po	Water	Normal	23-06742	Onsite	SW

Location C	Benzo(a)pyrene TEQ (zero)	Benzo[a]pyrene TEQ (LOR)	Sum C15-C36	ammonia (filtered)	Arsenic	Arsenic (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Lead	Lead (filtered)
	µg/L	g/m3	g/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
N Pond	<0.30	0.00080	<0.3	0.13	0.0015	0.00085	0.17	0.15	0.000043	<0.000020	0.0014	0.00026	0.0065	0.0046	0.0025	0.000066

Location C	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	C10-C14 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
N Pond	<0.00010	0.000092	0.0043	0.0034	0.014	0.0036	<1.0	<1.0	<1.0	<1.0	<1.0	<200	<0.30	<0.30	<0.30	<0.30

Location C	Benzo(a)pyrene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	2-methylnaphthalene	Benzo(b)fluoranthene
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
N Pond	<0.30	<0.50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.50

Location C	Date	Field ID	Matrix Typ	Sample Ty	Lab Repor	Location Group	Location Type	2,3,5,6-Tetrachlorophenol	2-Phenylphenol	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-Chloro-3-methylphenol	Phenol	2-Nitrophenol	2-Methylphenol (o-Cresol)	2,4-Dimethylphenol	4-Nitrophenol	4-Methylphenol (p-Cresol)	1,3-dichlorobenzene	2-nitroaniline	3,3-Dichlorobenzidine	3-nitroaniline	4-bromophenyl phenyl ether	4-chloroaniline	4-chlorophenyl phenyl ether	Azobenzene	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Dibenzofuran	Hexachlorocyclopentadiene	Hexachloroethane	N-nitrosodi-n-propylamine	n-Nitrosodiphenylamine	4,4'-DDE	a-BHC	Aldrin	b-BHC
								µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
N Pond	06 Mar 2023	N_Sed_Po	Water	Normal	23-06742	Onsite	SW	<0.30	<5.0	<0.30	<0.30	<0.50	<0.50	<0.30	<0.30	<2.0	<0.50	<0.30	<1.0	<1.0	<0.30	<0.30	<0.50	<0.50	<0.30	<0.30	<0.50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.50	<0.30

Location C	Date	Field ID	Matrix Typ	Sample Ty	Lab Repor	Location Group	Location Type	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Ethyl methanesulfonate	Methyl methanesulfonate
								µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
N Pond	06 Mar 2023	N_Sed_Po	Water	Normal	23-06742	Onsite	SW	<0.30	<0.50	<0.30	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<10	<0.30

Location C	C7-C9	1,2-dichlorobenzene	1,4-dichlorobenzene	2-chloronaphthalene	Hexachlorobutadiene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Di(2-ethylhexyl)adipate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Isophorone
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
N Pond	<200	<0.30	<0.30	<0.30	<0.30	<1.0	<1.0	<0.30	<6.3	<1.0	<5.0	<2.0	<0.30	<10	<0.50	<0.30

		Upstream				Ponds							
		GI1		GI2		E Pond				NE Pond			
Chemical	Unit	Maximum	Median	Maximum	Median	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*
Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	g/m3	-	-	-	-	-	-	-		0.018	-	-	-
Nitrate-N (NO3-N) (filtered)	g/m3	-	-	-	-	-	-	-		0.894	-	-	-
Sum of Anions*	meq/L	-	-	-	-	-	-	-		85.75	-	-	-
Sum of Cations*	meq/L	-	-	-	-	-	-	-		84.48	-	-	-
Total Alkalinity (CaCO3)	g CaCO3/m3	-	-	-	-	-	-	-		2516	-	-	-
EC/10* (EC/10)	(mS/m)/10	-	-	-	-	10.96	-	-		69.84	-	17.07	-
pH (Lab)	pH Units	9.4	8.3	7.1	6.8	8.6	-9%	8	-4%	8.1	-14%	7.7	-7%
Electrical conductivity (lab)	µS/cm	21600	211	42900	359	156700	265%	2030	465%	682000	1490%	47100	13020%
Dissolved Oxygen (Lab) (filtered)	mg/L	10.71	9.3	10.26	9.225	10.59	-1%	7.99	-14%	-	-	-	-
Cyanide (Free)	mg/L	-	-	-	-	-	-	-	-	0.013	-	-	-
Cyanide (Total)	mg/L	0.083	-	0.024	0.012	-	-	-	-	0.07	-16%	0.013	8%
Cyanide (Total) (filtered)	mg/L	-	-	-	-	-	-	-	-	0.07	-	0.023	-
Cyanide (WAD)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Carbon	µg/L	9000	4300	11400	3800	86000	654%	30100	600%	-	-	-	-
Alkalinity (Bicarbonate as CaCO3)	mg/L	-	-	-	-	-	-	-	-	2500	-	580	-
Alkalinity (Bicarbonate as CaCO3) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (total as CaCO3)	mg/L	-	-	-	-	291	-	210	-	2000	-	480	-
Hardness as CaCO3	mg/L	-	-	-	-	-	-	-	-	770	-	240	-
Calcium (filtered)	mg/L	-	-	-	-	38.5	-	-	-	116	-	48	-
Magnesium (filtered)	mg/L	-	-	-	-	21.1	-	-	-	126	-	34	-
Potassium	mg/L	-	-	-	-	45.1	-	25.4	-	-	-	-	-
Potassium (filtered)	mg/L	-	-	-	-	33.8	-	23.7	-	165	-	29.6	-
Sodium (filtered)	mg/L	-	-	-	-	168	-	-	-	1110	-	260	-
Chloride (filtered)	mg/L	32.6	18.1	37.1	24.2	494	1232%	115	375%	1220	3188%	268	1007%
Sulfate (filtered)	mg/L	-	-	-	-	35.8	-	-	-	47	-	10.4	-
Cations Total	meq/L	-	-	-	-	11.83	-	-	-	10.15	-	-	-
Cations Total (filtered)	meq/L	-	-	-	-	-	-	-	-	75	-	25	-
Anions Total	meq/L	-	-	-	-	10.54	-	-	-	71	-	17.57	-
Ammonia as N (filtered)	mg/L	0.38	0.016	0.26	0.11	6.55	1624%	0.725	559%	188	49374%	41	37173%
Ammonia (filtered)	mg/L	-	-	-	-	-	-	-	-	221	-	-	-
Nitrate (as N)	mg/L	2.6	0.35	2.8	0.2095	1.25	-55%	0.3295	-6%	-	-	-	-
Nitrate (as N) (filtered)	mg/L	0.998	0.409	0.595	0.266	0.915	-8%	0.1095	-73%	3	201%	0.181	-56%
Nitrite (as N) (filtered)	mg/L	0.009	0.006	0.009	0.003	0.026	189%	0.0215	258%	0.0742	724%	0.0201	235%
Nitrogen (Total Oxidised) (as N) (filtered)	mg/L	2.6	0.36	2.8	0.2105	1.28	-54%	0.3485	-3%	3	7%	0.21	-42%
Nitrate (as NO3-) (filtered)	mg/L	0.97	0.39	1.22	0.346	1.24	2%	0.092	-76%	-	-	-	-
Nitrite (as NO2-) (filtered)	mg/L	-	-	-	-	-	-	-	-	0.177	-	-	-
Reactive Phosphorus as P (filtered)	mg/L	-	-	-	-	-	-	-	-	0.085	-	0.0495	-
Carbonaceous Biochemical Oxygen Demand (cBOD5)	g/m3	-	-	-	-	9.24	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	11.8	-	4.9	-	-	-	-	-
Total Organic Carbon	mg/L	10.4	5.55	13	5.4	38	192%	33.5	504%	-	-	-	-
Aluminium	mg/L	-	-	-	-	1.99	-	-	-	1.74	-	0.051	-
Aluminium (filtered)	mg/L	0.31	0.04	0.53	0.026	0.096	-82%	-	-	1.39	162%	0.021	-48%
Arsenic	mg/L	-	-	-	-	0.0041	-	-	-	0.0033	-	0.0024	-
Arsenic (filtered)	mg/L	-	-	-	-	0.0021	-	-	-	0.0026	-	0.0017	-
Boron	mg/L	-	-	-	-	0.784	-	-	-	8.2	-	1.56	-
Boron (filtered)	mg/L	-	-	-	-	1.04	-	-	-	9.71	-	1.6	-
Cadmium	mg/L	-	-	-	-	0.000039	-	-	-	0.000061	-	-	-
Cadmium (filtered)	mg/L	0.00028	0.00011	0.00015	0.000098	0.00005	-82%	-	-	0.000025	-91%	-	-
Chromium (III+VI)	mg/L	-	-	-	-	0.0039	-	-	-	0.018	-	0.00425	-
Chromium (III+VI) (filtered)	mg/L	0.00079	0.00035	0.0007	0.0004	0.0016	103%	0.000435	9%	0.014	1672%	0.0029	625%
Copper	mg/L	-	-	-	-	0.0051	-	-	-	0.0063	-	0.002205	-
Copper (filtered)	mg/L	0.004	0.0018	0.0029	0.0011	0.0051	28%	0.00145	-19%	0.0045	13%	0.0015	-17%
Iron	mg/L	-	-	-	-	4.13	-	3.1	-	12.3	-	4	-
Iron (filtered)	mg/L	0.34	0.32	1.02	0.47	0.65	-36%	0.2	-57%	3.82	275%	1.35	187%
Lead	mg/L	-	-	-	-	0.00764	-	-	-	0.00188	-	0.0009	-
Lead (filtered)	mg/L	0.00058	0.0002	0.00061	0.0001	0.00763	1151%	0.0002	0%	0.00061	0%	0.00039	95%
Manganese	mg/L	-	-	-	-	0.339	-	-	-	1.22	-	0.35	-
Manganese (filtered)	mg/L	-	-	-	-	0.235	-	-	-	1.25	-	0.259	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Mercury (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	0.0071	-	-	-	0.0234	-	0.0054	-
Nickel (filtered)	mg/L	0.0238	0.00076	0.0173	0.008	0.0074	-69%	0.0033	-59%	0.0225	-5%	0.0044	-45%
Zinc	mg/L	-	-	-	-	0.024	-	-	-	0.078	-	0.0118	-
Zinc (filtered)	mg/L	0.077	0.013	0.059	0.027	0.043	-44%	0.00295	-89%	0.062	-19%	0.0071	-74%
Naphthalene (BTEXN suite)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
C10-C14 Fraction	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Total Organic Fluorine	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
C15-C36	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
C7-C36	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
C7-C9	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutanoic acid (PFBA)	µg/L	<0.010	-	<0.010	-	0.075	-	-	-	0.88	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	<0.010	-	<0.010	-	0.031	-	-	-	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	<0.0010	-	0.0357	1685%	-	-	0.17	8400%	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	<0.001	-	<0.0010	-	0.0123	-	-	-	0.079	-	-	-
Perfluorooctanoic acid (PFOA)	µg/L	0.0011	-	<0.0010	-	0.0222	1918%	-	-	0.18	16264%	-	-
Perfluorononanoic acid (PFNA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.0024	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-
Perfluoroundecanoic acid (PFUnDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-
Perfluorododecanoic acid (PFDoDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-
PFHxS (di-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-
PFHxS (mono-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.016	-	-	-
PFHxS (Total)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.069	-	-	-
PFOS (di-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.0026	-	-	-
PFOS (mono-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.015	-	-	-
PFOS (Total)	µg/L	0.001	-	<0.0010	-	0.011	1000%	-	-	0.031	3000%	-	-
Perfluoropropanesulfonic acid (PFPrS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.0067	-	-	-
Perfluorobutane sulfonic acid (PFBS)	µg/L	<0.001	-	<0.0010	-	0.0031	-	-	-	0.019	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.01	-	-	-
Perfluorohexane sulfonic acid (PFHxS)	µg/L	<0.001	-	<0.0010	-	0.0044	-	-	-	0.053	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.0013	-	-	-
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.001	-	0.0004	-	0.015	1400%	-	-	0.031	3000%	-	-
Perfluorononanesulfonic acid (PFNS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanesulfonic acid (PFDS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-

		Upstream				Ponds							
		GI1		GI2		E Pond				NE Pond			
Chemical	Unit	Maximum	Median	Maximum	Median	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*
Perfluorooctane sulfonamide (FOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	<0.0010	-	<0.0010	-	0.002	-	-	-	-	-	-	-
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	<0.0050	-	<0.0050	-	0.001	-	-	-	0.011	-	-	-
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	-	-	<0.0010	-	-	-	-	-	-	-	-	-
Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	µg/L	0.0021	-	0.0004	-	-		-	-	0.29	13710%	-	-
Sum (PFHxS (Total) + PFOS (Total))*	µg/L	0.001	-	-	-	0.0194	1840%	-	-	0.1	9900%	-	-
Sum (PFOS (Total) + PFOA (Total))*	µg/L	0.0021	-	-	-	-		-	-	0.22	10376%	-	-
Sum of PFAS (n=10)*	µg/L	0.0039	-	0.0004	-	-		-	-	1.4	35797%	-	-
Sum of PFAS (n=31)*	µg/L	0.0039	-	-	-	0.11	2721%	-	-	1.5	38362%	-	-
Sum of PFHxS and PFOS	µg/L	0.001	-	-	-	0.0194	1840%	-	-	0.1	9900%	-	-
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
PFAS (Sum of Total)	µg/L	-	-	-	-	0.167	-	-	-	-	-	-	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	µg/L	-	-	0.0004	-	-		-	-	-	-	-	-
PFAS (Sum of Total)(WA DER List)	µg/L	0.0008	-	-	-	0.165	20525%	-	-	0.0445	5463%	-	-

Notes

^ It is assumed that ammonia has been quantified as total ammonia nitrogen [NH3-N]

		Upstream				Ponds													
		GI1		GI2		SE Pond				W Pond				W Pond by MW0				N Pond	
Chemical	Unit	Maximum	Median	Maximum	Median	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*
Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	g/m3	-	-	-	-	0.305	-	0.149	-	-	-	-	-	0.008	-	-	-	-	-
Nitrate-N (NO3-N) (filtered)	g/m3	-	-	-	-	11.4	-	-	-	-	-	-	-	0.0173	-	-	-	-	-
Sum of Anions*	meq/L	-	-	-	-	6.17	-	-	-	-	-	-	-	44.55	-	-	-	-	-
Sum of Cations*	meq/L	-	-	-	-	5.28	-	-	-	-	-	-	-	46.09	-	-	-	-	-
Total Alkalinity (CaCO3)	g CaCO3/m3	-	-	-	-	120	-	-	-	-	-	-	-	76.7	-	-	-	-	-
EC/10* (EC/10)	(mS/m)/10	-	-	-	-	5.38	-	4.81	-	65.24	-	-	-	66.21	-	44.595	-	-	-
pH (Lab)	pH Units	9.4	8.3	7.1	6.8	7.8	-17%	7.4	-11%	8.9	-5%	8.6	4%	8.1	-14%	7.5	-10%	-	-
Electrical conductivity (lab)	µS/cm	21600	211	42900	359	72800	70%	36000	9928%	635000	1380%	8170	2176%	1386000	3131%	171500	47672%	-	-
Dissolved Oxygen (Lab) (filtered)	mg/L	10.71	9.3	10.26	9.225	-	-	-	-	7.2	-33%	3.71	-60%	-	-	-	-	-	-
Cyanide (Free)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Total)	mg/L	0.083	-	0.024	0.012	0.003	-96%	-	-	-	-	-	-	0.003	-96%	-	-	-	-
Cyanide (Total) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.002	-	-	-	-	-
Cyanide (WAD)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon	µg/L	9000	4300	11400	3800	-	-	-	-	186000	1532%	30250	603%	7700	-32%	-	-	-	-
Alkalinity (Bicarbonate as CaCO3)	mg/L	-	-	-	-	173	-	119	-	-	-	-	-	159	-	89	-	-	-
Alkalinity (Bicarbonate as CaCO3) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (total as CaCO3)	mg/L	-	-	-	-	142	-	97.3	-	495	-	211	-	236	-	77	-	-	-
Hardness as CaCO3	mg/L	-	-	-	-	127	-	104	-	-	-	-	-	1480	-	475	-	-	-
Calcium (filtered)	mg/L	-	-	-	-	28	-	22.4	-	80.1	-	-	-	110	-	53.9	-	-	-
Magnesium (filtered)	mg/L	-	-	-	-	14	-	8.93	-	134	-	-	-	290	-	102	-	-	-
Potassium	mg/L	-	-	-	-	-	-	-	-	83.6	-	57.655	-	-	-	-	-	-	-
Potassium (filtered)	mg/L	-	-	-	-	7.6	-	5.7	-	57.3	-	47.4	-	83	-	32.2	-	-	-
Sodium (filtered)	mg/L	-	-	-	-	100	-	64.4	-	1080	-	-	-	2500	-	780	-	-	-
Chloride (filtered)	mg/L	32.6	18.1	37.1	24.2	129	248%	83	243%	2280	6046%	1325	5375%	4300	11490%	1205	4879%	-	-
Sulfate (filtered)	mg/L	-	-	-	-	51	-	10	-	96.1	-	-	-	590	-	162	-	-	-
Cations Total	meq/L	-	-	-	-	1.31	-	-	-	63.61	-	-	-	69.64	-	-	-	-	-
Cations Total (filtered)	meq/L	-	-	-	-	7.3	-	4.95	-	-	-	-	-	141	-	32.675	-	-	-
Anions Total	meq/L	-	-	-	-	6.5	-	4.7	-	58.74	-	-	-	134	-	39.03	-	-	-
Ammonia as N (filtered)	mg/L	0.38	0.016	0.26	0.11	2.7	611%	0.66	500%	4.96	1205%	0.575	423%	4.43	1066%	0.1325	20%	0.13	-66%
Ammonia (filtered)	mg/L	-	-	-	-	0.76	-	-	-	-	-	-	-	0.11	-	-	-	-	-
Nitrate (as N)	mg/L	2.6	0.35	2.8	0.2095	-	-	-	-	18.3	554%	0.03	-91%	-	-	-	-	-	-
Nitrate (as N) (filtered)	mg/L	0.998	0.409	0.595	0.266	3	201%	0.095	-77%	0.315	-68%	0.14285	-65%	9.2	822%	0.09175	-78%	-	-
Nitrite (as N) (filtered)	mg/L	0.009	0.006	0.009	0.003	0.032	256%	0.009	50%	0.28	3011%	0.133	2117%	0.172	1811%	0.013	117%	-	-
Nitrogen (Total Oxidised) (as N) (filtered)	mg/L	2.6	0.36	2.8	0.2105	3	7%	0.106	-71%	18.6	564%	0.156	-57%	9.3	232%	0.143	-60%	-	-
Nitrate (as NO3-) (filtered)	mg/L	0.97	0.39	1.22	0.346	-	-	-	-	1.68	38%	0.56	44%	-	-	-	-	-	-
Nitrite (as NO2-) (filtered)	mg/L	-	-	-	-	0.0272	-	-	-	-	-	-	-	0.006	-	-	-	-	-
Reactive Phosphorus as P (filtered)	mg/L	-	-	-	-	0.288	-	0.2665	-	0.11	-	-	-	0.093	-	0.012	-	-	-
Carbonaceous Biochemical Oxygen Demand (cBOD5)	g/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	9.7	-	3.6	-	-	-	-	-	-	-
Total Organic Carbon	mg/L	10.4	5.55	13	5.4	-	-	-	-	64	392%	40	621%	-	-	-	-	-	-
Aluminium	mg/L	-	-	-	-	1.69	-	0.15	-	0.726	-	-	-	3.9	-	0.621	-	-	-
Aluminium (filtered)	mg/L	0.31	0.04	0.53	0.026	1.23	132%	0.041	3%	0.039	-93%	-	-	0.24	-55%	0.025	-38%	-	-
Arsenic	mg/L	-	-	-	-	0.0026	-	0.0015	-	0.013	-	-	-	0.011	-	0.002	-	0.0015	-
Arsenic (filtered)	mg/L	-	-	-	-	0.0024	-	0.0014	-	0.0082	-	-	-	0.0097	-	0.0013	-	0.00085	-
Boron	mg/L	-	-	-	-	0.123	-	0.07	-	0.49	-	-	-	0.89	-	0.4	-	0.17	-
Boron (filtered)	mg/L	-	-	-	-	0.139	-	0.062	-	0.535	-	-	-	0.99	-	0.4	-	0.15	-
Cadmium	mg/L	-	-	-	-	0.000056	-	-	-	0.000045	-	-	-	0.000095	-	0.000056	-	0.000043	-
Cadmium (filtered)	mg/L	0.00028	0.00011	0.00015	0.000098	0.000021	-93%	-	-	0.00007	-75%	-	-	0.00007	-75%	-	-	<0.000020	-
Chromium (III+VI)	mg/L	-	-	-	-	0.0028	-	0.00069	-	0.0068	-	-	-	0.0146	-	0.00265	-	0.0014	-
Chromium (III+VI) (filtered)	mg/L	0.00079	0.00035	0.0007	0.0004	0.0021	166%	0.0007	75%	0.0044	457%	0.0017	325%	0.0017	115%	0.0008	100%	0.00026	-67%
Copper	mg/L	-	-	-	-	0.0061	-	0.00189	-	0.0028	-	-	-	0.0081	-	0.00215	-	0.0065	-
Copper (filtered)	mg/L	0.004	0.0018	0.0029	0.0011	0.0046	15%	0.0015	-17%	0.0048	20%	0.0012	-33%	0.0046	15%	0.0012	-33%	0.0046	15%
Iron	mg/L	-	-	-	-	4.6	-	1.65	-	2.3	-	1.74	-	10.2	-	1.205	-	-	-
Iron (filtered)	mg/L	0.34	0.32	1.02	0.47	1.77	74%	0.88	87%	0.2	-80%	0.1	-79%	0.931	-9%	0.15	-68%	-	-
Lead	mg/L	-	-	-	-	0.0027	-	0.0009	-	0.00505	-	-	-	0.0098	-	0.001455	-	0.0025	-
Lead (filtered)	mg/L	0.00058	0.0002	0.00061	0.0001	0.00065	7%	0.000425	113%	0.0003	-51%	0.0002	0%	0.00041	-33%	0.00011	-45%	0.000066	-89%
Manganese	mg/L	-	-	-	-	2.2	-	0.41	-	0.652	-	-	-	0.89	-	0.22	-	-	-
Manganese (filtered)	mg/L	-	-	-	-	1.16	-	0.31	-	0.718	-	-	-	0.93	-	0.22	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.00010	-
Mercury (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000092	-
Nickel	mg/L	-	-	-	-	0.0036	-	0.0012	-	0.0034	-	-	-	0.0087	-	0.00315	-	0.0043	-
Nickel (filtered)	mg/L	0.0238	0.00076	0.0173	0.008	0.0028	-88%	0.00096	-88%	0.0084	-65%	0.0037	-54%	0.0071	-70%	0.0023	-71%	0.0034	-86%
Zinc	mg/L	-	-	-	-	0.056	-	0.013	-	0.013	-	-	-	0.065	-	0.015	-	0.014	-
Zinc (filtered)	mg/L	0.077	0.013	0.059	0.027	0.072	-6%	0.0052	-81%	0.0098	-87%	0.0018	-93%	0.0195	-75%	0.0062	-77%	0.0036	-95%
Naphthalene (BTEXN suite)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.30	-
C10-C14 Fraction	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<200	-
Total Organic Fluorine	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15-C36	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C7-C36	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C7-C9	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutanoic acid (PFBA)	µg/L	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	<0.010	-	<0.010	-	-	-	-	-	0.0831	-	-	-	0.0055	-	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	<0.0010	-	0.0032	60%	-	-	0.0828	4040%	-	-	0.0064	220%	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	<0.001	-	<0.0010	-	0.0018	-	-	-	0.0116	-	-	-	0.0022	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	µg/L	0.0011	-	<0.0010	-	0.0046	318%	-	-	0.016	1355%	-	-	0.0063	473%	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	<0.001	-	<0.0010	-	0.0012	-	-	-	0.0024	-	-	-	0.0008	-	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	<0.001	-	<0.0010	-	0.0015	-	-	-	-	-	-	-	0.001	-	-	-	-	-
Perfluoroundecanoic acid (PFUnDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorododecanoic acid (PFDoDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (di-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (mono-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (Total)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (di-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (mono-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (Total)	µg/L	0.001	-	<0.0010	-	0.0013	30%	-	-	0.0126	1160%	-	-	0.0018	80%	-	-	-	-
Perfluoropropanesulfonic acid (PFPrS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutane sulfonic acid (PFBS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.0245	-	-	-	-	-	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorohexane sulfonic acid (PFHxS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	0.0058	-	-	-	0.0013	-	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.001	-	0.0004	-	0.0013	30%	-	-	0.0126	1160%	-	-	0.0139	1290%	-	-	-	-
Perfluorononanesulfonic acid (PFNS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanesulfonic acid (PFDS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		Upstream								Ponds									
		GI1		GI2		SE Pond				W Pond				W Pond by MW0				N Pond	
Chemical	Unit	Maximum	Median	Maximum	Median	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*
Perfluorooctane sulfonamide (FOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	0.0043	-	-	-	-	-	-	-	-	-
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	<0.0050	-	<0.0050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	-	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	µg/L	0.0021	-	0.0004	-	0.0059	181%	-	-	-	-	-	-	0.0031	48%	-	-	-	-
Sum (PFHxS (Total) + PFOS (Total))*	µg/L	0.001	-	-	-	0.0013	30%	-	-	0.0126	1160%	-	-	0.0152	1420%	-	-	-	-
Sum (PFOS (Total) + PFOA (Total))*	µg/L	0.0021	-	-	-	0.0059	181%	-	-	-	-	-	-	0.0031	48%	-	-	-	-
Sum of PFAS (n=10)*	µg/L	0.0039	-	0.0004	-	0.011	182%	-	-	-	-	-	-	0.0052	33%	-	-	-	-
Sum of PFAS (n=31)*	µg/L	0.0039	-	-	-	0.014	259%	-	-	0.228	5746%	-	-	0.0374	859%	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.001	-	-	-	0.0013	-	-	-	0.0126	1160%	-	-	0.0152	1420%	-	-	-	-
Sum of US EPA PFAS (PFOS + PFOA)*	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFAS (Sum of Total)	µg/L	-	-	-	-	-	-	-	-	0.0813	-	-	-	0.0052	-	-	-	-	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	µg/L	-	-	0.0004	-	-	-	-	-	-	-	-	-	-	#VALUE!	-	-	-	-
PFAS (Sum of Total)(WA DER List)	µg/L	0.0008	-	-	-	-	-	-	-	0.228	28400%	-	-	0.0356	4350%	-	-	-	-

Notes

^ It is assumed that ammonia has been quantified as total ammonia nitrogen [NH3-N]

Appendix B
Table 5
Leachate and groundwater analytical results

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Butyric Acid	Naphthalene (value used in F2 calc)	Benzo(a)pyrene TEQ (zero)	Benzo[a]pyrene TEQ (LOR)	cis-Nonachlor	Conductivity of Water (mS/m)	Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	Faecal Coliforms Count FCOL	Nitrate-N (NO3-N) (filtered)	Sum of Anions*	Sum of Cations*	Total Alkalinity (CaCO3)	Total DDT	Volatile Fatty Acids (as Acetic Acid)	Weak Acid Dissociable (WAD) Cyanide	Phenols (Sum of Total) - Calc	Temperature as Received CAN-001	EC/10* (EC/10)	pH (Lab)	Electrical conductivity (lab)	Dissolved Oxygen (Lab) (filtered)	Total Suspended Solids	COD	Cyanide (Free)	Cyanide (Total)	Cyanide (Total) (filtered)	Cyanide (WAD)	Carbon	1 & 2 Chloronaphthalene	2-Chlorobiphenyl	Acetic Acid
On site																																				
	06 Sep 2022	GW15	Normal	3071976	MW	<5,000	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	<200	-	-	6.9	393000	-	-	440	-	<0.02	-	-	-	<3	-	6000
	14 Dec 2022	GW15	Normal	22-45801	MW	-	0.0042	<0.30	0.0008	-	483	1.442	-	<0.0200	54.27	48.02	1804	-	-	-	-	-	48.32	7.3	4830	-	-	438	-	-	-	-	129000	-	<0.010	-
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
	06 Sep 2022	GW21	Normal	3071976	MW	<30,000	-	-	-	-	-	-	-	-	-	-	-	-	<50	-	<1,000	-	-	7.8	1079000	-	-	2800	-	<0.1	-	-	-	<3	-	<30,000
	14 Dec 2022	GW21	Normal	22-45801	MW	-	0.0023	<0.30	0.0008	-	1147	4.529	-	<0.0200	116.17	122.74	4780	-	-	-	-	-	114.7	7.6	11470	-	-	2810	-	-	-	-	553000	-	<0.010	-
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-
	06 Sep 2022	GW36	Normal	3071976	MW	<30,000	-	-	-	-	-	-	-	-	-	-	-	-	<50	-	<200	-	-	7.8	1682000	-	-	2000	-	<0.1	-	-	-	<3	-	<30,000
	14 Dec 2022	GW36	Normal	22-45801	MW	-	0.002	<0.30	0.0008	-	2024	18.837	-	<0.0200	218.28	224.81	8610	-	-	-	-	-	202.4	7.9	20240	-	-	2970	-	-	-	-	770000	-	<0.010	-
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-
Leachate																																				
	03 Oct 2017	PS3	Normal	17-23985	SW	-	-	-	-	<0.00001	-	-	-	-	-	-	-	<0.00002	-	-	-	-	102.5	7.4	10250.24	6.62	-	1081	-	0.05	-	-	111000	-	<0.01	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	<0.00001	-	-	-	-	-	-	-	<0.00002	-	-	-	-	84.64	7.3	8460	-	-	454	-	0.082	-	-	111000	-	<0.01	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	-	-	82	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	<0.00001	-	-	-	-	-	-	-	<0.00002	<10.00	-	-	10.9	123.1	7.2	12310	-	-	491	-	0.078	-	-	150000	-	<0.01	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	-	-	52	-	-	-	-	-	-	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.4	-	-	80	436	-	-	-	-	-	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	8860	-	54	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	<0.00001	-	-	12000	-	-	-	-	<0.00002	142	-	-	9.6	68.73	7.3	6870	-	28	538	-	0.023	-	-	150000	-	<0.01	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	-	-	-	-	-	-	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	396	-	-	-	-	-	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115000	-	-	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	<0.000010	-	-	-	-	-	-	-	<0.000020	164	-	-	4.4	58.87	7.4	5890	-	118	938	-	0.056	-	-	291000	-	<0.010	-
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84	-	-	-	-	-	-	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	42000	-	-	-	-	-	-	-	-	-	-	-	-	35	-	150	-	-	7.3	524000	-	-	930	-	<0.02	-	-	-	<3	-	<5,000
	06 Sep 2022	PS3	Normal	3070547	SW	<5,000	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	40	-	-	7.7	1233000	-	-	1280	-	0.012	-	-	-	<3	-	<5,000
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	-	<0.0010	<0.30	0.0008	-	1074	0.021	-	<0.0200	110.97	116.42	2727	-	-	-	-	-	107.4	7.2	10740	-	-	545	-	-	-	-	129000	-	<0.010	-
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	1297	-	-	-	-	-	-	-	-	-	-	-	129.7	7.7	12970	-	-	-	-	0.04	-	-	595000	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chemical						Butyric Acid	Naphthalene (value used in F2 calc)	Benzo(a)pyrene TEQ (zero)	Benzo(a)pyrene TEQ (LOR)	cis-Nonachlor	Conductivity of Water (mS/m)	Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	Faecal Coliforms Count FCOL	Nitrate-N (NO3-N) (filtered)	Sum of Anions*	Sum of Cations*	Total Alkalinity (CaCO3)	Total DDT	Volatile Fatty Acids (as Acetic Acid)	Weak Acid Dissociable (WAD) Cyanide	Phenols (Sum of Total) - Calc	Temperature as Received CAN-001	EC/10* (EC/10)	pH (Lab)	Electrical conductivity (lab)	Dissolved Oxygen (Lab) (filtered)	Total Suspended Solids	COD	Cyanide (Free)	Cyanide (Total)	Cyanide (Total) (filtered)	Cyanide (WAD)	Carbon	1 & 2 Chloronaphthalene	2-Chlorobiphenyl	Acetic Acid
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type																															
			Shallow Perimeter																																	
MW0C	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	247	-	-	-	-	-	-	-	-	-	-	-	24.71	6.9	2470	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	220000	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.1	237000	-	-	-	-	0.003	0.004	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	262000	-	-	-	-	<0.002	0.003	-	-	-	-	-
	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	262000	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	229	0.02	-	0.145	26.21	27.31	231	-	-	-	-	-	22.93	7.1	2290	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	264	-	-	-	-	-	-	-	-	-	-	-	26.35	7.4	2640	-	-	-	-	<0.02	-	-	13700	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	2671	-	-	-	-	-	-	-	-	-	-	-	267.1	6.6	26710	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.5	2440000	-	-	-	-	<0.02	<0.002	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	2730000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	2700000	-	-	-	-	<0.02	0.06	-	-	-	-	-
	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2600000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	2826	<0.002	-	<0.0020	288.84	305.83	559	-	-	-	-	-	282.6	7.1	28260	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	2770	-	-	-	-	-	-	-	-	-	-	-	277	8.2	27700	-	-	-	-	<0.02	-	-	24500	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	2908	-	-	-	-	-	-	-	-	-	-	-	290.8	6.5	29080	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.3	2500000	-	-	-	-	<0.02	<0.002	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	2930000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	2900000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	2700000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	3082	<0.002	-	<0.0020	292.33	314.26	302	-	-	-	-	-	308.2	7.3	30820	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	2942	-	-	-	-	-	-	-	-	-	-	-	294.2	7.6	29420	-	-	-	-	<0.02	-	-	27100	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	151	-	-	-	-	-	-	-	-	-	-	-	15.05	6.9	1510	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	174700	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	343000	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.1	179100	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	203000	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	237	0.005	-	0.955	29.43	31.44	585	-	-	-	-	-	23.71	7.4	2370	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	267	-	-	-	-	-	-	-	-	-	-	-	26.74	7.6	2670	-	-	-	-	<0.02	-	-	19900	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	1989	-	-	-	-	-	-	-	-	-	-	-	198.9	7.2	19890	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.1	1769000	-	-	-	-	<0.02	<0.002	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	2020000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	1980000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.7	2000000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	2112	2.956	-	<0.0020	210.91	216.29	868	-	-	-	-	-	211.2	7.6	21120	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	2048	-	-	-	-	-	-	-	-	-	-	-	204.8	7.5	20480	-	-	-	-	<0.02	-	-	45300	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	558	-	-	-	-	-	-	-	-	-	-	-	55.81	7.4	5580	-	-	-	<0.001	0.005	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	540000	-	-	-	-	0.006	<0.02	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.8	631000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.8	700000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.7	750000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	775	0.005	-	0.0183	75.4	78.65	745	-	-	-	-	-	77.48	7.6	7750	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	773	-	-	-	-	-	-	-	-	-	-	-	77.32	8	7730	-	-	-	-	<0.02	-	-	33200	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	642	-	-	-	-	-	-	-	-	-	-	-	64.2	6.7	6420	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	1134000	-	-	-	-	<0.002	<0.02	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.4	1139000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	666000	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	710000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	1098	<0.002	-	0.477	106.36	126.87	441	-	-	-	-	-	109.8	7.5	10980	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	1169	-	-	-	-	-	-	-	-	-	-	-	116.9	7.4	11690	-	-	-	-	<0.02	-	-	16400	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chemical						Butyric Acid	Naphthalene (value used in F2 calc)	Benzo(a)pyrene TEQ (zero)	Benzo[a]pyrene TEQ (LOR)	cis-Nonachlor	Conductivity of Water (mS/m)	Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	Faecal Coliforms Count FCOL	Nitrate-N (NO3-N) (filtered)	Sum of Anions*	Sum of Cations*	Total Alkalinity (CaCO3)	Total DDT	Volatile Fatty Acids (as Acetic Acid)	Weak Acid Dissociable (WAD) Cyanide	Phenols (Sum of Total) - Calc	Temperature as Received CAN-001	EC/10* (EC/10)	pH (Lab)	Electrical conductivity (lab)	Dissolved Oxygen (Lab) (filtered)	Total Suspended Solids	COD	Cyanide (Free)	Cyanide (Total)	Cyanide (Total) (filtered)	Cyanide (WAD)	Carbon	1 & 2 Chloronaphthalene	2-Chlorobiphenyl	Acetic Acid
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type																															
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	152	-	-	-	-	-	-	-	-	-	-	-	15.23	8	1520	-	-	-	<0.001	0.002	-	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.4	130200	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	117100	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.4	101200	-	-	-	-	<0.002	<0.002	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	91100	-	-	-	-	<0.002	<0.02	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	88	0.003	-	1.22	8.85	9.56	120	-	-	-	-	-	8.8	7.5	880	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	81	-	-	-	-	-	-	-	-	-	-	-	8.1	7.1	810	-	-	-	-	<0.02	-	-	14100	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deep Perimeter																																				
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	282.41	6.6	28241.29	6.91	-	-	-	-	-	-	39500	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	292	6.7	29200	-	-	-	-	-	-	-	47100	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	289.8	6.8	28980	-	-	-	-	-	-	-	34900	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	301.1	6.6	30110	-	-	-	-	-	-	-	34000	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	2919	-	-	-	-	-	-	-	-	-	-	-	291.9	6.6	29190	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	2460000	-	-	-	-	<0.02	<0.002	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.1	2960000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	2900000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	2900000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2650000	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	3096	<0.002	-	<0.0020	306.2	310.33	202	-	-	-	-	-	309.6	6.8	30960	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	2973	-	-	-	-	-	-	-	-	-	-	-	297.3	6.7	29730	-	-	-	-	<0.02	-	-	50400	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233.79	6.7	23378.85	8.35	-	-	-	-	-	-	28700	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	248.4	6.7	24840	-	-	-	-	-	-	-	33400	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	244.8	6.9	24480	-	-	-	-	-	-	-	21000	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	256.9	6.8	25690	-	-	-	-	-	-	-	22400	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	2447	-	-	-	-	-	-	-	-	-	-	-	244.7	6.5	24470	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	2010000	-	-	-	-	<0.02	<0.002	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	2490000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2500000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	2400000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2280000	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	2626	<0.002	-	0.0255	252.3	262.75	252	-	-	-	-	-	262.6	6.7	26260	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	2531	-	-	-	-	-	-	-	-	-	-	-	253.1	7.9	25310	-	-	-	-	<0.02	-	-	28800	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.29	6.4	529	9	-	-	-	-	-	-	11300	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	173.8	6.8	17380	-	-	-	-	-	-	-	14200	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	165.6	7	16560	-	-	-	-	-	-	-	3000	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	175.1	7	17510	-	-	-	-	-	-	-	4400	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	1666	-	-	-	-	-	-	-	-	-	-	-	166.6	6.6	16660	-	-	-	<0.001	<0.001	-	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	1554000	-	-	-	-	<0.002	<0.02	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	1519000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	1730000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.7	1545000	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	1580000	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	1787	<0.002	-	0.169	172.84	186.48	445	-	-	-	-	-	178.7	7.3	17870	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	1766	-	-	-	-	-	-	-	-	-	-	-	176.6	7.2	17660	-	-	-	-	<0.02	-	-	12100	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
" - " indicates the analyte is non detected or a statistic could not be calculated due, for example, to insufficient data.
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Dichlorobiphenyl	Alkalinity (Carbonate as CaCO3)	Alkalinity (Carbonate as CaCO3) (filtered)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3) (filtered)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium (filtered)	Magnesium (filtered)	Potassium	Potassium (filtered)	Sodium (filtered)	Chloride (filtered)	Sulfate (filtered)	Cations Total	Cations Total (filtered)	Anions Total	Sulfide	Sulfide (filtered)	Ammonia as N (filtered)	Nitrate (as N)	Nitrate (as N) (filtered)	Nitrite (as N) (filtered)	Nitrogen (Total Oxidised) (as N) (filtered)	Nitrate (as NO3-) (filtered)	Nitrite (as NO2-) (filtered)	Reactive Phosphorus as P (filtered)	ammonia (filtered)	Phosphorus (Total) (filtered)	Carbonaceous Biochemical Oxygen Demand (cBOD5)	BOD	Total Organic Carbon
On site																																					
	06 Sep 2022	GW15	Normal	3071976	MW	-	<1	-	1890	-	1550	470	114	45	-	108	400	380	22	-	42	42	1.23	-	175	-	<0.02	<0.02	0.02	-	-	0.31	-	-	-	34	163
	14 Dec 2022	GW15	Normal	22-45801	MW	<0.010	-	-	-	-	-	-	97.8	47.9	-	106	456	561	107	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	232	-	-	31.7	-
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW21	Normal	3071976	MW	-	19.1	-	6600	-	5400	750	132	102	-	420	810	690	31	-	121	128	73	-	850	-	<0.02	0.02	0.02	-	-	0.04	-	-	-	64	780
	14 Dec 2022	GW21	Normal	22-45801	MW	<0.010	-	-	-	-	-	-	126	98.7	-	426	795	698	14.1	-	-	-	15.2	-	-	-	-	-	-	-	-	-	878	-	-	73.6	-
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW36	Normal	3071976	MW	-	-	-	-	-	6500	850	116	135	-	400	1060	1480	780	-	192	189	63	-	1670	-	<0.5	<0.5	<0.5	-	-	10.8	-	-	-	250	510
	14 Dec 2022	GW36	Normal	22-45801	MW	<0.010	-	-	-	-	-	-	72.4	100	-	617	1380	1560	2.5	-	-	-	0.82	-	-	-	-	-	-	-	-	-	1919.472	-	-	157	-
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																					
	03 Oct 2017	PS3	Normal	17-23985	SW	<0.01	-	10.9	-	3329	3340	-	140	181	-	315	1300	1760	42	116.4	-	117.44	-	<0.1	419	-	-	-	-	<5	-	-	-	3.2	-	36.5	-
	17 Jul 2018	PS3	Normal	18-24398	SW	<0.01	-	<1.0	-	<1.0	<1.0	-	140	173	-	160	1040	1380	30	91.17	-	39.62	-	<0.100	288	-	-	-	-	<0.020	-	-	-	<0.040	-	22.5	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.44	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	<0.01	-	4.8	-	3462	3467	-	144	186	-	202	1200	1620	56.9	100.79	-	116.3	-	<0.1	292	-	-	-	-	0.0689	-	-	-	0.044	20.6	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	277	-	-	-	-	-	-	-	-	-	-	17.8	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.8	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.76	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	<0.01	-	3.7	-	1824	1828	-	153	150	-	209	980	957	105	79.97	-	65.85	-	0.9	167	-	-	-	-	<0.0200	-	-	-	<0.020	66.9	66.9	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	168	-	-	-	-	-	-	-	-	-	-	25.2	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	273	-	-	-	-	-	-	-	-	-	-	25.6	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	2534	-	-	-	194	-	-	2180	-	-	-	-	-	-	257	-	<0.0200	-	-	-	-	-	-	-	-	9.2	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	<0.010	-	4.5	-	1877	1882	-	160	115	-	128	664	743	24.1	64.64	-	59.23	-	1.9	208	-	<0.0200	-	-	-	-	<0.020	-	-	382	422	-
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	743	-	-	-	-	-	-	-	-	-	-	214	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	-	-	-	-	-	-	-	7	-
	14 Jul 2022	PS3	Normal	3034727	SW	-	-	-	1470	-	1210	1170	300	101	-	116	420	460	540	-	56	55	<0.05	-	165	90	-	3.9	93	-	-	0.031	-	-	-	330	290
	06 Sep 2022	PS3	Normal	3070547	SW	-	12.8	-	5300	-	4400	1180	194	168	-	400	1330	1780	137	-	141	141	0.2	-	700	-	<0.1	<0.1	0.14	-	-	2.2	-	-	-	110	440
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	410	-	-	-	-	-	-	-	-	-	-	43	-
	14 Dec 2022	PS3	Normal	22-45801	SW	<0.010	-	-	-	-	-	-	149	206	-	232	1410	1940	71.6	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	346	-	-	1.3	-
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	38.9	-
	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	4800	-	215	173	-	528	1410	1440	101	165.32	-	139.45	-	-	915	-	<0.0020	-	-	-	-	5.477	-	-	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B
Table 5
Leachate and groundwater analytical results

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Dichlorobiphenyl	Alkalinity (Carbonate as CaCO3)	Alkalinity (Carbonate as CaCO3) (filtered)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3) (filtered)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium (filtered)	Magnesium (filtered)	Potassium	Potassium (filtered)	Sodium (filtered)	Chloride (filtered)	Sulfate (filtered)	Cations Total	Cations Total (filtered)	Anions Total	Sulfide	Sulfide (filtered)	Ammonia as N (filtered)	Nitrate (as N)	Nitrate (as N) (filtered)	Nitrite (as N) (filtered)	Nitrogen (Total Oxidised) (as N) (filtered)	Nitrate (as NO3-) (filtered)	Nitrite (as NO2-) (filtered)	Reactive Phosphorus as P (filtered)	ammonia (filtered)	Phosphorus (Total) (filtered)	Carbonaceous Biochemical Oxygen Demand (cBOD5)	BOD	Total Organic Carbon
			Shallow Perimeter																																		
MW0C	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	136	-	59.2	58.2	-	6.64	293	363	547	-	20.92	24.35	-	-	0.82	-	<0.0020	0.0207	-	-	-	0.025	-	-	-	-	-
MW0C	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	179	-	147	430	60	67	-	6.9	330	340	500	-	24	23	-	-	1.2	-	0.002	0.012	0.015	-	-	-	-	-	-	-	-
MW0C	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	59	68	-	7.8	330	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW0C	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	174	-	143	-	-	-	-	-	-	370	520	-	-	24	-	-	1.44	-	0.75	0.01	0.76	-	-	-	-	-	-	-	-
MW0C	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	240	-	196	510	67	82	-	8.1	410	400	520	-	28	26	-	-	1.6	-	0.27	0.06	0.33	-	-	-	-	-	-	-	-
MW0C	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	220	-	185	480	63	78	-	7.3	400	440	540	-	28	27	-	-	3.7	-	0.048	0.017	0.065	-	-	-	-	-	-	-	-
MW0C	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	-	-	66	78.6	-	8.06	382	405	488	-	-	-	-	-	-	-	-	-	-	-	0.0419	-	6.63	-	-	-	-
MW0C	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW0C	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	274	-	81	86.9	-	9.81	413	394	479	29.88	-	26.61	-	-	6.1	-	0.378	-	-	-	-	1.103	-	-	-	-	-
MW0C	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW0C	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	584	-	275	477	-	163	5570	8840	1940	-	300.79	301.48	-	-	1.16	-	<0.0020	0.0407	-	-	-	<0.002	-	-	-	-	-
MW1C	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	580	-	290	650	-	179	5300	-	-	-	-	-	-	-	0.44	-	<0.0010	0.0011	0.0015	-	-	-	-	-	-	-	-
MW1C	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	290	660	-	182	5300	-	-	-	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	630	-	520	-	-	-	-	-	-	9400	2200	-	-	320	-	-	<0.010	-	1.1	<0.02	1.1	-	-	-	-	-	-	-	-
MW1C	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	600	-	280	600	-	182	5000	-	-	-	-	-	-	-	1.97	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
MW1C	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	590	-	280	620	-	190	5400	-	-	-	-	-	-	-	1.83	-	0.0012	0.0034	0.0046	-	-	-	-	-	-	-	-
MW1C	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	-	-	313	669	-	187	5220	8390	1980	-	-	-	-	-	-	-	-	-	-	-	<0.0010	-	1.36	-	-	-	-
MW1C	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	555	-	249	593	-	193	6760	8810	2010	360.27	-	301.6	-	-	<0.005	-	1.42	-	-	-	-	0.012	-	-	-	-	-
MW1C	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	325	-	848	635	-	97.9	3670	11311.46	<15.0	-	259.56	325.48	-	-	11.3	-	<0.0020	0.0404	-	-	-	<0.002	-	-	-	-	-
MW2C	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	240	-	890	840	-	107	4500	-	-	-	-	-	-	-	12.8	-	<0.010	<0.010	<0.010	-	-	-	-	-	-	-	-
MW2C	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	860	810	-	110	4300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	320	-	260	-	-	-	-	-	-	11300	0.6	-	-	320	-	-	9.2	-	<0.10	<0.10	<0.10	-	-	-	-	-	-	-	-
MW2C	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	330	-	840	810	-	114	4400	-	-	-	-	-	-	-	13	-	<0.10	<0.10	<0.10	-	-	-	-	-	-	-	-
MW2C	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	420	-	800	780	-	107	4700	-	-	-	-	-	-	-	13	-	0.0011	<0.0010	0.0021	-	-	-	-	-	-	-	-
MW2C	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	-	-	925	846	-	116	4400	10151.37	<15.0	-	-	-	-	-	-	-	-	-	-	-	<0.0010	-	12.5	-	-	-	-
MW2C	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	340	-	757	759	-	124	2880	10454.48	<15.0	230.17	-	301.65	-	-	12.9	-	0.0127	-	-	-	-	0.003	-	-	-	-	-
MW2C	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	428	-	154	47.2	-	9.65	89.6	53.6	267	-	16.04	15.64	-	-	3.93	-	0.0151	0.0085	-	-	-	<0.002	-	-	-	-	-
MW3C	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	600	-	500	540	135	49	-	14.2	196	191	230	-	20	20	-	-	3.4	-	0.021	0.015	0.036	-	-	-	-	-	-	-	-
MW3C	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	164	94	-	26	480	-	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	670	-	550	-	-	-	-	-	-	730	220	-	-	36	-	-	5.2	-	<0.02	<0.02	<0.02	-	-	-	-	-	-	-	-
MW3C	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	420	-	340	770	194	71	-	14.3	133	80	550	-	22	21	-	-	3.2	-	0.111	0.008	0.119	-	-	-	-	-	-	-	-
MW3C	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	490	-	400	820	210	74	-	14.3	157	145	550	-	24	24	-	-	1.75	-	1.59	0.028	1.62	-	-	-	-	-	-	-	-
MW3C	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	-	-	235	79.5	-	19.2	277	318	415	-	-	-	-	-	-	-	-	-	-	-	0.0768	-	5.08	-	-	-	-
MW3C	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	530	-	228	98.3	-	19.6	260	177	687	32.21	-	29.98	-	-	5.62	-	0.412	-	-	-	-	<0.002	-	-	-	-	-
MW3C	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	881	-	314	398	-	85.7	2930	6970	<15.0	-	178.82	214.22	-	-	8.72	-	0.0032	0.0022	-	-	-	2.899	-	-	-	-	-
MW4C	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	920	-	260	450	-	78	3100	-	-	-	-	-	-	-	9.5	-	<0.0010	0.0016	0.0011	-	-	-	-	-	-	-	-
MW4C	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	280	490	-	87	3400	-	-	-	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	1060	-	870	-	-	-	-	-	-	7100	<0.5	-	-	220	-	-	5.3	-	<0.02	<0.02	<0.02	-	-	-	-	-	-	-	-
MW4C	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	830	-	280	490	-	91	3400	-	-	-	-	-	-	-	9.2	-	0.0047	0.0016	0.0062	-	-	-	-	-	-	-	-
MW4C	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	870	-	300	510	-	91	3700	-	-	-	-	-	-	-	9.8	-	0.0078	0.0019	0.0097	-	-	-	-	-	-	-	-
MW4C	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	-	-	329	540	-	93	3500	6860	<15.0	-	-	-	-	-	-	-	-	-	-	-	0.0026	-	9.46	-	-	-	-
MW4C	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	899	-	289	513	-	103	3450	6600	<15.0	209.95	-	204.29	-	-	9.07	-	0.0085	-	-	-	-	3.031	-	-	-	-	-
MW4C	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	942	-	79.1	117	-	47.4	752	1380	<15.0	-	48.5	57.82	-	-	13.3	-	0.0084	0.01	-	-	-	0.005	-	-	-	-	-
MW5C	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	1180	-	970	810	92	141	-	52	870	1400	5	-	57	59	-	-	14.1	-	<0.10	<0.10	0.13	-	-	-	-	-	-	-	-
MW5C	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	97	163	-	58	950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	980	-	810	-	-	-	-	-	-	1690	<0.5	-	-	64	-	-	15.6	-	<0.002	0.03	0.028	-	-	-	-	-	-	-	-
MW5C	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	780	-	108	183	-	64	1030	-	-	-	-	-	-	-	15.4	-	0.0044	0.0047	0.0091	-	-	-	-	-	-	-	-
MW5C	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	750	-	123	210	-	65	1170	-	-	-	-	-	-	-	21	-	0.0084	0.0036	0.012	-	-	-	-	-	-	-	-
MW5C	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	-	-	133	203	-	67	1180	2140	<1.50	-	-	-	-	-	-	-	-	-	-	-	0.0103	-	17.5	-	-	-	-
MW5C	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	779	-	131	197	-	70.7	1260	2170	<15.0	81.99	-	77.02	-	-	20.2	-	0.154	-	-	-	-	<0.002	-	-	-	-	-
MW5C	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	348	-	347	310	-	19.1	621	807	2480	-	71.96	81.36	-	-	1.8	-	<0.0020	0.0274	-	-	-	<0.002	-	-	-	-	-
MW6C	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	720	-	590	1800	270	270	-	39	2000	3700	520	-	126	128	-	-	4.7	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-
MW6C	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	178	199	-	28	1380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	610	-	500	-	-	-	-	-	-	3600	450	-	-	120	-	-	3.1	-	0.138	0.027	0.166	-	-	-	-	-	-	-	-
MW6C	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	193	-	158	2300	370	330	-	21	710	1140	2400	-	79	84	-	-	1.89	-	0.003	0.005	0.008	-	-	-	-	-	-	-	-
MW6C	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	260	-	290	300	-	25	1080	-	-	-	-	-	-	-	3	-	<0.10	<0.10	<0.10	-	-	-	-	-	-	-	-
MW6C	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	-	-	267	275	-	37.7	2020	3080	508	-	-	-	-	-	-	-	-	-	-	-	0.005	-	3.92	-	-	-	-
MW6C	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	474	-	266	259	-	37.2	1870	2720	508	118.98	-	96.78	-	-	4.97	-	<0.0020	-	-	-	-	<0.002	-	-	-	-	-
MW6C	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B
Table 5
Leachate and groundwater analytical results

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Dichlorobiphenyl	Alkalinity (Carbonate as CaCO3)	Alkalinity (Carbonate as CaCO3) (filtered)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3) (filtered)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium (filtered)	Magnesium (filtered)	Potassium	Potassium (filtered)	Sodium (filtered)	Chloride (filtered)	Sulfate (filtered)	Cations Total	Cations Total (filtered)	Anions Total	Sulfide	Sulfide (filtered)	Ammonia as N (filtered)	Nitrate (as N)	Nitrate (as N) (filtered)	Nitrite (as N) (filtered)	Nitrogen (Total Oxidised) (as N) (filtered)	Nitrate (as NO3-) (filtered)	Nitrite (as NO2-) (filtered)	Reactive Phosphorus as P (filtered)	ammonia (filtered)	Phosphorus (Total) (filtered)	Carbonaceous Biochemical Oxygen Demand (cBOD5)	BOD	Total Organic Carbon
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	382	-	90.9	50.1	-	10.9	139	172	103	-	14.99	14.75	-	-	<0.005	-	0.57	<0.0010	-	-	-	0.029	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	440	-	360	400	86	45	-	10.2	132	160	113	-	14.1	14.2	-	-	0.027	-	0.23	<0.002	0.24	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	290	-	240	320	64	39	-	7.8	135	132	126	-	12.5	11.2	-	-	0.26	-	0.72	0.007	0.73	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	200	-	168	250	49	31	-	5.6	110	119	138	-	9.9	9.6	-	-	0.04	-	0.97	0.002	0.97	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	143	-	118	220	42	28	-	5.3	102	108	156	-	9	8.7	-	-	0.22	-	1.06	<0.02	1.06	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	-	-	46.8	27.4	-	5.36	110	109	158	-	-	-	-	-	-	-	-	-	-	-	0.0019	-	0.006	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	98.3	-	42.6	28.3	-	5.38	116	109	146	9.68	-	8.15	-	-	0.02	-	1.11	-	-	-	-	0.007	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deep Perimeter																																					
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	<1	-	228	228	-	793	741	-	66.8	4530	10774.2	<1.5	303.52	-	308.4	-	-	20.2	-	-	-	-	<0.5	-	-	-	<0.04	-	7.6	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	<1.0	-	233	233	-	817	727	-	67.7	4490	11054.83	<15.0	301.55	-	316.41	-	-	23	-	-	-	-	<0.010	-	-	-	<0.040	-	2.4	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	<1.0	-	223	223	-	869	755	-	70.7	4800	11258.45	<15.0	319.79	-	321.96	-	-	18.9	-	-	-	-	0.161	-	-	-	<0.020	-	4.2	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	<1.0	-	185	185	-	879	748	-	71.4	4510	10833.07	<1.50	307.57	-	309.19	-	-	20.2	-	-	-	-	<0.0020	-	0.153	-	-	-	10.3	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	228	-	804	689	-	65.5	4470	11436.76	<15.0	-	295.91	327.09	-	-	19	-	<0.0020	0.0671	-	-	-	<0.002	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	230	-	800	780	-	66	4600	-	-	-	-	-	-	-	21	-	<0.010	<0.010	<0.010	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	780	760	-	67	4600	-	-	-	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	166	-	136	-	-	-	-	-	-	11600	<0.5	-	-	330	-	-	14.2	-	0.51	0.8	1.31	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	210	-	750	760	-	68	4400	-	-	-	-	-	-	-	21	-	<0.10	<0.10	<0.10	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	210	-	750	710	-	63	4600	-	-	-	-	-	-	-	21	-	<0.10	<0.10	<0.10	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	<1.0	-	240	-	196	5000	810	730	-	69	4700	11500	<5	-	310	330	-	-	22	<0.10	-	<0.10	<0.10	-	-	-	-	-	-	11	52
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	-	-	855	781	-	69	4500	10714.89	<15.0	-	-	-	-	-	-	-	-	-	-	-	0.0265	-	21.2	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	146	-	740	734	-	74.5	3190	10539.02	<15.0	240.72	-	300.12	-	-	21.4	-	0.0067	-	-	-	-	<0.002	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	<1	-	235	235	-	853	630	-	56.3	3820	9410	<15	265.34	-	270.05	-	-	10.1	-	-	-	-	<5	-	-	-	<0.04	-	6.7	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	<1.0	-	235	235	-	823	574	-	53.3	3590	9080	<15.0	248.61	-	260.88	-	-	9.64	-	-	-	-	<0.010	-	-	-	<0.040	-	2.5	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	<1.0	-	244	244	-	888	605	-	56.1	3820	9290	<15.0	264.21	-	266.95	-	-	7.96	-	-	-	-	<0.0200	-	-	-	<0.020	-	4.3	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	<1.0	-	201	201	-	842	587	-	57.1	3680	9120	2.07	253.23	-	261.28	-	-	7.46	-	-	-	-	<0.0020	-	0.084	-	-	-	2.3	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	212	-	849	458	-	54	3010	9410	<15.0	-	213.38	269.6	-	-	7.96	-	<0.0020	0.0254	-	-	-	0.005	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	290	-	750	580	-	51	3600	-	-	-	-	-	-	-	10.5	-	<0.010	<0.010	<0.010	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	800	620	-	57	3900	-	-	-	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	194	-	160	-	-	-	-	-	-	9300	<0.5	-	-	270	-	-	0.84	-	0.092	<0.02	0.098	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	250	-	800	600	-	55	3600	-	-	-	-	-	-	-	8.9	-	<0.10	<0.10	<0.10	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	270	-	820	600	-	56	3900	-	-	-	-	-	-	-	10.7	-	<0.10	<0.10	<0.10	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	<1.0	-	290	-	240	4500	830	590	-	57	3900	9500	<5	-	260	270	-	-	11.1	0.13	-	<0.10	0.13	-	-	-	-	-	-	8	38
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	-	-	867	631	-	56.3	3710	8770	<15.0	-	-	-	-	-	-	-	-	-	-	-	0.0154	-	10.9	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	174	-	743	546	-	56.7	3660	8830	<15.0	243.22	-	252.93	-	-	2.96	-	5.14	-	-	-	-	0.007	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	<1	-	21.9	22	-	19.3	7.5	-	9.6	63.7	122	51.3	4.63	-	5.01	-	-	0.13	-	-	-	-	1.06	-	-	-	<0.04	-	<2	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	<1.0	-	470	470	-	499	371	-	54.8	2680	5730	601	174.88	-	183.64	-	-	1.29	-	-	-	-	<0.010	-	-	-	<0.040	-	<4.0	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	<1.0	-	484	485	-	501	370	-	54.1	2700	5430	533	175.85	-	174.05	-	-	1.11	-	-	-	-	0.32	-	-	-	<0.020	-	2.3	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	<1.0	-	443	443	-	478	366	-	54.7	2690	5430	624	173.93	-	175.06	-	-	0.91	-	-	-	-	<0.0020	-	0.005	-	-	-	<1.0	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	476	-	459	289	-	49.7	2230	5660	531	-	146.05	180.33	-	-	0.83	-	<0.0020	0.0408	-	-	-	<0.002	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	640	-	530	2800	510	380	-	55	2800	5800	600	-	180	185	-	-	1.3	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	390	310	-	47	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	490	-	400	-	-	-	-	-	-	5100	500	-	-	163	-	-	0.53	-	0.02	<0.02	0.03	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	520	-	480	390	-	54	2700	-	-	-	-	-	-	-	0.46	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	1.3	-	500	-	410	2600	440	360	-	55	2800	6200	680	-	175	197	-	-	<0.010	0.38	-	<0.002	0.38	-	-	-	-	-	-	3	2.4
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	480	-	440	360	-	49	2700	-	-	-	-	-	-	-	0.47	-	0.048	0.0014	0.049	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	-	-	523	423	-	56	2820	5360	619	-	-	-	-	-	-	-	-	-	-	-	0.0526	-	0.35	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	503	-	615	470	-	71.7	3350	5230	497	218.68	-	167.99	-	-	0.75	-	0.0078	-	-	-	-	<0.002	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
" - " indicates the analyte is non detected or a statistic could not be calculated due, for example
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Volatile Fatty Acids	Aluminium	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Barium	Barium (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)
On site																				
	06 Sep 2022	GW15	Normal	3071976	MW	-	0.67	-	0.015	-	0.047	-	1.44	-	<0.0003	-	0.018	-	0.005	-
	14 Dec 2022	GW15	Normal	22-45801	MW	280000	-	0.397	-	0.015	-	0.0221	-	1.4	-	<0.00020	-	0.016	-	0.0047
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW21	Normal	3071976	MW	-	420	-	0.37	-	2.1	-	11.4	-	<0.0053	-	0.83	-	1.68	-
	14 Dec 2022	GW21	Normal	22-45801	MW	<800,000	-	0.066	-	0.04	-	0.0942	-	10.8	-	<0.00020	-	0.136	-	0.0042
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW36	Normal	3071976	MW	-	7.1	-	1.66	-	0.113	-	6.5	-	<0.0002	-	0.23	-	<0.001	-
	14 Dec 2022	GW36	Normal	22-45801	MW	260000	-	0.763	-	5.07	-	0.169	-	7.58	-	<0.00020	-	0.749	-	0.0099
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																				
	03 Oct 2017	PS3	Normal	17-23985	SW	-	-	<0.1	-	<0.05	-	0.162	-	5.14	-	<0.001	-	-	-	<0.02
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	<0.010	-	<0.0050	-	0.212	-	5.41	-	<0.0001	-	0.016	-	0.0036
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	0.012	-	0.003	-	0.171	-	5.03	-	<0.000010	-	0.019	-	0.004
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	<0.030	-	<0.0050	-	0.148	-	4.24	-	<0.00020	-	0.0221	-	<0.0020
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	0.018	-	0.0024
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	<0.030	-	<0.0050	-	0.113	-	4.14	-	0.00032	-	0.015	-	<0.0020
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	-	0.76	-	0.024	-	0.112	-	2.1	-	0.00037	-	0.0199	-	0.064	-
	06 Sep 2022	PS3	Normal	3070547	SW	-	0.34	-	0.066	-	0.15	-	5.3	-	<0.0003	-	0.091	-	0.082	-
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	<800,000	-	<0.030	-	0.0071	-	0.181	-	5.74	-	<0.00020	-	0.027	-	0.0094
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	23-11202	SW	-	0.22	0.233	0.062	0.0552	-	-	4.81	6.82	<0.00020	0.00011	0.188	0.187	0.043	0.016
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Iron	Iron (filtered)	Lead	Lead (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Naphthalene (BTEXN suite)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	C10-C14 Fraction	Acenaphthene
On site																									
	06 Sep 2022	GW15	Normal	3071976	MW	5.7	-	0.0104	-	1.78	-	<0.00008	-	0.015	-	0.061	-	7	6	129	34	26	58	1100	<3
	14 Dec 2022	GW15	Normal	22-45801	MW	-	1.21	-	0.0019	-	1.03	<0.0010	-	-	0.018	-	0.051	-	2.5	4.2	1.8	11	9.1	300	<0.30
	14 Dec 2022	GW15	Normal	22-45801	MW	-	1.37	-	-	-	1.24	-	-	-	-	-	0.096	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW21	Normal	3071976	MW	790	-	0.64	-	4.4	-	<0.011	-	0.34	-	4.5	-	<5	6	4	12	10	22	5500	<3
	14 Dec 2022	GW21	Normal	22-45801	MW	-	3.81	-	0.0018	-	0.392	<0.0010	-	-	0.0829	-	0.073	-	<1.0	<1.0	<1.0	6.7	<1.0	1200	<0.30
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	5.57	-	-	-	0.423	-	-	-	-	-	0.122	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW36	Normal	3071976	MW	1.41	-	<0.001	-	2.8	-	<0.00008	-	0.054	-	0.024	-	<5	5	17	19	19	32	2400	<3
	14 Dec 2022	GW36	Normal	22-45801	MW	-	0.945	-	0.00593	-	1.27	<0.0010	-	-	0.101	-	0.09	-	3.6	34	16	17	30	3000	<0.30
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	0.959	-	-	-	1.44	-	-	-	-	-	0.106	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																									
	03 Oct 2017	PS3	Normal	17-23985	SW	-	<5	-	<0.005	-	0.363	<0.0001	-	-	0.036	-	<0.1	-	1	<1	<1	<1	1	-	0.5
	17 Jul 2018	PS3	Normal	18-24398	SW	-	0.42	-	<0.0005	-	0.432	<0.0001	-	-	0.095	-	<0.010	-	3	<1	<1	<1	2	-	<0.3
	17 Jul 2018	PS3	Normal	18-24398	SW	-	3.09	-	-	-	0.533	-	-	-	-	-	0.019	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	0.767	-	<0.000050	-	0.367	<0.0010	-	-	0.026	-	0.017	-	<1	<1	<1	<1	<1	-	<0.3
	02 Jul 2019	PS3	Normal	19-22608	SW	-	1.19	-	-	-	0.406	-	-	-	-	-	0.021	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	1.12	-	<0.00050	-	0.823	<0.0010	-	-	0.0609	-	0.105	-	1	2	2	2	3	-	<1.4
	15 Jul 2020	PS3	Normal	20-25846	SW	-	1.58	-	-	-	1.11	-	-	-	-	-	0.108	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	<0.00050	-	-	-	-	-	0.0248	-	0.03	-	-	-	-	-	-	-	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	-	3.87	-	<0.00050	-	1.29	<0.0010	-	-	0.0355	-	0.017	20	1.5	5.3	4.5	3.8	6.7	-	0.11
	23 Jul 2021	PS3	Normal	21-32657	SW	-	7.92	-	-	-	1.59	-	-	-	-	-	0.028	-	-	-	-	-	-	-	<1.3
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	8.5	-	0.023	-	1.64	-	0.0001	-	0.088	-	0.162	-	<5	<3	30	14	10	19	-	<3
	06 Sep 2022	PS3	Normal	3070547	SW	7.3	-	0.0106	-	1.1	-	<0.00008	-	0.072	-	0.173	-	<5	<3	24	11	11	19	-	<3
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	-	1.16	-	<0.00050	-	0.544	<0.0010	-	-	0.0413	-	0.034	-	<1.0	<1.0	<1.0	<1.0	<1.0	<200	<0.30
	14 Dec 2022	PS3	Normal	22-45801	SW	-	1.2	-	-	-	0.643	-	-	-	-	-	0.063	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	23-11202	SW	1.83	1.97	0.0103	0.0039	1.25	1.37	<0.00010	0.00011	0.104	0.0916	0.1	0.058	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Volatile Fatty Acids	Aluminium	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Barium	Barium (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Iron	Iron (filtered)	Lead	Lead (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Naphthalene (BTEXN suite)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	C10-C14 Fraction	Acenaphthene
			Shallow Perimeter																																					
	18 Oct 2021	MW0C	Normal	21-44426	MW	-	0.017	<0.0030	0.0035	<0.00050	-	-	0.22	0.22	<0.000020	<0.000020	<0.00020	0.00021	0.00044	<0.00020	-	4.24	0.00007	0.00014	1.05	1.06	<0.00010	<0.000080	0.015	0.014	0.0034	0.0019	-	-	-	-	-	-	<200	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	0.041	0.005	0.0083	0.0054	-	-	0.23	0.24	<0.000053	<0.00005	0.00066	<0.0005	<0.00053	<0.0005	28	25	0.00021	<0.00010	1.08	1.02	<0.00008	<0.00008	0.0073	0.0123	0.004	0.0028	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	<0.012	-	<0.004	-	-	-	0.25	-	<0.0002	-	<0.0010	-	<0.0010	-	1.12	-	<0.0010	-	0.73	-	-	-	0.011	-	0.009	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	0.059	-	<0.0021	-	-	-	0.23	-	<0.00011	-	<0.0011	-	0.0014	-	1.92	-	0.00039	-	0.78	-	<0.00008	<0.00008	0.0117	-	0.0088	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	0.051	0.003	0.0025	0.0015	-	-	0.26	0.26	<0.000053	<0.00005	<0.00053	<0.0005	0.00103	0.0007	1.5	0.64	0.00037	<0.00010	0.85	0.79	<0.00008	<0.00008	0.0171	0.0156	0.0105	0.0073	-	-	-	-	-	-	<200	-
MW0C	11 Oct 2022	MW0C	Normal	3094519	MW	-	0.034	0.003	0.0022	0.0015	-	-	0.28	0.27	<0.000053	<0.00005	<0.00053	<0.0005	<0.00053	<0.0005	13.2	10.1	0.00025	<0.00010	1.14	1.03	<0.00008	<0.00008	0.0058	0.0056	0.0035	0.0019	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	0.092	0.012	0.0013	0.0006	-	-	0.23	0.27	<0.000020	<0.000020	0.001	0.00031	0.00055	<0.00020	-	5.77	0.00041	<0.000050	1.12	1.09	<0.00010	<0.000080	0.0052	0.0015	0.004	0.0085	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	0.053	0.119	0.0021	0.0019	-	-	0.25	0.21	<0.000020	<0.000020	0.00025	0.0011	0.0004	0.00046	0.19	0.31	0.00023	0.0004	0.735	1.08	<0.00010	<0.000080	0.0058	0.0051	0.0046	0.012	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW1C	Normal	21-44426	MW	-	0.061	<0.0030	0.00057	0.00051	-	-	2.09	3.6	0.00004	<0.00020	0.0011	0.00047	0.00024	<0.00020	-	34.7	0.0003	<0.000050	0.633	0.616	<0.00010	<0.000080	0.00072	0.00052	<0.0030	0.0015	-	-	-	-	-	-	<200	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	0.049	<0.012	<0.0042	<0.004	-	-	4.1	4	<0.00021	<0.0002	0.0022	0.0013	<0.0011	<0.0010	>11.6	>11.0	<0.0011	<0.0010	0.69	0.61	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	<0.012	-	<0.004	-	-	-	4.2	-	<0.0002	-	<0.0010	-	<0.0010	-	0.047	-	<0.0010	-	0.032	-	-	-	<0.007	-	<0.004	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	<0.32	-	<0.11	-	-	-	4.2	-	<0.0053	-	<0.053	-	<0.053	-	3	-	<0.011	-	0.06	-	<0.00008	<0.00008	<0.053	-	<0.11	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	0.05	<0.012	<0.0042	<0.004	-	-	4.1	4.1	<0.00021	<0.0002	0.0017	0.0011	<0.0011	<0.0010	51	88	<0.0011	<0.0010	0.67	0.7	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	<200	-
MW1C	11 Oct 2022	MW1C	Normal	3094519	MW	-	0.04	<0.012	<0.0042	<0.004	-	-	4.2	4	<0.00021	<0.0002	0.0017	<0.0010	<0.0011	<0.0010	89	87	<0.0011	<0.0010	0.71	0.66	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	0.053	<0.030	<0.0050	<0.0050	-	-	3.81	3.88	<0.00020	<0.00020	0.0033	<0.0020	<0.0020	<0.0020	-	88.9	<0.00050	<0.00050	0.794	0.755	<0.0010	<0.000080	<0.0020	<0.0020	<0.030	<0.010	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	0.014	<0.0030	<0.0050	0.00063	-	-	2.69	2.61	<0.00020	<0.000020	0.00042	<0.00020	0.0074	0.00026	0.47	0.017	<0.00050	<0.000050	0.0618	0.043	<0.00010	<0.000080	0.0078	0.0055	0.093	0.071	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2C	Normal	21-44426	MW	-	0.11	<0.0030	0.00095	0.0007	-	-	0.662	1.12	<0.00020	<0.00020	0.00054	<0.00020	0.00047	<0.00020	-	54.7	<0.00050	<0.000050	3.26	3.22	<0.00010	<0.000080	0.00083	0.00065	<0.0030	<0.0010	-	-	-	-	-	-	<200	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	0.132	<0.012	<0.0042	<0.004	-	-	1.31	1.26	<0.00021	<0.0002	0.0023	0.0015	<0.0011	<0.0010	>11.6	>11.0	<0.0011	<0.0010	3.7	3.4	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	<0.012	-	<0.004	-	-	-	1.4	-	<0.0002	-	<0.0010	-	<0.0010	-	>11.0	-	<0.0010	-	3.3	-	-	-	<0.007	-	<0.004	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	<0.32	-	<0.11	-	-	-	1.39	-	<0.0053	-	<0.053	-	<0.053	-	118	-	<0.011	-	3.9	-	<0.00008	<0.00008	<0.053	-	<0.11	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	0.044	<0.012	<0.0042	<0.004	-	-	1.41	1.47	<0.00021	<0.0002	0.0015	<0.0010	<0.0011	<0.0010	81	67	<0.0011	<0.0010	2.9	3.1	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	<200	-
MW2C	11 Oct 2022	MW2C	Normal	3094519	MW	-	0.045	<0.012	<0.0042	<0.004	-	-	1.57	1.45	<0.00021	<0.0002	<0.0011	<0.0010	<0.0011	<0.0010	73	70	<0.0011	<0.0010	2.9	2.5	<0.00008	<0.00008	<0.0070	<0.007	0.0061	<0.004	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	0.092	<0.030	<0.0050	<0.0050	-	-	1.3	1.27	<0.00020	<0.00020	0.0021	<0.0020	<0.0020	<0.0020	-	86.6	<0.00050	<0.00050	3.71	3.4	<0.0010	<0.000080	0.0025	<0.0020	<0.030	<0.010	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	0.075	0.016	<0.0050	0.00073	-	-	0.992	0.951	<0.00020	<0.000020	0.00032	<0.00020	0.007	<0.00020	8.67	11.2	<0.00050	0.00018	2.37	2.54	<0.00010	<0.000080	0.0021	0.00053	0.0094	0.0024	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW3C	Normal	21-44426	MW	-	0.085	0.0052	<0.00050	<0.00050	-	-	0.35	0.31	<0.000020	<0.000020	0.0013	0.00059	0.00029	<0.00020	-	0.022	0.00013	<0.000050	1.11	1.05	<0.00010	<0.000080	0.00034	0.0002	<0.0030	<0.0010	-	-	-	-	-	-	<200	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	0.023	0.01	<0.0011	<0.0010	-	-	0.46	0.48	<0.000053	<0.00005	0.00167	0.0014	<0.00053	<0.0005	5.1	4.3	<0.00011	<0.00010	1.01	0.96	<0.00008	<0.00008	0.00084	0.0005	<0.0011	0.0013	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	0.013	-	<0.004	-	-	-	0.84	-	<0.0002	-	0.0014	-	<0.0010	-	10.1	-	<0.0010	-	1.09	-	-	-	<0.007	-	<0.004	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	0.076	-	<0.0053	-	-	-	0.77	-	<0.00027	-	<0.0027	-	<0.0027	-	10.9	-	<0.00053	-	1.21	-	<0.00008	<0.00008	<0.0027	-	<0.0053	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	0.058	0.004	<0.0011	<0.0010	-	-	0.3	0.29	<0.000053	<0.00005	0.00081	0.0006	0.00113	<0.0005	6.5	5.4	0.00016	<0.00010	1.7	1.82	<0.00008	<0.00008	0.00104	0.0005	0.0024	<0.0010	-	-	-	-	-	-	<200	-
MW3C	11 Oct 2022	MW3C	Normal	3094519	MW	-	0.03	0.003	<0.0011	<0.0010	-	-	0.37	0.33	<0.000053	<0.00005	0.00104	0.0007	0.00083	<0.0005	5.8	4.4	<0.00011	<0.00010	1.1	1.28	<0.00008	<0.00008	0.00064	0.0009	0.0017	0.0015	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	0.029	0.01	0.00065	0.00066	-	-	0.36	0.5	0.000023	<0.000020	0.0027	0.0021	0.00063	0.00049	-	5.64	0.00045	0.00031	1.34	1.45	<0.00010	<0.000080	0.0045	0.0047	0.177	0.213	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	0.028	0.013	<0.00050	0.00069	-	-	0.42	0.39	<0.000020	<0.000020	0.0014	0.0019	0.00095	0.00026	8.78	13.6	0.00017	<0.000050	1.69	2	<0.00010	<0.000080	0.00095	0.00065	0.011	0.013	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4C	Normal	21-44426	MW	-	0.21	<0.0030	0.00062	<0.0050	-	-	1.09	1.78	<0.00020	<0.00020	0.0017	0.00081	0.00095	<0.00020	-	0.029	0.00059	<0.000050	0.198	0.192	<0.00010	<0.000080	0.00068	<0.00020	0.0068	<0.0010	-	-	-	-	-	-	<200	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	0.088	<0.012	<0.0042	<0.004	-	-	1.8	1.5	<0.00021	<0.0002	0.0026	0.0018	<0.0011	<0.0010	4	3.3	<0.0011	<0.0010	0.21	0.176	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	<0.012	-	<0.004	-	-	-	1.78	-	<0.0002	-	0.001	-	<0.0010	-	4.5	-	<0.0010	-	0.196	-	-	-	<0.007	-	<0.004	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	<0.32	-	<0.11	-	-	-	1.84	-	<0.0053	-	<0.053	-	<0.053	-	4.7	-	<0.011	-	0.23	-	<0.00008	<0.00008	<0.053	-	<0.11	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	<0.021	<0.012	<0.0042	<0.004	-	-	1.81	1.9	<0.00021	<0.0002	0.0019	0.0016	<0.0011	<0.0010	1.28	1.3	<0.0011	<0.0010	0.192	0.197	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	<200	-
MW4C	11 Oct 2022	MW4C	Normal	3094519	MW	-	0.081	<0.012	<0.0042	<0.004	-	-	1.91	1.86	<0.00021	<0.0002	0.0019	0.0012	<0.0011	<0.0010	4.1	3.5	<0.0011	<0.0010	0.23	0.21	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	0.19	<0.030	<0.0050	<0.0050	-	-	1.8	1.72	<0.00020	<0.00020	0.0037	<0.0020	<0.0020	<0.0020	-	3.36	0.00074	<0.00050	0.253	0.223	<0.0010	<0.000080	<0.0020	<0.0020	<0.030	<0.010	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	0.069	0.03	<0.0050	0.00058	-	-	1.36	1.33	<0.00020	<0.000020	0.0012	0.001	0.00079	0.0011	0.867	0.693	0.00057	0.00073	0.201	0.219	<0.00010	<0.000080	0.0011	0.00043	0.0074	0.0058	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW5C	Normal	21-44199	MW	-	0.11	0.01	0.00085	0.00062	-	-	2.49	2.2	<0.000020	<0.000020	0.012	0.0088	0.00078	<0.00020	-	0.08	0.00041	0.000089	1.49	1.36	<0.00010	<0.000080	0.0011	0.00075	0.0031	<0.0010	-	-	-	-	-	-	<200	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	0.022	<0.015	<0.011	<0.005	-	-	3	3	<0.00053	<0.0003	0.014	0.012	<0.0053	<0.003	33	27	<0.0011	<0.0005	1.58	1.47	<0.00008	<0.00008	<0.0053	<0.003	<0.011	<0.005	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	<0.012	-	<0.004	-	-	-	3.2	-	<0.0002	-	0.0084	-	<0.0010	-	>11.0	-	<0.0010	-	1.38	-	-	-	<0.007	-	<0.004	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	0.043	-	<0.011	-	-	-	3	-	<0.00053	-	0.01	-	<0.0053	-	37	-	<0.0011	-	1.54	-	<0.00008	<0.00008	<0.0053	-	<0.011	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	0.025	<0.012	<0.0042	<0.004	-	-	3.1	3.1	<0.00021	<0.0002	0.0076	0.0055	<0.0011	<0.0010	17.6	10.9	<0.0011	<0.0010	1.65	1.67	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	<200	-
MW5C	11 Oct 2022	MW5C	Normal	3094519	MW	-	0.081	<0.012	<0.0042	<0.004	-	-	3.1	2.9	<0.00021	<0.0002	0.0074	0.0052	<0.0011	<0.0010	33	30	<0.0011	<0.0010	2.7	2.4	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	0.02	<0.030	0.00056	<0.0050	-	-	1.59	2.8	0.000054	<0.00020	0.0077	0.0044	0.00093	<0.0020	-	26	0.00021	<0.00050	2.25	2.21	<0.00010	<0.000080	0.0074	0.0064	0.0059	<0.010	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	0.029	0.0039	0.00064	0.00059	-	-	2.52	2.57	<0.000020	<0.000020	0.0051	0.0046	0.00037	<0.00020	37.6	34.4	0.00011	<0.000050	2.09	2.01	<0.00010	<0.000080	0.0019	0.0015	0.0035	0.001	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW6C	Normal	21-44199	MW	-	0.3	<0.0030	0.0011	0.00076	-	-	0.98	0.888	0.000023	<0.000020	0.002	0.0012	0.00059	<0.00020	-	37.2	0.0017	<0.000050	4.38	4.43	<0.00010	<0.000080	0.0042	0.0036	0.0035	0.0013	-	-	-	-	-	-	<200	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	0.075	<0.03	<0.011	<0.010	-	-	1.25	1.38	<0.00053	<0.0005	<0.0053	<0.005	<0.0053	<0.005	47	46	<0.0011	<0.0010	0.84	0.8	<0.00008	<0.00008	<0.0053	<0.005	<0.011	<0.010	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	<0.012	-	<0.004	-	-	-	0.99	-	<0.0002	-	<0.0010	-	<0.0010	-	>11.0	-	<0.0010	-	0.71	-	-	-	<0.007	-	0.008	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	0.27	-	<0.021	-	-	-	0.93	-	<0.0011	-	<0.011	-	<0.011	-	35	-	<0.0021	-	0.77	-	<0.00008	<0.00008	<0.011	-	<0.021	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	0.169	<0.006	0.0013	<0.002	-	-	1.37	1.39	<0.000053	<0.00010	0.0022	0.0013	0.00097	<0.0010	36	38	0.00066	<0.0002	4.8	4.9	<0.00008	<0.00008	0.0038	0.0036	0.0041	<0.002	-	-	-	-	-	-	<200	-
MW6C	11 Oct 2022	MW6C	Normal	3094519	MW	-	0.48	<0.012	<0.0042	<0.004	-	-	1.47	1.43	<0.00021	<0.0002	0.0035	0.0017	0.0014	<0.0010	40	37	0.002	<0.0010	3.7	3.1	<0.00008	<0.00008	<0.0070	<0.007	0.0055	<0.004	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	0.71	<0.030	<0.0050	0.006	-	-	1.24	1.28	<0.00020	<0.00020	0.0031	<0.0020	0.0022	<0.0020	-	49.6	0.0013	<0.00050	0.83	0.84	<0.0010	<0.000080	0.0022	<0.0020	<0.030	<0.010	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	0.23	0.004	0.0041	0.0041	-	-	1.22	1.14	<0.000020	0.000021	0.00092	0.00068	0.0006	<0.00020	42.4	42.3	0.00083	<0.000050	1.14	1.09	<0.00010	<0.000080	0.0025	0.0022	<0.0030	<0.0010	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chemical						Volatile Fatty Acids	Aluminium	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Barium	Barium (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Iron	Iron (filtered)	Lead	Lead (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Naphthalene (BTEXN suite)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	C10-C14 Fraction	Acenaphthene
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type																																			
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	2.18	0.0031	0.0029	0.0012	-	-	0.47	0.506	0.000064	<0.000020	0.004	<0.00020	0.0048	0.0013	-	0.0054	0.0031	<0.000050	0.0789	0.006	<0.00010	<0.000080	0.0046	0.0025	0.016	0.0014	-	-	-	-	-	-	<200	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	0.3	0.006	0.0012	0.0017	-	-	0.58	0.57	<0.000053	<0.00005	0.00098	<0.0005	0.00194	0.0007	1.01	1.56	0.00056	<0.00010	0.051	0.071	<0.00008	<0.00008	0.0029	0.0024	0.0097	0.002	-	-	-	-	-	-	<200	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	1.66	0.004	0.0024	<0.0010	-	-	0.74	0.74	<0.000053	<0.00005	0.0029	<0.0005	0.0028	0.0013	4.7	0.67	0.0024	<0.00010	0.66	0.64	<0.00008	<0.00008	0.0066	0.0048	0.0162	0.0046	-	-	-	-	-	-	<200	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	0.93	0.004	0.002	<0.0010	-	-	0.88	0.9	<0.000053	<0.00005	0.0022	<0.0005	0.0024	0.0008	4	0.14	0.00148	<0.00010	0.111	0.086	<0.00008	<0.00008	0.0054	0.0035	0.0115	0.0034	-	-	-	-	-	-	<200	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	4.3	0.005	0.0049	<0.0010	-	-	0.94	0.92	0.000054	<0.00005	0.0066	<0.0005	0.0065	0.0009	12.5	0.07	0.0063	<0.00010	0.064	0.0039	<0.00008	<0.00008	0.0067	0.0026	0.027	0.0013	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	1.71	0.011	0.0015	<0.00050	-	-	0.964	1.01	0.000057	0.000042	0.0036	0.00094	0.0025	0.0011	-	0.18	0.0038	0.000059	0.248	0.218	<0.00010	<0.000080	0.0504	0.0487	0.801	0.914	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	0.677	0.015	0.0014	<0.00050	-	-	0.938	1.09	<0.000020	<0.000020	0.002	0.0014	0.0016	0.00094	2.26	0.29	0.0011	0.0002	0.409	0.434	<0.00010	<0.000080	0.0252	0.0257	0.4	0.443	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Deep Perimeter																																					
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	76.1	-	<0.05	-	1.24	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61.9	-	<0.0005	-	1.26	-	-	-	-	-	<0.010	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67.6	-	<0.000050	-	1.25	-	-	-	-	-	0.0044	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	-	<0.0050	-	1.34	-	-	-	-	-	<0.10	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	0.011	<0.030	0.0086	<0.0050	-	-	0.39	0.685	<0.00020	<0.000020	0.00045	<0.00020	0.0004	<0.00020	-	43.9	<0.00050	<0.000050	1.13	1.18	<0.00010	<0.000080	0.0016	<0.0020	<0.0030	<0.0010	-	-	-	-	-	-	<200	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	<0.021	<0.012	0.0186	0.017	-	-	0.73	0.7	<0.00021	<0.0002	0.0025	0.0013	<0.0011	<0.0010	>11.6	>11.0	<0.0011	<0.0010	1.2	1.17	<0.00008	<0.00008	<0.0070	<0.007	<0.0042	<0.004	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	<0.012	-	<0.004	-	-	-	0.73	-	<0.0002	-	<0.0010	-	<0.0010	-	4.8	-	<0.0010	-	1.14	-	-	-	<0.007	-	0.008	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	<0.32	-	<0.11	-	-	-	0.73	-	<0.0053	-	<0.053	-	<0.053	-	7.8	-	<0.011	-	1.29	-	<0.00008	<0.00008	<0.053	-	<0.11	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	0.025	<0.012	0.0166	0.014	-	-	0.73	0.72	<0.00021	<0.0002	0.0022	0.0017	<0.0011	<0.0010	123	116	<0.0011	<0.0010	1.21	1.2	<0.00008	<0.00008	<0.0070	<0.007	0.0197	<0.004	-	-	-	-	-	-	<200	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	<0.021	<0.012	0.0151	0.014	-	-	0.75	0.67	<0.00021	<0.0002	0.0019	0.0012	<0.0011	<0.0010	115	108	<0.0011	<0.0010	1.27	1.09	<0.00008	<0.00008	0.0195	0.017	1.64	1.4	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111	-	<0.010	-	-	-	-	-	-	-	1.68	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	0.097	<0.030	0.023	0.018	-	-	0.677	0.66	<0.00020	<0.00020	0.0042	<0.0020	0.0023	<0.0020	-	120	0.0129	0.003	1.5	1.3	<0.0010	<0.000080	0.014	0.011	0.784	0.705	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	0.019	0.29	0.028	0.016	-	-	0.47	0.45	<0.00020	<0.000020	0.0004	0.00049	0.0077	0.00032	17.5	30.5	0.0038	0.00015	1.06	1.22	<0.00010	<0.000080	0.011	0.0065	0.424	0.244	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71	-	<0.05	-	1.69	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56.8	-	<0.0005	-	1.65	-	-	-	-	-	<0.010	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45.6	-	<0.000050	-	1.64	-	-	-	-	-	0.0047	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.5	-	<0.0050	-	1.6	-	-	-	-	-	<0.10	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	0.0095	<0.0030	0.001	<0.0050	-	-	0.37	0.751	<0.00020	<0.000020	0.0003	<0.00020	0.00034	<0.00020	-	10	<0.00050	<0.000050	1.36	1.4	<0.00010	<0.000080	0.00068	<0.0020	0.0057	<0.0010	-	-	-	-	-	-	<200	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	<0.021	<0.012	<0.0042	<0.004	-	-	0.79	0.71	<0.00021	<0.0002	0.0021	0.0011	<0.0011	<0.0010	>11.6	>11.0	<0.0011	<0.0010	1.65	1.48	<0.00008	<0.00008	<0.0070	<0.007	0.0066	<0.004	-	-	-	-	-	-	<200	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	<0.012	-	<0.004	-	-	-	0.8	-	<0.0002	-	<0.0010	-	<0.0010	-	0.51	-	<0.0010	-	0.66	-	-	-	<0.007	-	0.011	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	<0.32	-	<0.11	-	-	-	0.77	-	<0.0053	-	<0.053	-	<0.053	-	21	-	<0.011	-	0.85	-	<0.00008	<0.00008	<0.053	-	<0.11	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	<0.021	<0.012	<0.0042	<0.004	-	-	0.82	0.76	<0.00021	<0.0002	0.0018	0.0013	<0.0011	<0.0010	86	78	<0.0011	<0.0010	1.62	1.65	<0.00008	<0.00008	<0.0070	<0.007	0.0074	<0.004	-	-	-	-	-	-	<200	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	0.022	<0.012	<0.0042	<0.004	-	-	0.82	0.78	<0.00021	<0.0002	0.0014	<0.0010	<0.0011	<0.0010	98	98	<0.0011	<0.0010	1.71	1.53	<0.00008	<0.00008	<0.0070	<0.007	0.022	0.013	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97	-	<0.010	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	0.034	<0.030	<0.0050	<0.0050	-	-	0.776	0.743	<0.00020	<0.00020	0.003	<0.0020	<0.0020	<0.0020	-	109	0.001	<0.00050	2	1.7	<0.0010	<0.000080	0.0038	<0.0020	<0.030	<0.010	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	0.037	<0.0030	<0.0050	0.00075	-	-	0.568	0.508	<0.00020	<0.000020	0.00044	0.0003	0.0024	0.00052	5.5	8.29	0.00084	<0.000050	0.754	0.825	<0.00010	<0.000080	0.0041	0.0019	0.076	0.025	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.321	-	0.0001	-	0.071	-	-	-	-	-	0.025	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.7	-	<0.0005	-	2.63	-	-	-	-	-	<0.010	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.6	-	<0.000050	-	2.57	-	-	-	-	-	0.0025	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.6	-	<0.0050	-	2.75	-	-	-	-	-	<0.10	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	0.3	0.02	0.0042	0.0018	-	-	0.937	0.801	<0.00020	<0.000020	0.0008	<0.00020	0.00056	<0.00020	-	29.2	<0.00050	<0.000050	2.6	2.59	<0.00010	<0.000080	0.0045	0.0035	<0.0030	0.0014	-	-	-	-	-	-	<200	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	0.107	<0.03	<0.011	<0.010	-	-	1.48	1.49	<0.00053	<0.0005	<0.0053	<0.005	<0.0053	<0.005	50	50	<0.0011	<0.0010	2.8	2.6	<0.00008	<0.00008	<0.0053	<0.005	<0.011	<0.010	-	-	-	-	-	-	<200	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	<0.012	-	<0.004	-	-	-	1.28	-	<0.0002	-	<0.0010	-	<0.0010	-	11	-	<0.0010	-	1.85	-	-	-	<0.007	-	0.005	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	0.093	-	<0.021	-	-	-	1.3	-	<0.0011	-	<0.011	-	<0.011	-	13.7	-	<0.0021	-	2	-	<0.00008	<0.00008	<0.011	-	<0.021	-	-	-	-	-	-	-	<200	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	0.26	<0.012	0.008	0.006	-	-	1.56	1.51	<0.00021	<0.0002	0.0019	0.0019	<0.0011	<0.0010	57	51	<0.0011	<0.0010	2.8	2.9	<0.00008	<0.00008	0.0072	0.008	<0.0042	<0.004	-	-	-	-	-	-	<200	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	<0.010	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	0.13	<0.012	0.0105	0.009	-	-	1.59	1.41	<0.00021	<0.0002	0.0012	<0.0010	<0.0011	<0.0010	48	47	<0.0011	<0.0010	2.9	2.6	<0.00008	<0.00008	0.0163	0.014	0.0044	<0.004	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	0.791	<0.030	0.0057	0.0078	-	-	0.814	1.48	0.000031	<0.00020	0.002	<0.0020	0.0017	<0.0020	-	37.5	0.0013	<0.00050	2.76	2.87	<0.00010	<0.000080	0.015	0.015	0.0086	<0.010	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	0.839	0.0055	0.012	0.0091	-	-	1.3	1.18	<0.000020	0.000052	0.0018	0.00038	0.0014	0.00029	52.2	48.8	0.0012	<0.000050	2.99	2.9	<0.00010	<0.000080	0.016	0.0099	0.012	0.0014	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

" - " indicates the analyte is non detected or a statistic could not be calculated due, for example

#1 Cyanide as un-ionised HCN, measured as [CN].

#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.

#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.

#4 Measured as NH3-N at pH 8

#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"

#6 (pH >6.5, 0.8 ug/L for pH<6.5)

#7 In absence of total As guideline, As (V) guideline has been adopted.

#8 Freshwater DGV adopted (insufficient marine toxicity data)

#9 Insufficient information for FW value, marine unknown species protection used in interim

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc	2-methylnaphthalene	Benzo(b)fluoranthene	2,3,5,6-Tetrachlorophenol	2-Phenylphenol	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	Phenol	2-Nitrophenol	2-Methylphenol (o-Cresol)	3,4-Methylphenol (m,p-cresol)
On site																																						
	06 Sep 2022	GW15	Normal	3071976	MW	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	<3	<3	<3	-	<8	<3	-	-	-	<5	<5	<10	<10	-	<10	<100	<10	<10	<5	92
	14 Dec 2022	GW15	Normal	22-45801	MW	<0.30	<0.30	<0.30	<0.30	-	<0.50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	-	-	<0.30	<0.50	<0.30	<5.0	<0.30	<0.30	<0.50	<0.50	<0.30	<0.30	-	<2.0	<0.50	<0.30	-
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW21	Normal	3071976	MW	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	<3	<3	<3	-	<8	<3	-	-	-	<5	<5	<10	<10	-	<10	<100	<10	<10	<5	<10
	14 Dec 2022	GW21	Normal	22-45801	MW	<0.30	<0.30	<0.30	<0.30	-	<0.50	3.3	<0.30	<0.30	<0.30	<0.30	0.64	<0.30	-	<0.30	<0.30	-	-	<0.30	<0.50	<0.30	<5.0	<0.30	<0.30	<0.50	<0.50	<0.30	<0.30	-	<2.0	<0.50	<0.30	-
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW36	Normal	3071976	MW	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	<3	<3	<3	-	<8	<3	-	-	-	<5	<5	<10	<10	-	<10	<100	<10	<10	14	15
	14 Dec 2022	GW36	Normal	22-45801	MW	<0.30	<0.30	<0.30	<0.30	-	<0.50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	-	-	<0.30	<0.50	<0.30	<5.0	3	<0.30	1.4	<0.50	<0.30	<0.30	-	<2.0	<0.50	6.8	-
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																						
	03 Oct 2017	PS3	Normal	17-23985	SW	<0.3	<0.3	<0.3	<0.3	-	<0.5	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	-	<0.3	<0.3	<0.3	-	-	0.5	<0.5	<0.3	-	<0.3	<0.3	<0.5	<0.5	<0.3	<0.3	-	<0.3	<0.5	<0.3	-
	17 Jul 2018	PS3	Normal	18-24398	SW	<0.3	<0.3	<0.3	<0.3	-	<0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	<0.5	<0.3	-	<0.3	<0.3	<0.5	<0.5	<0.3	<0.3	-	<0.3	<0.5	<0.3	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	<0.3	<0.3	<0.3	<0.3	-	<0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	0.8	<0.3	<0.5	0.4	<5	<0.3	<0.3	<0.5	<0.5	<0.3	<0.3	-	<2.0	<0.5	<0.3	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	<1.4	<1.4	<1.4	<1.4	-	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	-	9.4	<1.4	<1.4	<0.3	3.4	<1.4	<1.4	<1.4	<5	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	-	49	<1.4	<1.4	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	<0.022	<0.022	0.036	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	0.023	<0.022	<0.032	-	3.2	0.034	0.032	<0.020	0.06	<0.060	<1.3	<1.3	<5.0	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	-	150	<1.3	2.4	-
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	<1.3	-	-	-	-	-	-	<1.3	-	-	-	20	<1.3	<1.3	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	<3	<3	<3	-	<8	<3	-	-	-	<5	<5	<10	<10	-	<10	<100	68	<10	<5	11
	06 Sep 2022	PS3	Normal	3070547	SW	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	<3	<3	<3	-	<8	<3	-	-	-	<5	<5	<10	<10	-	<10	<100	12	<10	5	14
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	<0.30	<0.30	<0.30	<0.30	-	<0.50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	-	-	<0.30	<0.50	<0.30	<5.0	<0.30	<0.30	<0.50	<0.50	<0.30	<0.30	-	<2.0	<0.50	<0.30	-
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc	2-methylnaphthalene	Benzo(b)fluoranthene	2,3,5,6-Tetrachlorophenol	2-Phenylphenol	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	Phenol	2-Nitrophenol	2-Methylphenol (o-Cresol)	3,4-Methylphenol (m,p-cresol)
			Shallow Perimeter																																			
	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW0C	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b+j)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc	2-methylnaphthalene	Benzo(b)fluoranthene	2,3,5,6-Tetrachlorophenol	2-Phenylphenol	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	Phenol	2-Nitrophenol	2-Methylphenol (o-Cresol)	3,4-Methylphenol (m,p-cresol)
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8C	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Deep Perimeter																																			
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2D	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
" - " indicates the analyte is non detected or a statistic could not be calculated due, for example
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	2,4-Dimethylphenol	4-Nitrophenol	4-Methylphenol (p-Cresol)	1,1-dichloroethane	1,2,3-trichlorobenzene	1,2,3-trichloropropane	1,2-dibromoethane	1,3-dichlorobenzene	1,4-Dioxane	2-butanone (MEK)	2-Chloroethylvinyl ether	4-methyl-2-pentanone (MIBK)	Acetone	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroethane	cis-1,3-dichloropropene	Dibromomethane	Freon 113	Iodomethane	MTBE	Trichloroethene	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	1,3,5-Trichlorobenzene	1-Methylnaphthalene	2-nitroaniline	3,3-Dichlorobenzidine
On site																																				
GW15	06 Sep 2022	GW15	Normal	3071976	MW	<5	-	-	<3	<3	<3	<3	<3	-	700	-	<100	<500	<3	<3	<3	<3	<5	<3	<3	-	<3	<3	<3	<5	<3	<3	<3	-	-	-
	14 Dec 2022	GW15	Normal	22-45801	MW	<1.0	<1.0	<0.30	1	<1.0	<1.0	<1.0	<0.30	<20	-	<8.0	3.3	-	<1.0	<1.0	<1.0	4.9	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<0.50	<0.50
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	06 Sep 2022	GW21	Normal	3071976	MW	<5	-	-	<3	<3	<3	<3	<3	-	<500	-	<100	<500	<3	<3	<3	<3	<5	<3	<3	-	<3	<3	<3	<5	<3	<3	<3	-	-	-
	14 Dec 2022	GW21	Normal	22-45801	MW	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	<1.0	<0.30	<20	-	<8.0	2.2	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<0.50	<0.50
	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	06 Sep 2022	GW36	Normal	3071976	MW	7	-	-	<3	<3	<3	<3	<3	-	<500	-	<100	<500	<3	<3	<3	<3	<5	<3	<3	-	<3	<3	<3	<5	<3	<3	<3	-	-	-
	14 Dec 2022	GW36	Normal	22-45801	MW	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	<1.0	<0.30	<20	-	<8.0	4.9	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<0.50	<0.50
	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																				
PS3	03 Oct 2017	PS3	Normal	17-23985	SW	<1	<1	0.3	<0.5	<2	<1	<0.5	<0.3	-	-	<8	<1	-	<0.5	<1	<1	<8	<1	<1	-	<0.5	<5	<0.5	<1	<1	<1	<1	-	-	<0.5	<0.5
	17 Jul 2018	PS3	Normal	18-24398	SW	<1.0	<1.0	<0.3	<0.5	<2	<1	<0.5	<0.3	30	-	<8	<1	-	<0.5	<1	<1	<8	<1	<1	-	<0.5	<5	<0.5	<1	<1	<1	<1	-	-	<0.5	<0.5
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	<1.0	<1.0	<0.3	<0.5	<2	<1	<0.5	<0.3	<20	-	<8	<1	<40	<0.5	<1	<1	<8	<1	<1	-	<0.5	<5	<0.5	<1	<1	<1	<1	-	-	<0.5	<0.5
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	<1.4	<1.4	21.1	<0.6	<2	<1	<0.6	<1.4	<20	-	<10	<1	-	<0.6	<1	<1	<10	<1	<1	-	<0.6	<6	<0.6	<1	<1	<1	<1	-	-	<1.4	<1.4
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23 Jul 2021	PS3	Normal	21-32657	SW	<1.3	-	510	<1.0	<1.0	<1.0	<1.0	<1.0	<20	-	<1.0	2.8	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	0.074	<1.3	<1.3
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	<5	-	-	<3	<3	<3	<3	<3	-	<500	-	<100	<500	<3	<3	<3	<3	<5	<3	<3	-	<3	<3	<3	<5	<3	<3	<3	-	-	-
	06 Sep 2022	PS3	Normal	3070547	SW	<5	-	-	<3	<3	<3	<3	<3	-	<500	-	<100	<500	<3	<3	<3	<3	<5	<3	<3	-	<3	<3	<3	<5	<3	<3	<3	-	-	-
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	<1.0	<0.30	<20	-	<8.0	1.2	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<0.50	<0.50
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	2,4-Dimethylphenol	4-Nitrophenol	4-Methylphenol (p-Cresol)	1,1-dichloroethane	1,2,3-trichlorobenzene	1,2,3-trichloropropane	1,2-dibromoethane	1,3-dichlorobenzene	1,4-Dioxane	2-butanone (MEK)	2-Chloroethylvinyl ether	4-methyl-2-pentanone (MIBK)	Acetone	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroethane	cis-1,3-dichloropropene	Dibromomethane	Freon 113	Iodomethane	MTBE	Trichloroethene	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	1,3,5-Trichlorobenzene	1-Methylnaphthalene	2-nitroaniline	3,3-Dichlorobenzidine
			Shallow Perimeter																																	
MW0C	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	2,4-Dimethylphenol	4-Nitrophenol	4-Methylphenol (p-Cresol)	1,1-dichloroethane	1,2,3-trichlorobenzene	1,2,3-trichloropropane	1,2-dibromoethane	1,3-dichlorobenzene	1,4-Dioxane	2-butanone (MEK)	2-Chloroethylvinyl ether	4-methyl-2-pentanone (MIBK)	Acetone	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroethane	cis-1,3-dichloropropene	Dibromomethane	Freon 113	Iodomethane	MTBE	Trichloroethene	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	1,3,5-Trichlorobenzene	1-Methylnaphthalene	2-nitroaniline	3,3-Dichlorobenzidine
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Deep Perimeter																																	
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
" - " indicates the analyte is non detected or a statistic could not be calculated due, for example
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	3-nitroaniline	4-bromophenyl phenyl ether	4-chloroaniline	4-chlorophenyl phenyl ether	Azobenzene	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Carbazole	Dibenzofuran	Hexachlorocyclopentadiene	Hexachloroethane	N-nitrosodi-n-propylamine	n-Nitrosodiphenylamine	2,4-DDT	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin
On site																																				
GW15	06 Sep 2022	GW15	Normal	3071976	MW	-	<5	-	<5	-	<50	<5	<5	<5	<5	<5	-	<10	<10	-	<0.2	<0.2	<0.2	<0.1	<0.2	-	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.1
GW15	14 Dec 2022	GW15	Normal	22-45801	MW	<0.30	<0.30	<0.50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.50	<0.30	-	<0.30	<0.50	<0.30	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0
GW15	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	06 Sep 2022	GW21	Normal	3071976	MW	-	<5	-	<5	-	<50	<5	<5	<5	<5	<5	-	<10	<10	-	<0.2	<0.2	<0.2	<0.1	<0.2	-	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.1
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	<0.30	<0.30	<0.50	<0.30	<0.30	<0.30	<0.30	0.36	<0.30	-	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.50	<0.30	-	<0.30	<0.50	<0.30	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	06 Sep 2022	GW36	Normal	3071976	MW	-	<5	-	<5	-	<50	<5	<5	<5	<5	<5	-	<10	<10	-	<0.2	<0.2	<0.2	<0.1	<0.2	-	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.1
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	<0.30	<0.30	<0.50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.50	<0.30	-	<0.30	<0.50	<0.30	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																				
PS3	03 Oct 2017	PS3	Normal	17-23985	SW	<0.3	<0.3	<0.5	<0.3	<0.3	<0.3	<0.3	0.4	0.4	-	<0.3	<0.3	<0.3	<0.3	1.4	<0.01	<0.005	<0.005	<0.02	<0.005	<0.04	<0.01	<0.01	<0.005	<0.005	<0.01	<0.02	<0.005	<0.01	<0.005	<0.02
PS3	17 Jul 2018	PS3	Normal	18-24398	SW	<0.3	<0.3	<0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.01	<0.005	<0.005	<0.02	<0.005	<0.04	<0.01	<0.01	<0.005	<0.005	<0.01	<0.02	<0.005	<0.01	<0.005	<0.02
PS3	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	02 Jul 2019	PS3	Normal	19-22608	SW	<0.3	<0.3	<0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	0.8	<0.01	<0.005	<0.005	<0.02	<0.005	<0.04	<0.01	<0.01	<0.005	<0.005	<0.01	<0.02	<0.005	<0.01	<0.005	<0.02
PS3	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	15 Jul 2020	PS3	Normal	20-25846	SW	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	-	<1.4	<1.4	<1.4	<1.4	<1.4	<0.01	<0.005	<0.005	<0.02	<0.005	<0.04	<0.01	<0.01	<0.005	<0.005	<0.01	<0.02	<0.005	<0.01	<0.005	<0.02
PS3	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	-	<1.3	<1.3	<1.3	<1.3	<1.3	<0.010	<0.0050	<0.0050	<0.020	<0.0050	<0.040	<0.010	<0.010	<0.0050	0.0067	<0.010	<0.020	<0.0050	<0.010	<0.0050	<0.020
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.3	-	-	-	-	-	-
PS3	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Jul 2022	PS3	Normal	3034727	SW	-	<5	-	<5	-	<50	<5	<5	<5	<5	<5	-	<10	<10	-	<0.2	<0.2	<0.2	<0.1	<0.2	-	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.1
PS3	06 Sep 2022	PS3	Normal	3070547	SW	-	<5	-	<5	-	<50	<5	<5	<5	<5	<5	-	<10	<10	-	<0.2	<0.2	<0.2	<0.1	<0.2	-	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.1
PS3	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	22-45801	SW	<0.30	<0.30	<0.50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.50	<0.30	-	<0.30	<0.50	<0.30	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0
PS3	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	3-nitroaniline	4-bromophenyl phenyl ether	4-chloroaniline	4-chlorophenyl phenyl ether	Azobenzene	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Carbazole	Dibenzofuran	Hexachlorocyclopentadiene	Hexachloroethane	N-nitrosodi-n-propylamine	n-Nitrosodiphenylamine	2,4-DDT	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin
			Shallow Perimeter																																	
MW0C	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	3-nitroaniline	4-bromophenyl phenyl ether	4-chloroaniline	4-chlorophenyl phenyl ether	Azobenzene	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Carbazole	Dibenzofuran	Hexachlorocyclopentadiene	Hexachloroethane	N-nitrosodi-n-propylamine	n-Nitrosodiphenylamine	2,4-DDT	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Deep Perimeter																																	
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
" - " indicates the analyte is non detected or a statistic could not be calculated due, for example
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Chemical						Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Ethyl methanesulfonate	Methyl methanesulfonate	2,4 DDD	2,4 DDE	trans-Nonachlor	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	Styrene	n-butylbenzene	n-propylbenzene	sec-butylbenzene	tert-butylbenzene	p-isopropyltoluene	Bromomethane	Dichlorodifluoromethane	2,3,7,8-TCDD TEQ	PCB-110	PCB-121	PCB-128	PCB-128 & PCB-167 2,2',3,3',4,4'-Hexachlorobiphenyl&2,3',4	PCB-141	PCB-149	PCB-151
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type																																	
On site																																						
GW15	06 Sep 2022	GW15	Normal	3071976	MW	<0.1	<0.2	<0.2	<0.1	<0.1	<0.8	<0.1	-	-	<0.2	<0.2	-	32	8	4	<5	<5	5	<3	<3	40	<3	<3	-	<0.4	<0.4	<0.4	-	<0.4	<0.4	<0.4
GW15	14 Dec 2022	GW15	Normal	22-45801	MW	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<10	<0.30	-	-	-	9	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.0000020	-	<0.0050	-	<0.0000050	<0.0050	<0.0050	<0.0050
GW15	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	06 Sep 2022	GW21	Normal	3071976	MW	<0.1	<0.2	<0.2	<0.1	<0.1	<0.8	<0.1	-	-	<0.2	<0.2	-	22	6	3	<5	<5	<5	<3	<3	6	<3	<3	-	<0.4	<0.4	<0.4	-	<0.4	<0.4	<0.4
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<10	<0.30	-	-	-	<1.0	3.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.0000020	-	0.007	-	<0.0000050	<0.0050	0.011	<0.0050
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	06 Sep 2022	GW36	Normal	3071976	MW	<0.1	<0.2	<0.2	<0.1	<0.1	<0.8	<0.1	-	-	<0.2	<0.2	-	19	6	<3	<5	<5	<5	<3	<3	41	<3	<3	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<10	<0.30	-	-	-	18	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	56	<1.0	<1.0	<0.0000020	-	<0.0050	-	<0.0000050	<0.0050	<0.0050	<0.0050
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																						
PS3	03 Oct 2017	PS3	Normal	17-23985	SW	<0.01	<0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<10	<0.3	<0.005	<0.005	<0.01	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8	<1	<0.000002	-	<0.005	-	<0.000005	<0.005	<0.005	<0.005
PS3	17 Jul 2018	PS3	Normal	18-24398	SW	<0.01	<0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<10.0	<0.3	<0.005	<0.005	<0.01	2	<1	<1	<1	<1	<1	<1	<1	<1	<8	<1	<0.000002	-	<0.005	-	<0.000005	<0.005	<0.005	<0.005
PS3	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	02 Jul 2019	PS3	Normal	19-22608	SW	<0.01	<0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<10.0	<0.3	<0.005	<0.005	<0.01	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8	<1	<0.000002	-	<0.005	-	<0.000005	<0.005	<0.005	<0.005
PS3	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	15 Jul 2020	PS3	Normal	20-25846	SW	<0.01	<0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<10.0	<1.4	<0.005	<0.005	<0.01	2	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<0.000002	-	<0.005	-	<0.000005	<0.005	<0.005	<0.005
PS3	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	<0.010	<0.010	<0.0050	<0.010	<0.010	<0.010	<0.010	<10	<1.3	<0.0050	<0.0050	<0.010	4.6	1.1	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<0.0000020	-	<0.0050	-	<0.0000050	<0.0050	<0.0050	<0.0050
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Jul 2022	PS3	Normal	3034727	SW	<0.1	<0.2	<0.2	<0.1	<0.1	<0.8	<0.1	-	-	<0.2	<0.2	-	12	4	<3	<5	<5	<5	<3	<3	9	<3	<3	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1
PS3	06 Sep 2022	PS3	Normal	3070547	SW	<0.1	<0.2	<0.2	<0.1	<0.1	<0.8	<0.1	-	-	<0.2	<0.2	-	15	5	<3	<5	<5	<5	<3	<3	14	<3	<3	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1
PS3	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	22-45801	SW	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<10	<0.30	-	-	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.0000020	-	<0.0050	-	<0.0000050	<0.0050	<0.0050	<0.0050
PS3	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Ethyl methanesulfonate	Methyl methanesulfonate	2,4 DDD	2,4 DDE	trans-Nonachlor	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	Styrene	n-butylbenzene	n-propylbenzene	sec-butylbenzene	tert-butylbenzene	p-isopropyltoluene	Bromomethane	Dichlorodifluoromethane	2,3,7,8-TCDD TEQ	PCB-110	PCB-121	PCB-128	PCB-128 & PCB-167 2,2',3,3',4,4'-Hexachlorobiphenyl&2,3',4	PCB-141	PCB-149	PCB-151
			Shallow Perimeter																																	
MW0C	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chemical						Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Ethyl methanesulfonate	Methyl methanesulfonate	2,4 DDD	2,4 DDE	trans-Nonachlor	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	Styrene	n-butylbenzene	n-propylbenzene	sec-butylbenzene	tert-butylbenzene	p-isopropyltoluene	Bromomethane	Dichlorodifluoromethane	2,3,7,8-TCDD TEQ	PCB-110	PCB-121	PCB-128	PCB-128 & PCB-167 2,2',3,3',4,4'-Hexachlorobiphenyl&2,3',4	PCB-141	PCB-149	PCB-151
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type																															
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deep Perimeter																																				
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
" - " indicates the analyte is non detected or a statistic could not be calculated due, for example
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	PCB-159	PCB-170	PCB-18	PCB-187 2,2',3,4',5,5',6-Heptachlorobiphenyl	PCB-194	PCB-195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	PCB-206	PCB-28 & PCB-31 PCB-28 & PCB-31	PCB-3 4-Chlorobiphenyl	PCB-31	PCB-4 2,2'-Dichlorobiphenyl	PCB-44	PCB-49	PCB-60	PCB-66 2,3',4,4'-Tetrachlorobiphenyl	PCB-8 2,4'-Dichlorobiphenyl	PCB-86	Decachlorobiphenyl	PCB-189	PCB-156	PCB-157	PCB-167	PCB-169	PCB-101	PCB-118	PCB-138	PCB-153	PCB-180	PCB-28	PCB-52	PCBs (Total)
On site																																		
GW15	06 Sep 2022	GW15	Normal	3071976	MW	<0.4	<0.4	<0.4	-	<0.4	-	<0.4	-	-	<0.4	-	<0.4	<0.4	<0.4	-	-	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<14
GW15	14 Dec 2022	GW15	Normal	22-45801	MW	<0.0050	<0.0050	<0.010	<0.000010	<0.0050	<0.0000050	<0.0050	<0.000010	<0.000010	-	<0.000010	<0.0050	<0.010	<0.0050	<0.0000050	<0.000010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	-	<0.010	-
GW15	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	06 Sep 2022	GW21	Normal	3071976	MW	<0.4	<0.4	<0.4	-	<0.4	-	<0.4	-	-	<0.4	-	<0.4	<0.4	<0.4	-	-	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<14
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	<0.0050	<0.0050	<0.010	<0.000010	<0.0050	<0.0000050	<0.0050	<0.000010	<0.000010	-	<0.000010	0.0068	<0.010	<0.0050	<0.0000050	<0.000010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	-	<0.0050	0.024	0.016	0.02	0.0099	<0.0050	-	0.012	-
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	06 Sep 2022	GW36	Normal	3071976	MW	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	<0.0050	<0.0050	<0.010	<0.000010	<0.0050	<0.0000050	<0.0050	<0.000010	<0.000010	-	<0.000010	<0.0050	<0.010	<0.0050	<0.0000050	<0.000010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	-	<0.010	-
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																		
PS3	03 Oct 2017	PS3	Normal	17-23985	SW	<0.005	<0.005	<0.01	<0.00001	<0.005	<0.000005	<0.005	<0.00001	<0.00001	-	0.00001	<0.005	<0.01	<0.005	<0.000005	<0.00001	<0.005	<0.01	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.01	-
PS3	17 Jul 2018	PS3	Normal	18-24398	SW	<0.005	<0.005	<0.01	<0.00001	<0.005	<0.000005	<0.005	<0.00001	<0.00001	-	<0.00001	<0.005	<0.01	<0.005	<0.000005	<0.00001	<0.005	<0.01	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.01	-
PS3	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	02 Jul 2019	PS3	Normal	19-22608	SW	<0.005	<0.005	<0.01	<0.00001	<0.005	<0.000005	<0.005	<0.00001	<0.00001	-	<0.00001	<0.005	<0.01	<0.005	<0.000005	<0.00001	<0.005	<0.01	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.01	-
PS3	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	15 Jul 2020	PS3	Normal	20-25846	SW	<0.005	<0.005	<0.01	<0.00001	<0.005	<0.000005	<0.005	<0.00001	<0.00001	-	<0.00001	<0.005	<0.01	<0.005	<0.000005	<0.00001	<0.005	<0.01	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.01	-
PS3	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	<0.0050	<0.0050	<0.010	<0.000010	<0.0050	<0.0000050	<0.0050	<0.000010	<0.000010	-	<0.000010	<0.0050	<0.010	<0.0050	<0.0000050	<0.000010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	-	<0.010	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Jul 2022	PS3	Normal	3034727	SW	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5
PS3	06 Sep 2022	PS3	Normal	3070547	SW	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5
PS3	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	22-45801	SW	<0.0050	<0.0050	<0.010	<0.000010	<0.0050	<0.0000050	<0.0050	<0.000010	<0.000010	-	<0.000010	<0.0050	<0.010	<0.0050	<0.0000050	<0.000010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	-	<0.010	-
PS3	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	PCB-159	PCB-170	PCB-18	PCB-187 2,2',3,4',5,5',6-Heptachlorobiphenyl	PCB-194	PCB-195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	PCB-206	PCB-28 & PCB-31 PCB-28 & PCB-31	PCB-3 4-Chlorobiphenyl	PCB-31	PCB-4 2,2'-Dichlorobiphenyl	PCB-44	PCB-49	PCB-60	PCB-66 2,3',4,4'-Tetrachlorobiphenyl	PCB-8 2,4'-Dichlorobiphenyl	PCB-86	Decachlorobiphenyl	PCB-189	PCB-156	PCB-157	PCB-167	PCB-169	PCB-101	PCB-118	PCB-138	PCB-153	PCB-180	PCB-28	PCB-52	PCBs (Total)
			Shallow Perimeter																																	
MW0C	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	PCB-159	PCB-170	PCB-18	PCB-187 2,2',3,4',5,5',6-Heptachlorobiphenyl	PCB-194	PCB-195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	PCB-206	PCB-28 & PCB-31 PCB-28 & PCB-31	PCB-3 4-Chlorobiphenyl	PCB-31	PCB-4 2,2'-Dichlorobiphenyl	PCB-44	PCB-49	PCB-60	PCB-66 2,3',4,4'-Tetrachlorobiphenyl	PCB-8 2,4'-Dichlorobiphenyl	PCB-86	Decachlorobiphenyl	PCB-189	PCB-156	PCB-157	PCB-167	PCB-169	PCB-101	PCB-118	PCB-138	PCB-153	PCB-180	PCB-28	PCB-52	PCBs (Total)
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deep Perimeter																																				
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

" - " indicates the analyte is non detected or a statistic could not be calculated due, for example
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Chemical						PCB-105	PCB-114	PCB-123	PCB-126	PCB-77	PCB-81	2,4,5-Trichlorophenoxy-propanoic acid	Total Organic Fluorine	C15-C36	C7-C36	C7-C9	Thermotolerant (Faecal) Coliforms	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,4-trichlorobenzene	1,2-dibromo-3-chloropropane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	1,4-dichlorobenzene	2,2-dichloropropane	2-chloronaphthalene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Carbon tetrachloride	Chlorobenzene	Chloroform	Chloromethane
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type																																		
On site																																							
GW15	06 Sep 2022	GW15	Normal	3071976	MW	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<5,000	-	5000	7000	<400	80000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	-	<3	<3	<3	<3	<3	<3	<3
	14 Dec 2022	GW15	Normal	22-45801	MW	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	-	-	400	-	<200	-	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW21	06 Sep 2022	GW21	Normal	3071976	MW	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<30,000	-	164000	171000	900	1200	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	-	<3	<3	<3	<3	3	<3	<3
	14 Dec 2022	GW21	Normal	22-45801	MW	0.0067	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	-	-	19000	-	<200	-	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	1.1	<1.0	<0.30	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW36	06 Sep 2022	GW36	Normal	3071976	MW	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<30,000	-	1900	4500	210	23	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	-	<3	<3	<3	<3	<3	<3	<3
	14 Dec 2022	GW36	Normal	22-45801	MW	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	-	-	2000	-	<200	-	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	1.3	<1.0	<0.30	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																							
PS3	03 Oct 2017	PS3	Normal	17-23985	SW	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	-	-	-	-	-	-	<1	<0.5	<5	<1	<1	<1	<2	<8	<0.3	<1	<0.5	<0.5	0.5	<2	<0.3	<1	<1	<1	<1	1.5	<1	<5
	17 Jul 2018	PS3	Normal	18-24398	SW	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	-	-	-	-	-	-	<1	<0.5	<5	<1	<1	<1	<2	<8	<0.3	<1	<0.5	<0.5	0.4	<2	<0.3	<1	<1	<1	<1	1.4	<1	<5
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	-	-	-	-	-	10	<1	<0.5	<5	<1	<1	<1	<2	<8	<0.3	<1	<0.5	<0.5	<0.3	<2	<0.3	<1	<1	<1	<1	<0.5	<1	<1
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	-	-	-	-	-	-	<1	<0.6	<6	<1	<1	<1	<2	<10	<1.4	<1	<0.6	<0.6	<1.4	<2	<1.4	<1	<1	<1	<1	1.2	<1	<1
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23 Jul 2021	PS3	Normal	21-32657	SW	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	-	-	-	-	-	4000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5,000	-	-	-	-	>16,000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	-	<3	<3	<3	<3	<3	<3	<3
	06 Sep 2022	PS3	Normal	3070547	SW	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5,000	-	-	-	-	19000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-	-	<3	<3	<3	<3	<3	<3	<3
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	-	-	<300	-	<200	-	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	0.72	<1.0	<0.30	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	PCB-105	PCB-114	PCB-123	PCB-126	PCB-77	PCB-81	2,4,5-Trichlorophenoxy-propanoic acid	Total Organic Fluorine	C15-C36	C7-C36	C7-C9	Thermotolerant (Faecal) Coliforms	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,4-trichlorobenzene	1,2-dibromo-3-chloropropane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	1,4-dichlorobenzene	2,2-dichloropropane	2-chloronaphthalene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Carbon tetrachloride	Chlorobenzene	Chloroform	Chloromethane
			Shallow Perimeter																																				
	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW0C	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1C	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2C	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3C	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4C	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5C	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6C	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chemical						PCB-105	PCB-114	PCB-123	PCB-126	PCB-77	PCB-81	2,4,5-Trichlorophenoxy-propanoic acid	Total Organic Fluorine	C15-C36	C7-C36	C7-C9	Thermotolerant (Faecal) Coliforms	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,4-trichlorobenzene	1,2-dibromo-3-chloropropane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	1,4-dichlorobenzene	2,2-dichloropropane	2-chloronaphthalene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Carbon tetrachloride	Chlorobenzene	Chloroform	Chloromethane
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type																																		
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deep Perimeter																																							
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	-	-	-	<300	<500	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	<400	<700	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
" - " indicates the analyte is non detected or a statistic could not be calculated due, for example
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	cis-1,2-dichloroethene	Methylene chloride	Hexachlorobutadiene	Vinyl chloride	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	N-Nitrosodiphenyl & Diphenylamine	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Di(2-ethylhexyl)adipate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2-hexanone (MBK)	Carbon disulfide	Isophorone	Vinyl acetate	Formic Acid	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	PFHxS (di-branched)
On site																																					
	06 Sep 2022	GW15	Normal	3071976	MW	<3	<100	<3	14	<10	<10	<5	<10	<30	<10	<5	<10	<10	<10	<10	-	<5	<5	-	<5,000	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	22-45801	MW	<1.0	2.4	<0.30	<1.0	<1.0	<1.0	<0.30	-	<6.3	<1.0	<5.0	<2.0	<0.30	<10	<0.50	<8.0	<1.0	<0.30	<1.0	-	0.25	0.18	0.41	0.065	0.13	0.025	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW21	Normal	3071976	MW	<3	<100	<3	<3	<10	<10	<5	<10	50	<10	<5	<10	<10	<10	<10	-	<5	<5	-	<30,000	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	22-45801	MW	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	<0.30	-	310	<1.0	<5.0	<2.0	<0.30	<10	<0.50	<8.0	<1.0	<0.30	<1.0	-	1	0.39	0.65	0.17	0.34	0.021	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW36	Normal	3071976	MW	<3	<100	<5	<3	<10	<10	<5	<10	<30	<10	<5	<10	<10	<10	<10	-	8	<5	-	<30,000	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	22-45801	MW	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	<0.30	-	28	<1.0	<5.0	<2.0	<0.30	<10	<0.50	<8.0	4.6	<0.30	<1.0	-	1.1	1.4	3.5	0.23	0.47	0.018	0.014	<0.010	<0.010	<0.010	<0.010	<0.010
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																					
	03 Oct 2017	PS3	Normal	17-23985	SW	<1	<2	<0.3	<1	<1	<1	<0.3	-	<10	<1	-	<2	<0.3	<10	<0.5	<8	<1	<0.3	<8	-	-	-	-	-	-	-	-	-	-	-	-	-
	17 Jul 2018	PS3	Normal	18-24398	SW	<1	<2	<0.3	<1	<1.0	<1.0	<0.3	-	<10	<1.0	-	<2.0	<0.3	<10	<0.5	<8	<1	<0.3	<8	-	-	-	-	-	-	-	-	-	-	-	-	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	<1	<2	<0.3	<1	<1.0	1.3	<0.3	-	<10	<1.0	<5	<0.3	<2.0	<10	<0.5	<8	<1	<0.3	<8	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	<1	<2	<1.4	<1	<1.4	<1.4	<1.4	-	<10	<1.4	<5	<1.4	<2.0	<10	<1.4	<10	<1	<1.4	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	<1.0	<1.0	<1.0	<1.0	<1.3	<1.3	<1.3	-	<10	4.1	<5.0	2.9	<1.3	<10	<1.3	<1.0	<1.0	3.3	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	<3	<100	<3	<3	<10	<10	<5	<10	<30	<10	<5	<10	<10	<10	<10	-	<5	<5	-	<5,000	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	PS3	Normal	3070547	SW	<3	<100	<3	<3	<10	<10	<5	<10	<30	<10	<5	<10	<10	<10	<10	-	<5	<5	-	<5,000	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	<1.0	<1.0	<0.30	<1.0	<1.0	<1.0	<0.30	-	<6.3	<1.0	<5.0	<2.0	<0.30	<10	<0.50	<8.0	<1.0	<0.30	<1.0	-	0.35	0.16	0.21	0.073	0.14	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	<0.20	0.15	0.056	0.11	0.0046	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.020	<0.0040	<0.0040	0.113	0.248	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0100	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.73	0.697	0.302	0.106	0.162	0.0053	<0.0040	<0.0040	<0.0040	<0.0040	<0.0100	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	cis-1,2-dichloroethene	Methylene chloride	Hexachlorobutadiene	Vinyl chloride	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	N-Nitrosodiphenyl & Diphenylamine	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Di(2-ethylhexyl)adipate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2-hexanone (MBK)	Carbon disulfide	Isophorone	Vinyl acetate	Formic Acid	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	PFHxS (di-branched)
			Shallow Perimeter																																		
MW0C	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	<0.0005	0.0016	<0.0005	0.0008	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0010	-
MW1C	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.029	<0.010	0.011	0.0018	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.043	<0.0005	0.0102	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	0.0409	0.013	0.0017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
MW2C	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
MW3C	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.011	<0.010	0.01	0.0033	0.011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	0.0072	0.0107	0.0046	0.0192	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	0.004	0.0063	0.0021	0.0127	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
MW4C	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
MW5C	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.011	<0.010	0.0038	0.0021	0.0088	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	<0.0005	<0.0005	<0.0005	0.0121	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0020	<0.0005	0.0032	<0.0005	0.011	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
MW6C	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0264	0.0015	0.0051	0.0009	0.0033	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-

Appendix B

Table 5

Leachate and groundwater analytical results

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	cis-1,2-dichloroethene	Methylene chloride	Hexachlorobutadiene	Vinyl chloride	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	N-Nitrosodiphenyl & Diphenylamine	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Di(2-ethylhexyl)adipate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2-hexanone (MBK)	Carbon disulfide	Isophorone	Vinyl acetate	Formic Acid
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deep Perimeter																									
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location Code	Date	Field ID	Lab Report Number	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	PFHxS (di-branched)
MW8C	18 Oct 2021	MW8C	21-44426	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW8C	2840646	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	2948344	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	3034726	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	3095333	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	23-01704	<0.010	<0.010	0.0015	0.0022	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW8C	3168264	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	23-11285	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	ES2313258	<0.002	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW8C	ES2329846	<0.0020	0.0028	0.0014	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
Deep Perimeter															
MW2D	03 Oct 2017	MW2D	17-23985	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	18-32718	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	19-35067	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	20-39692	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	21-44426	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2D	2842111	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	2946979	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	2946979	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	3033832	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	3094519	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	3095310	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	23-01370	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW2D	3168263	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	23-11202	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	ES2313255	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW2D	ES2329846	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
MW4D	03 Oct 2017	MW4D	17-23985	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	18-32718	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	19-35067	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	20-39692	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	21-44426	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4D	2842111	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	2946979	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	2946979	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	3033832	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	3094519	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	3095310	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	23-01370	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW4D	3168263	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	23-11202	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	ES2313255	<0.002	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW4D	ES2329846	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
MW7D	03 Oct 2017	MW7D	17-23985	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	18-32718	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	19-35067	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	20-39692	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	21-44199	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW7D	2840646	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	2948344	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	2948344	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	3033832	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	3095310	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	3095333	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	23-01704	<0.010	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	18 Jan 2023	MW7D	3168264	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	23-11285	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	ES2313258	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-
	28 Aug 2023	MW7D	ES2329846	0.0026	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0010	-

Comments

" - " indicates the analyte is non detected or a statistic could not be calculated due, for example

#1 Cyanide as un-ionised HCN, measured as [CN].

#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.

#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.

#4 Measured as NH3-N at pH 8

#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"

#6 (pH >6.5, 0.8 ug/L for pH<6.5)

#7 In absence of total As guideline, As (V) guideline has been adopted.

#8 Freshwater DGV adopted (insufficient marine toxicity data)

#9 Insufficient information for FW value, marine unknown species protection used in interim

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	PFHxS (mono-branched)	PFHxS (Total)	PFOS (di-branched)	PFOS (mono-branched)	PFOS (Total)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	Sum (PFHxS (Total) + PFOS (Total))*	Sum (PFOS (Total) + PFOA (Total))*	Sum of PFAS (n=10)*	Sum of PFAS (n=31)*	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*
On site																																				
	06 Sep 2022	GW15	Normal	3071976	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	22-45801	MW	0.017	0.097	<0.010	0.022	0.079	<0.010	0.022	<0.010	0.079	<0.010	0.057	-	<0.010	<0.010	<0.010	<0.010	0.034	<0.010	<0.010	0.013	<0.010	<0.050	<0.010	-	0.31	0.18	0.21	1.2	1.3	-	-
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW15	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW21	Normal	3071976	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	22-45801	MW	0.051	0.25	<0.010	0.027	0.076	<0.010	0.15	0.011	0.2	<0.010	0.049	-	<0.010	<0.010	<0.010	<0.010	0.078	0.018	0.01	0.016	<0.010	0.25	0.02	-	0.67	0.33	0.41	3.3	3.5	-	-
GW21	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	GW36	Normal	3071976	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	22-45801	MW	0.037	0.18	<0.010	0.049	0.14	<0.010	3.3	0.011	0.15	<0.010	0.092	-	<0.010	<0.010	<0.010	<0.010	0.28	0.19	0.038	0.024	<0.010	0.18	0.016	-	0.8	0.33	0.61	10	11	-	-
GW36	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate																																				
	03 Oct 2017	PS3	Normal	17-23985	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS3	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Sep 2022	PS3	Normal	3070547	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	0.012	0.057	<0.010	0.02	0.047	<0.010	0.041	<0.010	0.045	<0.010	0.027	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.050	<0.010	-	0.24	0.1	0.19	1.1	1.1	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	0.01	0.049	0.0023	0.022	0.057	0.0049	0.032	0.0052	0.039	0.0016	0.033	-	<0.0010	<0.0010	<0.0010	<0.0010	0.005	<0.0010	<0.0010	0.019	<0.0010	0.025	0.0019	-	0.22	0.11	0.17	0.48	0.52	-	-
	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	-	-	-	-	-	-	0.169	<0.0040	0.104	<0.0040	0.0886	-	<0.0040	<0.0040	<0.010	<0.010	<0.0040	<0.010	<0.010	0.0174	<0.004	0.092	<0.004	<0.004	-	-	-	-	-	0.193	-
	28 Aug 2023	PS3	Normal	ES2329846	SW	-	-	-	-	-	-	0.0551	<0.0040	0.0637	<0.0040	0.1		<0.0040	<0.0040	<0.010	<0.010	0.0084	<0.010	<0.010	0.0204	<0.004	0.046	<0.004	<0.004	-	-	-	-	-	0.164	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	PFHxS (mono-branched)	PFHxS (Total)	PFOS (di-branched)	PFOS (mono-branched)	PFOS (Total)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	Sum (PFHxS (Total) + PFOS (Total))*	Sum (PFOS (Total) + PFOA (Total))*	Sum of PFAS (n=10)*	Sum of PFAS (n=31)*	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*
			Shallow Perimeter																																	
MW0C	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0076	<0.0010	-	N/A	N/A	N/A	0.0076	0.0076	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.035	<0.001	<0.001	-	-	-	-	-	0.0012	-
	28 Aug 2023	MW0C	Normal	ES2329846	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0004		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.014	<0.001	<0.001	-	-	-	-	-	0.0004	-
MW1C	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	0.0019	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	0.044	0.045	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.02	<0.001	<0.001	-	-	-	-	-	0.0009	-
	28 Aug 2023	MW1C	Normal	ES2329846	MW	-	-	-	-	-	-	0.0024	<0.0005	<0.0005	<0.0005	<0.0004		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.001	<0.001	<0.001	-	-	-	-	-	<0.0004	-
MW2C	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.004	<0.001	<0.001	-	-	-	-	-	<0.0004	-
	28 Aug 2023	MW2C	Normal	ES2329846	MW	-	-	-	-	-	-	<0.0005	<0.0005	0.0126	0.0005	0.0078		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.005	<0.001	<0.001	-	-	-	-	-	0.0204	-
MW3C	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	<0.0010	0.0017	<0.0010	0.0031	0.0073	<0.0010	0.0012	<0.0010	0.0017	<0.0010	0.0042	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	<0.0010	<0.0050	<0.0010	-	0.02	0.009	0.019	0.046	0.051	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0082	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0106	<0.001	0.002	<0.001	<0.001	-	-	-	-	-	0.0082	-
	28 Aug 2023	MW3C	Normal	ES2329846	MW	-	-	-	-	-	-	<0.0005	<0.0005	0.0024	<0.0005	0.0092		<0.0005	0.002	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0036	<0.001	0.002	<0.001	<0.001	-	-	-	-	-	0.0116	-
MW4C	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	-	-	-	-	-	-	0.001	<0.0005	<0.0005	<0.0005	<0.0004	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.004	<0.001	<0.001	-	-	-	-	-	<0.0004	-
	28 Aug 2023	MW4C	Normal	ES2329846	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.0004	-
MW5C	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	<0.0010	0.002	<0.0010	<0.0010	<0.0010	<0.0010	0.0018	0.0017	0.002	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	0.011	0.002	0.0088	0.029	0.031	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	-	-	-	-	-	-	<0.0005	<0.0005	0.0028	<0.0005	<0.0004	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.024	<0.001	<0.001	-	-	-	-	-	0.0028	-
	28 Aug 2023	MW5C	Normal	ES2329846	MW	-	-	-	-	-	-	0.0023	<0.0005	0.0044	<0.0005	0.002		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.005	<0.001	<0.001	-	-	-	-	-	0.0064	-
MW6C	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.0004	-
	28 Aug 2023	MW6C	Normal	ES2329846	MW	-	-	-	-	-	-	0.0025	<0.0005	0.0021	<0.0005	0.0024		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.001	<0.001	<0.001	-	-	-	-	-	0.0045	-

Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type	PFHxS (mono-branched)	PFHxS (Total)	PFOS (di-branched)	PFOS (mono-branched)	PFOS (Total)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum (PFHxS (Total) + PFOS (Total) + PFOA)*	Sum (PFHxS (Total) + PFOS (Total))*	Sum (PFOS (Total) + PFOA (Total))*	Sum of PFAS (n=10)*	Sum of PFAS (n=31)*	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	<0.0010	<0.0010	<0.0010	<0.0010	0.0019	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0019	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	0.0019	0.0019	0.0019	0.0056	0.0056	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0024	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.006	<0.001	<0.001	-	-	-	-	-	0.0024	-
	28 Aug 2023	MW8C	Normal	ES2329846	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.002		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	0.002	-
			Deep Perimeter																																	
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.003	<0.001	<0.001	-	-	-	-	-	<0.0004	-
	28 Aug 2023	MW2D	Normal	ES2329846	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0026		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.028	<0.001	<0.001	-	-	-	-	-	0.0026	-
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.081	<0.001	<0.001	-	-	-	-	-	0.0012	-
	28 Aug 2023	MW4D	Normal	ES2329846	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	0.0009		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.043	<0.001	<0.001	-	-	-	-	-	0.0009	-
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	<0.0010	-	N/A	N/A	N/A	N/A	N/A	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004	-	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.0004	-
	28 Aug 2023	MW7D	Normal	ES2329846	MW	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004		<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.001	<0.001	<0.001	-	-	-	-	-	<0.0004	-

Comments

" - " indicates the analyte is non detected or a statistic could not be calculated due, for example

#1 Cyanide as un-ionised HCN, measured as [CN].

#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.

#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.

#4 Measured as NH3-N at pH 8

#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"

#6 (pH >6.5, 0.8 ug/L for pH<6.5)

#7 In absence of total As guideline, As (V) guideline has been adopted.

#8 Freshwater DGV adopted (insufficient marine toxicity data)

#9 Insufficient information for FW value, marine unknown species protection used in interim

Chemical						PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	PFAS (Sum of Total)(WA DER List)
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type			
On site								
GW15	06 Sep 2022	GW15	Normal	3071976	MW	-	-	-
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-
	14 Dec 2022	GW15	Normal	22-45801	MW	-	-	-
	14 Dec 2022	GW15	Normal	3146420	MW	-	-	-
	14 Dec 2022	GW15	Normal	3174733	MW	-	-	-
GW21	06 Sep 2022	GW21	Normal	3071976	MW	-	-	-
	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-
	14 Dec 2022	GW21	Normal	22-45801	MW	-	-	-
	14 Dec 2022	GW21	Normal	3146420	MW	-	-	-
	14 Dec 2022	GW21	Normal	3174733	MW	-	-	-
GW36	06 Sep 2022	GW36	Normal	3071976	MW	-	-	-
	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-
	14 Dec 2022	GW36	Normal	22-45801	MW	-	-	-
	14 Dec 2022	GW36	Normal	3146420	MW	-	-	-
	14 Dec 2022	GW36	Normal	3174733	MW	-	-	-
Leachate								
PS3	03 Oct 2017	PS3	Normal	17-23985	SW	-	-	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-
	17 Jul 2018	PS3	Normal	18-24398	SW	-	-	-
	11 Apr 2019	PS3	Normal	19-12900	SW	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-
	02 Jul 2019	PS3	Normal	19-22608	SW	-	-	-
	08 Oct 2019	PS3	Normal	19-35055	SW	-	-	-
	14 Jan 2020	PS3	Normal	20-01125	SW	-	-	-
	20 May 2020	PS3	Normal	20-18082	SW	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-
	15 Jul 2020	PS3	Normal	20-25846	SW	-	-	-
	20 Oct 2020	PS3	Normal	20-39698	SW	-	-	-
	26 Jan 2021	PS3	Normal	21-03142	SW	-	-	-
	16 Apr 2021	PS3	Normal	21-17434	SW	-	-	-
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-
	23 Jul 2021	PS3	Normal	21-32657	SW	-	-	-
	18 Oct 2021	PS3	Normal	21-44420	SW	-	-	-
	04 May 2022	P3	Normal	2977306	SW	-	-	-
	14 Jul 2022	PS3	Normal	3034727	SW	-	-	-
	06 Sep 2022	PS3	Normal	3070547	SW	-	-	-
	11 Oct 2022	PS3	Normal	3095310	SW	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-
	14 Dec 2022	PS3	Normal	22-45801	SW	-	-	-
	14 Dec 2022	PS3	Normal	3146420	SW	-	-	-
	14 Dec 2022	PS3	Normal	3174733	SW	-	-	-
	18 Jan 2023	PS3	Normal	23-01371	SW	-	-	-
	12 Apr 2023	PS3	Normal	23-11202	SW	-	-	-
	12 Apr 2023	PS3	Normal	ES2313255	SW	0.832	-	0.815
	28 Aug 2023	PS3	Normal	ES2329846	SW	2.3	-	2.26

Chemical						PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	PFAS (Sum of Total)(WA DER List)
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type			
			Shallow Perimeter					
	18 Oct 2021	MW0C	Normal	21-44426	MW	-	-	-
	24 Jan 2022	MW0C	Normal	2842111	MW	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW0C	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW0C	Normal	3033832	MW	-	-	-
MW0C	11 Oct 2022	MW0C	Normal	3094519	MW	-	-	-
	18 Jan 2023	MW0C	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW0C	Normal	3168263	MW	-	-	-
	12 Apr 2023	MW0C	Normal	23-11202	MW	-	-	-
	12 Apr 2023	MW0C	Normal	ES2313255	MW	0.0422	-	0.0422
	28 Aug 2023	MW0C	Normal	ES2329846	MW	0.0174	-	0.0168
	18 Oct 2021	MW1C	Normal	21-44426	MW	-	-	-
	24 Jan 2022	MW1C	Normal	2842111	MW	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW1C	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW1C	Normal	3033832	MW	-	-	-
MW1C	11 Oct 2022	MW1C	Normal	3094519	MW	-	-	-
	18 Jan 2023	MW1C	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW1C	Normal	3168263	MW	-	-	-
	12 Apr 2023	MW1C	Normal	23-11202	MW	-	-	-
	12 Apr 2023	MW1C	Normal	ES2313255	MW	0.0741	-	0.0741
	28 Aug 2023	MW1C	Normal	ES2329846	MW	0.059	-	0.059
	18 Oct 2021	MW2C	Normal	21-44426	MW	-	-	-
	24 Jan 2022	MW2C	Normal	2842111	MW	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW2C	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW2C	Normal	3033832	MW	-	-	-
MW2C	11 Oct 2022	MW2C	Normal	3094519	MW	-	-	-
	18 Jan 2023	MW2C	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW2C	Normal	3168263	MW	-	-	-
	12 Apr 2023	MW2C	Normal	23-11202	MW	-	-	-
	12 Apr 2023	MW2C	Normal	ES2313255	MW	0.004	-	0.004
	28 Aug 2023	MW2C	Normal	ES2329846	MW	0.0259	-	0.0254
	18 Oct 2021	MW3C	Normal	21-44426	MW	-	-	-
	24 Jan 2022	MW3C	Normal	2842111	MW	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW3C	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW3C	Normal	3033832	MW	-	-	-
MW3C	11 Oct 2022	MW3C	Normal	3094519	MW	-	-	-
	18 Jan 2023	MW3C	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW3C	Normal	3168263	MW	-	-	-
	12 Apr 2023	MW3C	Normal	23-11202	MW	-	-	-
	12 Apr 2023	MW3C	Normal	ES2313255	MW	0.0633	-	0.0519
	28 Aug 2023	MW3C	Normal	ES2329846	MW	0.0443	-	0.0387
	18 Oct 2021	MW4C	Normal	21-44426	MW	-	-	-
	24 Jan 2022	MW4C	Normal	2842111	MW	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW4C	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW4C	Normal	3033832	MW	-	-	-
MW4C	11 Oct 2022	MW4C	Normal	3094519	MW	-	-	-
	18 Jan 2023	MW4C	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW4C	Normal	3168263	MW	-	-	-
	12 Apr 2023	MW4C	Normal	23-11202	MW	-	-	-
	12 Apr 2023	MW4C	Normal	ES2313255	MW	0.005	-	0.005
	28 Aug 2023	MW4C	Normal	ES2329846	MW	<0.0004	-	<0.0004
	19 Oct 2021	MW5C	Normal	21-44199	MW	-	-	-
	26 Jan 2022	MW5C	Normal	2840646	MW	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW5C	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW5C	Normal	3033832	MW	-	-	-
MW5C	11 Oct 2022	MW5C	Normal	3094519	MW	-	-	-
	18 Jan 2023	MW5C	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW5C	Normal	3168263	MW	-	-	-
	13 Apr 2023	MW5C	Normal	23-11285	MW	-	-	-
	13 Apr 2023	MW5C	Normal	ES2313258	MW	0.0389	-	0.0389
	28 Aug 2023	MW5C	Normal	ES2329846	MW	0.0284	-	0.0279
	19 Oct 2021	MW6C	Normal	21-44199	MW	-	-	-
	26 Jan 2022	MW6C	Normal	2840646	MW	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW6C	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW6C	Normal	3033832	MW	-	-	-
MW6C	11 Oct 2022	MW6C	Normal	3094519	MW	-	-	-
	18 Jan 2023	MW6C	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW6C	Normal	3168263	MW	-	-	-
	13 Apr 2023	MW6C	Normal	23-11285	MW	-	-	-
	13 Apr 2023	MW6C	Normal	ES2313258	MW	<0.0004	-	<0.0004
	28 Aug 2023	MW6C	Normal	ES2329846	MW	0.0452	-	0.0452

Chemical						PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	PFAS (Sum of Total)(WA DER List)
Location Code	Date	Field ID	Sample Type	Lab Report Number	Location Type			
MW8C	18 Oct 2021	MW8C	Normal	21-44426	MW	-	-	-
	26 Jan 2022	MW8C	Normal	2840646	MW	-	-	-
	06 Apr 2022	MW8C	Normal	2948344	MW	-	-	-
	14 Jul 2022	MW8C	Normal	3034726	MW	-	-	-
	12 Oct 2022	MW8C	Normal	3095333	MW	-	-	-
	18 Jan 2023	MW8C	Normal	23-01704	MW	-	-	-
	18 Jan 2023	MW8C	Normal	3168264	MW	-	-	-
	13 Apr 2023	MW8C	Normal	23-11285	MW	-	-	-
	13 Apr 2023	MW8C	Normal	ES2313258	MW	0.0092	-	0.0092
	28 Aug 2023	MW8C	Normal	ES2329846	MW	0.0062	-	0.0062
Deep Perimeter								
MW2D	03 Oct 2017	MW2D	Normal	17-23985	MW	-	-	-
	16 Oct 2018	MW2D	Normal	18-32718	MW	-	-	-
	08 Oct 2019	MW2D	Normal	19-35067	MW	-	-	-
	20 Oct 2020	MW2D	Normal	20-39692	MW	-	-	-
	18 Oct 2021	MW2D	Normal	21-44426	MW	-	-	-
	24 Jan 2022	MW2D	Normal	2842111	MW	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW2D	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW2D	Normal	3033832	MW	-	-	-
	11 Oct 2022	MW2D	Normal	3094519	MW	-	-	-
	11 Oct 2022	MW2D	Normal	3095310	MW	-	-	-
	18 Jan 2023	MW2D	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW2D	Normal	3168263	MW	-	-	-
	12 Apr 2023	MW2D	Normal	23-11202	MW	-	-	-
	12 Apr 2023	MW2D	Normal	ES2313255	MW	0.003	-	0.003
	28 Aug 2023	MW2D	Normal	ES2329846	MW	0.0306	-	0.0306
MW4D	03 Oct 2017	MW4D	Normal	17-23985	MW	-	-	-
	16 Oct 2018	MW4D	Normal	18-32718	MW	-	-	-
	08 Oct 2019	MW4D	Normal	19-35067	MW	-	-	-
	20 Oct 2020	MW4D	Normal	20-39692	MW	-	-	-
	18 Oct 2021	MW4D	Normal	21-44426	MW	-	-	-
	24 Jan 2022	MW4D	Normal	2842111	MW	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-
	05 Apr 2022	MW4D	Normal	2946979	MW	-	-	-
	13 Jul 2022	MW4D	Normal	3033832	MW	-	-	-
	11 Oct 2022	MW4D	Normal	3094519	MW	-	-	-
	11 Oct 2022	MW4D	Normal	3095310	MW	-	-	-
	18 Jan 2023	MW4D	Normal	23-01370	MW	-	-	-
	18 Jan 2023	MW4D	Normal	3168263	MW	-	-	-
	12 Apr 2023	MW4D	Normal	23-11202	MW	-	-	-
	12 Apr 2023	MW4D	Normal	ES2313255	MW	0.083	-	0.083
	28 Aug 2023	MW4D	Normal	ES2329846	MW	0.0439	-	0.0439
MW7D	03 Oct 2017	MW7D	Normal	17-23985	MW	-	-	-
	16 Oct 2018	MW7D	Normal	18-32718	MW	-	-	-
	08 Oct 2019	MW7D	Normal	19-35067	MW	-	-	-
	20 Oct 2020	MW7D	Normal	20-39692	MW	-	-	-
	19 Oct 2021	MW7D	Normal	21-44199	MW	-	-	-
	26 Jan 2022	MW7D	Normal	2840646	MW	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-
	06 Apr 2022	MW7D	Normal	2948344	MW	-	-	-
	13 Jul 2022	MW7D	Normal	3033832	MW	-	-	-
	12 Oct 2022	MW7D	Normal	3095310	MW	-	-	-
	12 Oct 2022	MW7D	Normal	3095333	MW	-	-	-
	18 Jan 2023	MW7D	Normal	23-01704	MW	-	-	-
	18 Jan 2023	MW7D	Normal	3168264	MW	-	-	-
	13 Apr 2023	MW7D	Normal	23-11285	MW	-	-	-
	13 Apr 2023	MW7D	Normal	ES2313258	MW	<0.0004	-	<0.0004
	28 Aug 2023	MW7D	Normal	ES2329846	MW	0.0036	-	0.0036

Comments
" - " indicates the analyte is non detected or a statistic could not be calculated due, for example
#1 Cyanide as un-ionised HCN, measured as [CN].
#2 Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#3 In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#4 Measured as NH3-N at pH 8
#5 Values taken from "Updating nitrate toxicity effects on freshwater aquatic species, 2013"
#6 (pH >6.5, 0.8 ug/L for pH<6.5)
#7 In absence of total As guideline, As (V) guideline has been adopted.
#8 Freshwater DGV adopted (insufficient marine toxicity data)
#9 Insufficient information for FW value, marine unknown species protection used in interim

Chemical	Units	Upstream				On site											
		GI1		GI2		GW15				GW21				GW36			
		Maximum	Median	Maximum	Median	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*
Butyric Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene (value used in F2 calc)	mg/L	-	-	-	-	0.0042	NA	0.0042	NA	0.0023	NA	0.0023	NA	0.002	NA	0.002	NA
Benzo[a]pyrene TEQ (LOR)	g/m3	-	-	-	-	0.0008	NA	0.0008	NA	0.0008	NA	0.0008	NA	0.0008	NA	0.0008	NA
Conductivity of Water (mS/m)	mS/m	-	-	-	-	483	NA	483	NA	1147	NA	1147	NA	2024	NA	2024	NA
Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	g/m3	-	-	-	-	1.442	NA	1.442	NA	4.529	NA	4.529	NA	18.837	NA	18.837	NA
Faecal Coliforms Count FCOL	cfu/100mL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate-N (NO3-N) (filtered)	g/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum of Anions*	meq/L	-	-	-	-	54.27	NA	54.27	NA	116.17	NA	116.17	NA	218.28	NA	218.28	NA
Sum of Cations*	meq/L	-	-	-	-	48.02	NA	48.02	NA	122.74	NA	122.74	NA	224.81	NA	224.81	NA
Total Alkalinity (CaCO3)	g CaCO3/m3	-	-	-	-	1804	NA	1804	NA	4780	NA	4780	NA	8610	NA	8610	NA
Volatile Fatty Acids (as Acetic Acid)	MG/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols (Sum of Total) - Calc	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Temperature as Received CAN-001	°C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EC/10* (EC/10)	(mS/m)/10	-	-	-	-	48.32	NA	48.32	NA	114.7	NA	114.7	NA	202.4	NA	202.4	NA
pH (Lab)	pH Units	9.4	8.3	7.1	6.8	7.3	-22%	7.1	-14%	7.8	-17%	7.7	-7%	7.9	-16%	7.85	-5%
Electrical conductivity (lab)	µS/cm	21600	211	42900	359	393000	816%	198915	55308%	1079000	2415%	545235	151776%	1682000	3821%	851120	236981%
Dissolved Oxygen (Lab) (filtered)	mg/L	10.71	9.3	10.26	9.225	-	-	-	-	-	-	-	-	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	440	NA	439	NA	2810	NA	2805	NA	2970	NA	2485	NA
Cyanide (Total)	mg/L	0.083	0.083	0.024	0.012	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Total) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon	mg/L	9000	4300	11400	3800	129000	1032%	129000	2900%	553000	4751%	553000	12760%	770000	6654%	770000	17807%
Acetic Acid	µg/L	-	-	-	-	6000	NA	6000	NA	-	-	-	-	-	-	-	-
Alkalinity (Carbonate as CaCO3)	µg/L	-	-	-	-	-	-	-	-	19.1	NA	19.1	NA	-	-	-	-
Alkalinity (Carbonate as CaCO3) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (Bicarbonate as CaCO3)	mg/L	-	-	-	-	1890	NA	1890	NA	6600	NA	6600	NA	-	-	-	-
Alkalinity (Bicarbonate as CaCO3) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (total as CaCO3)	mg/L	-	-	-	-	1550	NA	1550	NA	5400	NA	5400	NA	6500	NA	6500	NA
Hardness as CaCO3	mg/L	-	-	-	-	470	NA	470	NA	750	NA	750	NA	850	NA	850	NA
Calcium (filtered)	mg/L	-	-	-	-	114	NA	105.9	NA	132	NA	129	NA	116	NA	94.2	NA
Magnesium (filtered)	mg/L	-	-	-	-	47.9	NA	46.45	NA	102	NA	100.35	NA	135	NA	117.5	NA
Potassium	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium (filtered)	mg/L	-	-	-	-	108	NA	107	NA	426	NA	423	NA	617	NA	508.5	NA
Sodium (filtered)	mg/L	-	-	-	-	456	NA	428	NA	810	NA	802.5	NA	1380	NA	1220	NA
Chloride (filtered)	mg/L	32.6	18.1	37.1	24.2	561	1412%	470.5	1844%	698	1781%	694	2768%	1560	4105%	1520	6181%
Sulfate (filtered)	mg/L	-	-	-	-	107	NA	64.5	NA	31	NA	22.55	NA	780	NA	391.25	NA
Cations Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cations Total (filtered)	meq/L	-	-	-	-	42	NA	42	NA	121	NA	121	NA	192	NA	192	NA
Anions Total	meq/L	-	-	-	-	42	NA	42	NA	128	NA	128	NA	189	NA	189	NA
Sulfide	meq/L	-	-	-	-	1.23	NA	1.23	NA	73	NA	15.2	NA	63	NA	0.82	NA
Sulfide (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia as N (filtered)	mg/L	0.38	0.016	0.26	0.11	175	45953%	175	158991%	850	223584%	850	772627%	1670	439374%	1670	1518082%
Nitrate (as N)	mg/L	2.6	0.35	2.8	0.2095	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N) (filtered)	mg/L	0.998	0.409	0.595	0.266	-	-	-	-	-	-	-	-	-	-	-	-
Nitrite (as N) (filtered)	mg/L	0.009	0.006	0.009	0.003	-	-	-	-	0.02	122%	0.02	233%	-	-	-	-
Nitrogen (Total Oxidised) (as N) (filtered)	mg/L	2.6	0.36	2.8	0.2105	0.02	-99%	0.02	-94%	0.02	-99%	0.02	-94%	-	-	-	-
Nitrate (as NO3-) (filtered)	mg/L	0.97	0.39	1.22	0.346	-	-	-	-	-	-	-	-	-	-	-	-
Nitrite (as NO2-) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reactive Phosphorus as P (filtered)	mg/L	-	-	-	-	0.31	NA	0.31	NA	0.04	NA	0.04	NA	10.8	NA	10.8	NA
ammonia (filtered)	mg/L	-	-	-	-	232	NA	232	NA	878	NA	878	NA	1919.472	NA	1919.472	NA
Phosphorus (Total) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbonaceous Biochemical Oxygen Demand (cBOD5)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BOD	g/m3	-	-	-	-	34	NA	32.85	NA	73.6	NA	68.8	NA	250	NA	203.5	NA
Total Organic Carbon	mg/L	10.4	5.55	13	5.4	163	1154%	163	2837%	780	5900%	780	13954%	510	3823%	510	9089%
Volatile Fatty Acids	mg/L	-	-	-	-	280000	NA	280000	NA	-	-	-	-	260000	NA	260000	NA
Aluminium	µg/L	-	-	-	-	0.67	NA	0.67	NA	420	NA	420	NA	7.1	NA	7.1	NA
Aluminium (filtered)	mg/L	0.31	0.04	0.53	0.026	0.397	-25%	0.397	893%	0.066	-88%	0.066	65%	0.763	44%	0.763	1808%
Arsenic	mg/L	-	-	-	-	0.015	NA	0.015	NA	0.37	NA	0.37	NA	1.66	NA	1.66	NA
Arsenic (filtered)	mg/L	-	-	-	-	0.015	NA	0.015	NA	0.04	NA	0.04	NA	5.07	NA	5.07	NA
Barium	mg/L	-	-	-	-	0.047	NA	0.047	NA	2.1	NA	2.1	NA	0.113	NA	0.113	NA
Barium (filtered)	mg/L	-	-	-	-	0.0221	NA	0.0221	NA	0.0942	NA	0.0942	NA	0.169	NA	0.169	NA
Boron	mg/L	-	-	-	-	1.44	NA	1.44	NA	11.4	NA	11.4	NA	6.5	NA	6.5	NA
Boron (filtered)	mg/L	-	-	-	-	1.4	NA	1.4	NA	10.8	NA	10.8	NA	7.58	NA	7.58	NA
Cadmium	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium (filtered)	mg/L	0.00028	0.00011	0.00015	0.000098	-	-	-	-	-	-	-	-	-	-	-	-
Chromium (III+VI)	mg/L	-	-	-	-	0.018	NA	0.018	NA	0.83	NA	0.83	NA	0.23	NA	0.23	NA
Chromium (III+VI) (filtered)	mg/L	0.00079	0.00035	0.0007	0.0004	0.016	1925%	0.016	3900%	0.136	17115%	0.136	33900%	0.749	94710%	0.749	187150%
Copper	mg/L	-	-	-	-	0.005	NA	0.005	NA	1.68	NA	1.68	NA	-	-	-	-
Copper (filtered)	mg/L	0.004	0.0018	0.0029	0.0011	0.0047	18%	0.0047	161%	0.0042	5%	0.0042	133%	0.0099	148%	0.0099	450%
Iron	mg/L	-	-	-	-	5.7	NA	5.7	NA	790	NA	790	NA	1.41	NA	1.41	NA
Iron (filtered)	mg/L	0.34	0.32	1.02	0.47	1.37	34%	1.29	174%	5.57	446%	4.69	898%	0.959	-6%	0.952	103%
Lead	mg/L	-	-	-	-	0.0104	NA	0.0104	NA	0.64	NA	0.64	NA	-	-	-	-
Lead (filtered)	mg/L	0.00058	0.0002	0.00061	0.0001	0.0019	211%	0.0019	850%	0.0018	195%	0.0018	800%	0.00593	872%	0.00593	2865%
Manganese	mg/L	-	-	-	-	1.78	NA	1.78	NA	4.4	NA	4.4	NA	2.8	NA	2.8	NA
Manganese (filtered)	mg/L	-	-	-	-	1.24	NA	1.135	NA	0.423	NA	0.4075	NA	1.44	NA	1.355	NA
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	0.015	NA	0.015	NA	0.34	NA	0.34	NA	0.054	NA	0.054	NA
Nickel (filtered)	mg/L	0.0238	0.00076	0.0173	0.008	0.018	-24%	0.018	125%	0.0829	248%	0.0829	936%	0.101	324%	0.101	1163%
Zinc	mg/L	-	-	-	-	0.061	NA	0.061	NA	4.5	NA	4.5	NA	0.024	NA	0.024	NA
Zinc (filtered)	mg/L	0.077	0.013	0.059	0.027	0.096	25%	0.0735	172%	0.122	58%	0.0975	261%	0.106	38%	0.098	263%
Naphthalene (BTEXN suite)	mg/L	-	-	-	-	7	NA	7	NA	-	-	-	-	-	-	-	-
Benzene	µg/L	-	-	-	-	6	NA	4.25	NA	6	NA	6	NA	5	NA	4.3	NA
Toluene	µg/L	-	-	-	-	129	NA	66.6	NA	4	NA	4	NA	34	NA	25.5	NA
Ethylbenzene	µg/L	-	-	-	-	34	NA	17.9	NA	12	NA	12	NA	19	NA	17.5	NA
Xylene (o)	µg/L	-	-	-	-	26	NA	18.5	NA	10	NA	8.35	NA	19	NA	18	NA
Xylene (m & p)	µg/L	-	-	-	-	58	NA	33.55	NA	22	NA	22	NA	32	NA	31	NA
C10-C14 Fraction	µg/L	-	-	-	-	1100	NA	700	NA	5500	NA	3350	NA	3000	NA	2700	NA
Acenaphthene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chemical	Units	Upstream				On site											
		GI1		GI2		GW15				GW21				GW36			
		Maximum	Median	Maximum	Median	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*
Benz(a)anthracene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-	-	-	-	3.3	NA	3.3	NA	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-	-	-	-	-	0.64	NA	0.64	NA	-	-	-	-
Naphthalene-PAH	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,5,6-Tetrachlorophenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	3	NA	3	NA
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	1.4	NA	1.4	NA
Phenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	110	NA	110	NA
2-Methylphenol (o-Cresol)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	14	NA	10.4	NA
3,4-Methylphenol (m,p-cresol)	µg/L	-	-	-	-	92	NA	92	NA	-	-	-	-	15	NA	15	NA
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	7	NA	7	NA
4-Methylphenol (p-Cresol)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethane	µg/L	-	-	-	-	1	NA	1	NA	-	-	-	-	-	-	-	-
1,4-Dioxane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-butanone (MEK)	µg/L	-	-	-	-	700	NA	700	NA	-	-	-	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	µg/L	-	-	-	-	3.3	NA	3.3	NA	2.2	NA	2.2	NA	4.9	NA	4.9	NA
Chloroethane	µg/L	-	-	-	-	4.9	NA	4.9	NA	-	-	-	-	-	-	-	-
1-Methylnaphthalene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl)ether	µg/L	-	-	-	-	-	-	-	-	0.36	NA	0.36	NA	-	-	-	-
Bis(2-chloroisopropyl) ether	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Nitrosodiphenylamine	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4 DDD	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	µg/L	-	-	-	-	32	NA	20.5	NA	22	NA	22	NA	19	NA	18.5	NA
1,3,5-trimethylbenzene	µg/L	-	-	-	-	8	NA	4.95	NA	6	NA	4.55	NA	6	NA	4.5	NA
Isopropylbenzene	µg/L	-	-	-	-	4	NA	4	NA	3	NA	3	NA	-	-	-	-
n-propylbenzene	µg/L	-	-	-	-	5	NA	5	NA	-	-	-	-	-	-	-	-
p-isopropyltoluene	µg/L	-	-	-	-	40	NA	40	NA	6	NA	6	NA	56	NA	48.5	NA
PCB-121	µg/L	-	-	-	-	-	-	-	-	0.007	NA	0.007	NA	-	-	-	-
PCB-149	µg/L	-	-	-	-	-	-	-	-	0.011	NA	0.011	NA	-	-	-	-
PCB-4 2,2'-Dichlorobiphenyl	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-44	g/m3	-	-	-	-	-	-	-	-	0.0068	NA	0.0068	NA	-	-	-	-
PCB-101	µg/L	-	-	-	-	-	-	-	-	0.024	NA	0.024	NA	-	-	-	-
PCB-118	µg/L	-	-	-	-	-	-	-	-	0.016	NA	0.016	NA	-	-	-	-
PCB-138	µg/L	-	-	-	-	-	-	-	-	0.02	NA	0.02	NA	-	-	-	-
PCB-153	µg/L	-	-	-	-	-	-	-	-	0.0099	NA	0.0099	NA	-	-	-	-
PCB-52	µg/L	-	-	-	-	-	-	-	-	0.012	NA	0.012	NA	-	-	-	-
PCB-105	µg/L	-	-	-	-	-	-	-	-	0.0067	NA	0.0067	NA	-	-	-	-
C15-C36	µg/L	-	-	-	-	5000	NA	2700	NA	164000	NA	91500	NA	2000	NA	1950	NA
C7-C36	µg/L	-	-	-	-	7000	NA	7000	NA	171000	NA	171000	NA	4500	NA	4500	NA
C7-C9	µg/L	-	-	-	-	-	-	-	-	900	NA	900	NA	210	NA	210	NA
Thermotolerant (Faecal) Coliforms	µg/L	-	-	-	-	80000	NA	80000	NA	1200	NA	1200	NA	23	NA	23	NA
1,4-dichlorobenzene	µg/L	-	-	-	-	3.2	NA	3.2	NA	1.5	NA	1.3	NA	2.7	NA	2	NA
Chlorobenzene	µg/L	-	-	-	-	-	-	-	-	3	NA	3	NA	-	-	-	-
Methylene chloride	µg/L	-	-	-	-	2.4	NA	2.4	NA	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	14	NA	14	NA	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl) phthalate	µg/L	-	-	-	-	-	-	-	-	310	NA	180	NA	28	NA	28	NA
Butyl benzyl phthalate	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylphthalate	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	8	NA	6.3	NA
Isophorone	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutanoic acid (PFBA)	µg/L	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	µg/L	0.0011	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroundecanoic acid (PFUnDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorododecanoic acid (PFDoDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (di-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (mono-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (Total)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (di-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (mono-branched)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (Total)	µg/L	0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropropanesulfonic acid (PFPrS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutane sulfonic acid (PFBS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorohexane sulfonic acid (PFHxS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	<0.001	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.001	-	0.0004	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorononanesulfonic acid (PFNS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanesulfonic acid (PFDS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctane sulfonamide (FOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	<0.0050	-	<0.0050	-	-	-	-	-	-	-	-	-	-	-	-	-
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	<0.0010	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	-	-	<0.0010	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum (PFHxS (Total) + PFOS (Total))*	µg/L	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFAS (Sum of Total)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		Leachate				Shallow																									
		PS3				MW0C				MW1C				MW2C				MW3C				MW4C				MW5C				MW	
Chemical	Units	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*
Butyric Acid	µg/L	42000	NA	42000	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene (value used in F2 calc)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[a]pyrene TEQ (LOR)	g/m3	0.0008	NA	0.0008	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conductivity of Water (mS/m)	mS/m	1297	NA	1185.5	NA	264	NA	247	NA	2826	NA	2770	NA	3082	NA	2942	NA	267	NA	237	NA	2112	NA	2048	NA	775	NA	773	NA	1169	NA
Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	g/m3	0.021	NA	0.021	NA	0.02	NA	0.02	NA	-	-	-	-	-	-	-	-	0.005	NA	0.005	NA	2.956	NA	2.956	NA	0.005	NA	0.005	NA	-	-
Faecal Coliforms Count FCOL	cfu/100mL	12000	NA	12000	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate-N (NO3-N) (filtered)	g/m3	-	-	-	-	0.145	NA	0.145	NA	-	-	-	-	-	-	-	-	0.955	NA	0.955	NA	-	-	-	-	0.0183	NA	0.0183	NA	0.477	NA
Sum of Anions*	meq/L	110.97	NA	110.97	NA	26.21	NA	26.21	NA	288.84	NA	288.84	NA	292.33	NA	292.33	NA	29.43	NA	29.43	NA	210.91	NA	210.91	NA	75.4	NA	75.4	NA	106.36	NA
Sum of Cations*	meq/L	116.42	NA	116.42	NA	27.31	NA	27.31	NA	305.83	NA	305.83	NA	314.26	NA	314.26	NA	31.44	NA	31.44	NA	216.29	NA	216.29	NA	78.65	NA	78.65	NA	126.87	NA
Total Alkalinity (CaCO3)	g CaCO3/m3	2727	NA	2727	NA	231	NA	231	NA	559	NA	559	NA	302	NA	302	NA	585	NA	585	NA	868	NA	868	NA	745	NA	745	NA	441	NA
Volatile Fatty Acids (as Acetic Acid)	MG/L	164	NA	142	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols (Sum of Total) - Calc	µg/L	150	NA	95	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Temperature as Received CAN-001	°C	10.9	NA	9.6	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EC/10* (EC/10)	(mS/m)/10	129.7	NA	102.5	NA	26.35	NA	24.71	NA	282.6	NA	277	NA	308.2	NA	294.2	NA	26.74	NA	23.71	NA	211.2	NA	204.8	NA	77.48	NA	77.32	NA	116.9	NA
pH (Lab)	pH Units	7.7	-18%	7.4	-11%	7.6	-19%	7.1	-14%	8.2	-13%	7	-16%	7.6	-19%	7.2	-13%	7.6	-19%	7.3	-12%	7.7	-18%	7.5	-10%	8	-15%	7.7	-7%	7.5	-20%
Electrical conductivity (lab)	µS/cm	1233000	2774%	10495.12	2823%	262000	511%	220000	61181%	2730000	6264%	2440000	679566%	2930000	6730%	2500000	696279%	343000	700%	174700	48563%	2020000	4609%	1769000	492658%	750000	1648%	540000	150318%	1139000	2555%
Dissolved Oxygen (Lab) (filtered)	mg/L	6.62	-38%	6.62	-29%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Suspended Solids	mg/L	118	NA	55.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COD	mg/L	1280	NA	541.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Total)	mg/L	0.082	-1%	0.05	-40%	0.003	-96%	0.003	-96%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.006	-93%	0.0055	-93%	-	-
Cyanide (Total) (filtered)	mg/L	-	-	-	-	0.004	NA	0.0035	NA	0.06	NA	0.06	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon	mg/L	595000	5119%	139500	3144%	13700	20%	13700	219%	24500	115%	24500	470%	27100	138%	27100	530%	19900	75%	19900	363%	45300	297%	45300	953%	33200	191%	33200	672%	16400	44%
Acetic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (Carbonate as CaCO3)	µg/L	12.8	NA	12.8	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (Carbonate as CaCO3) (filtered)	mg/L	10.9	NA	4.65	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (Bicarbonate as CaCO3)	mg/L	5300	NA	3385	NA	240	NA	199.5	NA	630	NA	630	NA	320	NA	320	NA	670	NA	545	NA	1060	NA	1060	NA	1180	NA	1080	NA	720	NA
Alkalinity (Bicarbonate as CaCO3) (filtered)	mg/L	3462	NA	2603	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (total as CaCO3)	mg/L	4800	NA	2937	NA	274	NA	166	NA	600	NA	582	NA	420	NA	327.5	NA	550	NA	464	NA	920	NA	875.5	NA	970	NA	795	NA	590	NA
Hardness as CaCO3	mg/L	1180	NA	1175	NA	510	NA	480	NA	-	-	-	-	-	-	-	-	820	NA	770	NA	-	-	-	-	810	NA	810	NA	2300	NA
Calcium (filtered)	mg/L	300	NA	153	NA	81	NA	63	NA	313	NA	280	NA	925	NA	848	NA	235	NA	194	NA	329	NA	289	NA	133	NA	108	NA	370	NA
Magnesium (filtered)	mg/L	206	NA	173	NA	86.9	NA	78	NA	669	NA	620	NA	846	NA	810	NA	98.3	NA	74	NA	540	NA	490	NA	210	NA	183	NA	330	NA
Potassium	mg/L	194	NA	194	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium (filtered)	mg/L	528	NA	209	NA	9.81	NA	7.8	NA	193	NA	182	NA	124	NA	110	NA	26	NA	14.3	NA	103	NA	91	NA	70.7	NA	64	NA	39	NA
Sodium (filtered)	mg/L	1410	NA	1200	NA	413	NA	382	NA	6760	NA	5300	NA	4700	NA	4400	NA	480	NA	196	NA	3700	NA	3400	NA	1260	NA	1030	NA	2020	NA
Chloride (filtered)	mg/L	2180	5776%	1530	6222%	440	1086%	394	1528%	9400	25237%	8825	36367%	11311.46	30389%	10877.24	44847%	730	1868%	177	631%	7100	19037%	6915	28474%	2170	5749%	1690	6883%	3700	9873%
Sulfate (filtered)	mg/L	540	NA	71.6	NA	547	NA	520	NA	2200	NA	1995	NA	0.6	NA	0.6	NA	687	NA	415	NA	-	-	-	-	5	NA	5	NA	2480	NA
Cations Total	mg/L	165.32	NA	95.98	NA	29.88	NA	29.88	NA	360.27	NA	360.27	NA	230.17	NA	230.17	NA	32.21	NA	32.21	NA	209.95	NA	209.95	NA	81.99	NA	81.99	NA	118.98	NA
Cations Total (filtered)	meq/L	141	NA	98.5	NA	28	NA	24	NA	300.79	NA	300.395	NA	259.56	NA	259.56	NA	38	NA	22	NA	200	NA	189.41	NA	57	NA	52.75	NA	126	NA
Anions Total	meq/L	141	NA	91.075	NA	27	NA	25.175	NA	320	NA	301.6	NA	325.48	NA	320	NA	36	NA	22.5	NA	220	NA	214.22	NA	77.02	NA	61.5	NA	128	NA
Sulfide	meq/L	0.2	NA	0.2	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide (filtered)	mg/L	1.9	NA	1.4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia as N (filtered)	mg/L	915	240689%	282.5	256718%	6.1	1505%	1.52	1282%	1.97	418%	1.495	1259%	13	3321%	12.85	11582%	5.62	1379%	3.665	3232%	9.8	2479%	9.135	8205%	21	5426%	15.5	13991%	4.97	1208%
Nitrate (as N)	mg/L	90	3114%	90	25614%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N) (filtered)	mg/L	-	-	-	-	0.75	-25%	0.27	-34%	1.42	42%	1.1	169%	0.0127	-99%	0.0069	-98%	1.59	59%	0.111	-73%	0.0085	-99%	0.00625	-98%	0.154	-85%	0.0084	-98%	0.138	-86%
Nitrite (as N) (filtered)	mg/L	3.9	43233%	3.9	64900%	0.06	567%	0.017	183%	0.0407	352%	0.0034	-43%	0.0404	349%	0.0404	573%	0.028	211%	0.01175	96%	0.0022	-76%	0.00175	-71%	0.03	233%	0.00735	23%	0.0274	204%
Nitrogen (Total Oxidised) (as N) (filtered)	mg/L	93	3221%	46.57	12836%	0.76	-73%	0.1975	-45%	1.1	-61%	0.0046	-99%	0.0021	-100%	0.0021	-99%	1.62	-42%	0.119	-67%	0.0097	-100%	0.0062	-98%	0.13	-95%	0.02	-94%	0.166	-94%
Nitrate (as NO3-) (filtered)	mg/L	0.0689	-94%	0.0689	-82%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrite (as NO2-) (filtered)	mg/L	-	-	-	-	0.0419	NA	0.0419	NA	-	-	-	-	-	-	-	-	0.0768	NA	0.0768	NA	0.0026	NA	0.0026	NA	0.0103	NA	0.0103	NA	0.005	NA
Reactive Phosphorus as P (filtered)	mg/L	5.477	NA	2.2	NA	1.103	NA	0.564	NA	0.012	NA	0.012	NA	0.003	NA	0.003	NA	-	-	-	-	3.031	NA	2.965	NA	0.005	NA	0.005	NA	-	-
ammonia (filtered)	mg/L	346	NA	346	NA	6.63	NA	6.63	NA	1.36	NA	1.36	NA	12.5	NA	12.5	NA	5.08	NA	5.08	NA	9.46	NA	9.46	NA	17.5	NA	17.5	NA	3.92	NA
Phosphorus (Total) (filtered)	mg/L	3.2	NA	1.622	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbonaceous Biochemical Oxygen Demand (cBOD5)	mg/L	382	NA	23.2	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BOD	g/m3	422	NA	36.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/L	440	3285%	365	6477%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Fatty Acids	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminium	µg/L	0.76	NA	0.34	NA	0.092	NA	0.051	NA	0.061	NA	0.0495	NA	0.132	NA	0.0835	NA	0.085	NA	0.03	NA	0.21	NA	0.088	NA	0.11	NA	0.029	NA	0.71	NA
Aluminium (filtered)	mg/L	0.233	-56%	0.1225	206%	0.119	-78%	0.005	-88%	-	-	-	-	0.016	-97%	0.016	-60%	0.013	-98%	0.01	-75%	0.03	-94%	0.03	-25%	0.01	-98%	0.00695	-83%	0.004	-99%
Arsenic	mg/L	0.066	NA	0.062	NA	0.0083	NA	0.00235	NA	0.00057	NA	0.00057	NA	0.00095	NA	0.00095	NA	0.00065	NA	0.00065	NA	0.00062	NA	0.00062	NA	0.00085	NA	0.00064	NA	0.0041	NA
Arsenic (filtered)	mg/L	0.0552	NA	0.0071	NA	0.0054	NA	0.0015	NA	0.00063	NA	0.00057	NA	0.00073	NA	0.000715	NA	0.00069	NA	0.000675	NA	0.00058	NA	0.00058	NA	0.00062	NA	0.000605	NA	0.006	NA
Barium	mg/L	0.15	NA	0.131	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium (filtered)	mg/L	0.212	NA	0.1665	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron	mg/L	5.3	NA	4.81	NA	0.28	NA	0.23	NA	4.2	NA	4.1	NA	1.57	NA	1.31	NA	0.77	NA	0.37	NA	1.91	NA	1.8	NA	3.1	NA	3	NA	1.47	NA
Boron (filtered)	mg/L	6.82	NA	5.14	NA	0.27	NA	0.25	NA	4.2	NA	4	NA	1.47	NA	1.27	NA	0.84	NA	0.39	NA	1.9	NA	1.78	NA	3.2	NA	2.9	NA	1.43	NA
Cadmium	mg/L	0.00037	NA	0.00037	NA	-	-	-	-	0.00004	NA	0.00004	NA	-	-	-	-	0.000023	NA	0.000023	NA	-	-	-	-	0.000054	NA	0.000054	NA	0.000023	NA
Cadmium (filtered)	mg/L	0.00032	14%	0.000215	95%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000021	-93%
Chromium (III+VI)	mg/L	0.188	NA	0.091	NA	0.001	NA	0.00066	NA	0.0033	NA	0.0017	NA	0.0023	NA	0.0015	NA	0.0027	NA	0.00135	NA	0.0037	NA	0.0019	NA	0.014	NA	0.0077	NA	0.0035	NA
Chromium (III+VI) (filtered)	mg/L	0.187	23571%	0.019	4650%	0.0011	39%	0.00031	-23%	0.0013	65%	0.0011	175%	0.0015	90%	0.0015	275%	0.0021	166%	0.0014	250%	0.0018	128%	0.0011	175%	0.012	1419%	0.0055	1275%	0.0017	115%
Copper	mg/L	0.082	NA	0.064	NA	0.0014	NA	0.00055	NA	0.0074	NA	0.00382	NA	0.007	NA	0.003735	NA	0.00113	NA	0.00083	NA	0.00095	NA	0.00087	NA	0.00093	NA	0.00078	NA	0.0022	NA
Copper (filtered)	mg/L	0.016	300%	0.004	122%	0.0007	-83%	0.00058	-68%	0.00026	-94%	0.00026	-86%	-	-	-	-	0.00049	-88%	0.000375	-79%	0.0011	-73%	0.0011	-39%	-	-	-	-	-	-
Iron	mg/L	8.5	NA	7.3	NA	28	NA	1.92	NA	89	NA	27	NA	118	NA	77	NA	10.9	NA	6.5	NA	4.7	NA	4	NA	37.6	NA	33	NA	47	NA
Iron (filtered)	mg/L	7.92	676%	1.2	155%	25	2351%	4.24	802%	88.9	8616%	60.85	12847%	86.6	8390%	67	14155%	13.6	1233%	5.4	1049%	4.5	341%	3.3	602%	34.4	3273%	26.5	5538%	49.6	4763%
Lead	mg/L	0.023	NA	0.0106	NA	0.00041	NA	0.00025	NA	0.0003	NA	0.0003	NA	-	-	-	-	0.00045	NA	0.000165	NA	0.00074	NA	0.00059	NA	0.00041	NA	0.00021	NA	0.002	NA
Lead (filtered)	mg/L	0.0039	539%	0.0039	1850%	0.0004	-34%	0.00027	35%	-	-	-	-	0.00018	-70%	0.00018	-10%	0.00031	-49%	0.00031	55%	0.00073	20%	0.00073	265%	0.000089	-85%	0.000089	-56%	-	-
Manganese	mg/L	1.64	NA	1.25	NA	1.14	NA	1.05	NA	0.794	NA	0.67	NA	3.9	NA	3.26	NA	1.7	NA	1.21	NA	0.253	NA	0.21	NA	2.7	NA	1.65	NA	4.8	NA
Manganese (filtered)	mg/L	1.59	NA	0.5935	NA	1.09	NA	1.03	NA	0.755	NA	0.616	NA	3.4	NA	3.22	NA	2	NA	1.28	NA	0.223	NA	0.197	NA	2.4	NA	1.67	NA	4.9	NA
Mercury	mg/L	0.0001	NA	0.0001	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury (filtered)	mg/L	0.00011	NA	0.00011	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	0.104	NA	0.088	NA	0.0171	NA	0.0073	NA	0.0078	NA	0.00426	NA	0.0025	NA	0.0021	NA	0.0045	NA	0.000895	NA	0.0011	NA	0.00089	NA	0.0074	NA	0.0019	NA	0.0042	NA
Nickel (filtered)	mg/L	0.095	299%	0.03865	383%	0.0156	-34%	0.011	38%	0.0055	-77%	0.00301	-62%	0.00065	-97%	0.00059	-93%	0.0047	-80%	0.000575	-93%	0.00043	-98%	0.00043	-95%	0.0064	-73%	0.0015	-81%	0.0036	-85%
Zinc	mg/L	0.173	NA	0.162	NA	0.0105	NA	0.004	NA	0.093	NA	0.093	NA	0.0094	NA	0.00775	NA	0.177	NA	0.0067	NA	0.0074	NA	0.0071	NA	0.0059	NA	0.0035	NA	0.0055	NA
Zinc (filtered)	mg/L	0.108	40%	0.03	11%	0.012	-84%	0.0073	-73%	0.071	-8%	0.03625	34%	0.0024	-97%	0.0024	-91%	0.213	177%	0.00725	-73%	0.0058	-92%	0.0058	-79%	0.001	-99%	0.001	-96%	0.008	-90%
Naphthalene (BTEXN suite)	mg/L	20	NA	20	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	µg/L	3	NA	1.25	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	30	NA	14.65	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	14	NA	7.75	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (o)	µg/L	11	NA	6.9	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (m & p)	µg/L	19	NA	4.85	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C10-C14 Fraction	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	µg/L	0.5	NA	0.305	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chemical	Units	Leachate				Shallow																									
		PS3				MW0C				MW1C				MW2C				MW3C				MW4C				MW5C				MW	
		Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*
Benz(a)anthracene	µg/L	0.036	NA	0.036	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	µg/L	0.023	NA	0.023	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	µg/L	0.4	NA	0.4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene-PAH	µg/L	20	NA	9.4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	µg/L	0.034	NA	0.034	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	µg/L	0.032	NA	0.032	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc	µg/L	3.4	NA	1.95	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	µg/L	0.5	NA	0.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,5,6-Tetrachlorophenol	µg/L	0.4	NA	0.4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/L	150	NA	58.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylphenol (o-Cresol)	µg/L	5	NA	3.7	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4-Methylphenol (m,p-cresol)	µg/L	14	NA	12.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methylphenol (p-Cresol)	µg/L	510	NA	21.1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dioxane	µg/L	30	NA	30	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-butanone (MEK)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	µg/L	2.8	NA	2	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Methylnaphthalene	µg/L	0.074	NA	0.074	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl)ether	µg/L	0.4	NA	0.4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	µg/L	0.4	NA	0.4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Nitrosodiphenylamine	µg/L	1.4	NA	1.1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4 DDD	µg/L	0.0067	NA	0.0067	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	µg/L	15	NA	4.6	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-trimethylbenzene	µg/L	5	NA	4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene	µg/L	1.1	NA	1.1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-propylbenzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	µg/L	14	NA	9	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-121	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-149	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-4 2,2'-Dichlorobiphenyl	µg/L	0.00001	NA	0.00001	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-44	g/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-101	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-118	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-138	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-153	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-52	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-105	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15-C36	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C7-C36	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C7-C9	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thermotolerant (Faecal) Coliforms	µg/L	19000	NA	4000	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	µg/L	0.72	NA	0.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	µg/L	1.5	NA	1.4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	µg/L	1.3	NA	1.3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl) phthalate	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl benzyl phthalate	µg/L	4.1	NA	4.1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylphthalate	µg/L	2.9	NA	2.9	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	µg/L	3.3	NA	3.3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutanoic acid (PFBA)	µg/L	0.73	-	-	-	0.006	-	-	-	0.043	-	-	-	-	-	-	-	0.011	-	-	-	-	-	-	-	0.011	-	-	-	0.0264	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.697	-	-	-	-	-	-	-	0.0409	-	-	-	-	-	-	-	0.0072	-	-	-	-	-	-	-	-	-	-	-	0.0015	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.302	15000%	-	-	0.0016	-20%	-	-	0.013	550%	-	-	-	-	-	-	0.0107	435%	-	-	-	-	-	-	0.0038	90%	-	-	0.0051	155%
Perfluoroheptanoic acid (PFHpA)	µg/L	0.113	-	-	-	-	-	-	-	0.0018	-	-	-	-	-	-	-	0.0046	-	-	-	-	-	-	-	0.0021	-	-	-	0.0009	-
Perfluorooctanoic acid (PFOA)	µg/L	0.248	22445%	-	-	0.0008	-27%	-	-	-	-	-	-	-	-	-	-	0.0192	1645%	-	-	-	-	-	-	0.0121	1000%	-	-	0.0033	200%
Perfluorononanoic acid (PFNA)	µg/L	0.0053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0008	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.0011	-	-	-	0.0006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0005	-	-	-	-	-
Perfluoroundecanoic acid (PFUnDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorododecanoic acid (PFDoDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (di-branched)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (mono-branched)	µg/L	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (Total)	µg/L	0.057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0017	-	-	-	-	-	-	-	0.002	-	-	-	-	-
PFOS (di-branched)	µg/L	0.0023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (mono-branched)	µg/L	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0031	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (Total)	µg/L	0.057	5600%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0073	630%	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.0049	-	-	-	-	-	-	-	0.0014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.169	-	-	-	-	-	-	-	0.0024	-	-	-	-	-	-	-	0.0012	-	-	-	0.001	-	-	-	0.0023	-	-	-	0.0025	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0017	-	-	-	-	-
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.104	-	-	-	-	-	-	-	-	-	-	-	0.0126	-	-	-	0.0024	-	-	-	-	-	-	-	0.0044	-	-	-	0.0021	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0016	-	-	-	-	-	-	-	-	-	-	-	0.0005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.1	9900%	-	-	0.0012	20%	-	-	0.0009	-10%	-	-	0.0078	680%	-	-	0.0092	820%	-	-	-	-	-	-	0.002	100%	-	-	0.0024	140%
Perfluorononanesulfonic acid (PFNS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanesulfonic acid (PFDS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctane sulfonamide (FOSA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.0084	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.0204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0106	-	-	-	-	-	-	-	-	-	-	-	-	-
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.092	-	-	-	0.035	-	-	-	0.02	-	-	-	0.005	-	-	-	0.002	-	-	-	0.004	-	-	-	0.024	-	-	-	0.001	-
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.0019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum (PFHxS (Total) + PFOS (Total))*	µg/L	0.11	10900%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.009	800%	-	-	-	-	-	-	0.002	100%	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.193	19200%	-	-	0.0012	20%	-	-	0.0009	-10%	-	-	0.0204	1940%	-	-	0.0116	1060%	-	-	-	-	-	-	0.0064	540%	-	-	0.0045	350%
PFAS (Sum of Total)	µg/L	2.3	-	-	-	0.0422	-	-	-	0.0741	-	-	-	0.0259	-	-	-	0.0633	-	-	-	0.005	-	-	-	0.0389	-	-	-	0.0452	-

Chemical	Units							Deep											
		6C		MW8C				MW2D				MW4D				MW7D			
		Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*
Butyric Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene (value used in F2 calc)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[a]pyrene TEQ (LOR)	g/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conductivity of Water (mS/m)	mS/m	1098	NA	152	NA	88	NA	3096	NA	2973	NA	2626	NA	2531	NA	1787	NA	1766	NA
Dissolved Reactive Phosphorus (FIA) (DRP) (filtered)	g/m3	-	-	0.003	NA	0.003	NA	-	-	-	-	-	-	-	-	-	-	-	-
Faecal Coliforms Count FCOL	cfu/100mL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate-N (NO3-N) (filtered)	g/m3	0.477	NA	1.22	NA	1.22	NA	-	-	-	-	0.0255	NA	0.0255	NA	0.169	NA	0.169	NA
Sum of Anions*	meq/L	106.36	NA	8.85	NA	8.85	NA	306.2	NA	306.2	NA	252.3	NA	252.3	NA	172.84	NA	172.84	NA
Sum of Cations*	meq/L	126.87	NA	9.56	NA	9.56	NA	310.33	NA	310.33	NA	262.75	NA	262.75	NA	186.48	NA	186.48	NA
Total Alkalinity (CaCO3)	g CaCO3/m3	441	NA	120	NA	120	NA	202	NA	202	NA	252	NA	252	NA	445	NA	445	NA
Volatile Fatty Acids (as Acetic Acid)	MG/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols (Sum of Total) - Calc	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Temperature as Received CAN-001	°C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EC/10* (EC/10)	(mS/m)/10	109.8	NA	15.23	NA	8.8	NA	309.6	NA	292	NA	262.6	NA	248.4	NA	178.7	NA	173.8	NA
pH (Lab)	pH Units	7.2	-13%	8	-15%	7.4	-11%	7.1	-24%	6.75	-19%	7.9	-16%	6.85	-17%	7.7	-18%	7	-16%
Electrical conductivity (lab)	µS/cm	666000	185415%	130200	203%	91100	25276%	2960000	6800%	30535	8406%	2500000	5728%	25975	7135%	1730000	3933%	17765	4848%
Dissolved Oxygen (Lab) (filtered)	mg/L	-	-	-	-	-	-	6.91	-35%	6.91	-26%	8.35	-22%	8.35	-10%	9	-16%	9	-3%
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Total)	mg/L	-	-	0.002	-98%	0.002	-98%	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Total) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon	mg/L	16400	281%	14100	24%	14100	228%	50400	342%	39500	819%	33400	193%	28700	567%	14200	25%	11300	163%
Acetic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (Carbonate as CaCO3)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.3	NA	1.3	NA
Alkalinity (Carbonate as CaCO3) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity (Bicarbonate as CaCO3)	mg/L	610	NA	440	NA	245	NA	240	NA	203	NA	290	NA	242	NA	640	NA	500	NA
Alkalinity (Bicarbonate as CaCO3) (filtered)	mg/L	-	-	-	-	-	-	233	NA	225.5	NA	244	NA	235	NA	484	NA	456.5	NA
Alkalinity (total as CaCO3)	mg/L	411	NA	382	NA	204	NA	233	NA	210	NA	290	NA	235	NA	530	NA	476	NA
Hardness as CaCO3	mg/L	2050	NA	400	NA	285	NA	5000	NA	5000	NA	4500	NA	4500	NA	2800	NA	2700	NA
Calcium (filtered)	mg/L	270	NA	90.9	NA	49	NA	879	NA	802	NA	888	NA	826.5	NA	615	NA	479	NA
Magnesium (filtered)	mg/L	275	NA	50.1	NA	31	NA	781	NA	744.5	NA	631	NA	595	NA	470	NA	368	NA
Potassium	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium (filtered)	mg/L	28	NA	10.9	NA	5.6	NA	74.5	NA	67.85	NA	57.1	NA	56.2	NA	71.7	NA	54.4	NA
Sodium (filtered)	mg/L	1380	NA	139	NA	116	NA	4800	NA	4520	NA	3900	NA	3695	NA	3350	NA	2700	NA
Chloride (filtered)	mg/L	2900	11883%	172	364%	119	392%	11600	31167%	11054.83	45581%	9500	25506%	9290	38288%	6200	16612%	5430	22338%
Sulfate (filtered)	mg/L	514	NA	158	NA	138	NA	-	-	-	-	2.07	NA	2.07	NA	680	NA	566.5	NA
Cations Total	mg/L	118.98	NA	9.68	NA	9.68	NA	319.79	NA	303.52	NA	265.34	NA	253.23	NA	218.68	NA	174.88	NA
Cations Total (filtered)	meq/L	79	NA	14.99	NA	12.5	NA	310	NA	300	NA	260	NA	260	NA	180	NA	175	NA
Anions Total	meq/L	96.78	NA	14.75	NA	10.4	NA	330	NA	319.185	NA	270.05	NA	268.275	NA	197	NA	175.06	NA
Sulfide	meq/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia as N (filtered)	mg/L	3.05	2673%	0.26	-32%	0.04	-64%	23	5953%	21	18991%	11.1	2821%	8.9	7991%	1.3	242%	0.79	618%
Nitrate (as N)	mg/L	-	-	-	-	-	-	-	-	-	-	0.13	-95%	0.13	-63%	0.38	-86%	0.38	9%
Nitrate (as N) (filtered)	mg/L	0.0705	-83%	1.11	11%	0.845	107%	0.51	-49%	0.25835	-37%	5.14	415%	2.616	540%	0.048	-95%	0.02	-95%
Nitrite (as N) (filtered)	mg/L	0.027	350%	0.007	-22%	0.0045	-25%	0.8	8789%	0.43355	7126%	0.0254	182%	0.0254	323%	0.0408	353%	0.0211	252%
Nitrogen (Total Oxidised) (as N) (filtered)	mg/L	0.087	-76%	1.06	-62%	0.85	136%	1.31	-53%	1.31	264%	0.13	-95%	0.114	-68%	0.38	-86%	0.049	-86%
Nitrate (as NO3-) (filtered)	mg/L	-	-	-	-	-	-	0.161	-87%	0.161	-59%	-	-	-	-	1.06	-13%	0.69	77%
Nitrite (as NO2-) (filtered)	mg/L	0.005	NA	0.0019	NA	0.0019	NA	0.0265	NA	0.0265	NA	0.0154	NA	0.0154	NA	0.0526	NA	0.0526	NA
Reactive Phosphorus as P (filtered)	mg/L	-	-	0.029	NA	0.018	NA	0.153	NA	0.153	NA	0.084	NA	0.007	NA	0.005	NA	0.005	NA
ammonia (filtered)	mg/L	3.92	NA	0.006	NA	0.006	NA	21.2	NA	21.2	NA	10.9	NA	10.9	NA	0.35	NA	0.35	NA
Phosphorus (Total) (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbonaceous Biochemical Oxygen Demand (cBOD5)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BOD	g/m3	-	-	-	-	-	-	11	NA	7.6	NA	8	NA	4.3	NA	3	NA	2.65	NA
Total Organic Carbon	mg/L	-	-	-	-	-	-	52	300%	52	837%	38	192%	38	585%	2.4	-82%	2.4	-57%
Volatile Fatty Acids	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminium	µg/L	0.27	NA	4.3	NA	1.66	NA	0.097	NA	0.022	NA	0.037	NA	0.028	NA	0.839	NA	0.26	NA
Aluminium (filtered)	mg/L	0.004	-90%	0.015	-97%	0.005	-88%	0.29	-45%	0.29	625%	-	-	-	-	0.02	-96%	0.01275	-68%
Arsenic	mg/L	0.0013	NA	0.0049	NA	0.002	NA	0.028	NA	0.0176	NA	0.001	NA	0.001	NA	0.012	NA	0.008	NA
Arsenic (filtered)	mg/L	0.0041	NA	0.0017	NA	0.00145	NA	0.018	NA	0.016	NA	0.00075	NA	0.00075	NA	0.0091	NA	0.0078	NA
Barium	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron	mg/L	1.24	NA	0.964	NA	0.88	NA	0.75	NA	0.73	NA	0.82	NA	0.776	NA	1.59	NA	1.3	NA
Boron (filtered)	mg/L	1.28	NA	1.09	NA	0.9	NA	0.73	NA	0.685	NA	0.8	NA	0.751	NA	1.51	NA	1.41	NA
Cadmium	mg/L	0.000023	NA	0.000064	NA	0.000057	NA	-	-	-	-	-	-	-	-	0.000031	NA	0.000031	NA
Cadmium (filtered)	mg/L	0.000021	-81%	0.000042	-85%	0.000042	-62%	-	-	-	-	-	-	-	-	0.000052	-81%	0.000052	-53%
Chromium (III+VI)	mg/L	0.0022	NA	0.0066	NA	0.0029	NA	0.0042	NA	0.00205	NA	0.003	NA	0.0016	NA	0.002	NA	0.0018	NA
Chromium (III+VI) (filtered)	mg/L	0.00125	213%	0.0014	77%	0.00117	193%	0.0017	115%	0.00125	213%	0.0013	65%	0.0011	175%	0.0019	141%	0.00114	185%
Copper	mg/L	0.00097	NA	0.0065	NA	0.0025	NA	0.0077	NA	0.0023	NA	0.0024	NA	0.00137	NA	0.0017	NA	0.0014	NA
Copper (filtered)	mg/L	-	-	0.0013	-68%	0.00094	-48%	0.00032	-92%	0.00032	-82%	0.00052	-87%	0.00052	-71%	0.00029	-93%	0.00029	-84%
Iron	mg/L	40	NA	12.5	NA	4	NA	123	NA	66.25	NA	98	NA	53.5	NA	57	NA	50	NA
Iron (filtered)	mg/L	40.15	8443%	1.56	53%	0.18	-62%	120	11665%	74	15645%	109	10586%	56.8	11985%	51	4900%	37.55	7889%
Lead	mg/L	0.0013	NA	0.0063	NA	0.0024	NA	0.0129	NA	0.00835	NA	0.001	NA	0.00092	NA	0.0013	NA	0.00125	NA
Lead (filtered)	mg/L	-	-	0.0002	-67%	0.0001295	-35%	0.003	392%	0.001575	688%	-	-	-	-	0.0001	-84%	0.0001	-50%
Manganese	mg/L	1.14	NA	0.66	NA	0.111	NA	1.5	NA	1.21	NA	2	NA	1.62	NA	2.99	NA	2.8	NA
Manganese (filtered)	mg/L	1.09	NA	0.64	NA	0.086	NA	1.34	NA	1.22	NA	1.7	NA	1.6	NA	2.9	NA	2.6	NA
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury (filtered)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	0.00315	NA	0.0504	NA	0.0066	NA	0.0195	NA	0.0125	NA	0.0041	NA	0.0038	NA	0.0163	NA	0.015	NA
Nickel (filtered)	mg/L	0.0036	-55%	0.0487	105%	0.0035	-56%	0.017	-29%	0.011	38%	0.0019	-92%	0.0019	-76%	0.015	-37%	0.0099	24%
Zinc	mg/L	0.0041	NA	0.801	NA	0.0162	NA	1.64	NA	0.604	NA	0.076	NA	0.0074	NA	0.012	NA	0.0086	NA
Zinc (filtered)	mg/L	0.00465	-83%	0.914	1087%	0.0034	-87%	1.68	2082%	0.4745	1657%	0.025	-68%	0.012	-56%	0.025	-68%	0.0025	-91%
Naphthalene (BTEXN suite)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (o)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (m & p)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C10-C14 Fraction	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chemical	Units							Deep											
		6C		MW8C				MW2D				MW4D				MW7D			
		Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*	Maximum	% Difference relative to maximum upstream*	Median	% Difference relative to median upstream*
Benz(a)anthracene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene-PAH	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,5,6-Tetrachlorophenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylphenol (o-Cresol)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4-Methylphenol (m,p-cresol)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methylphenol (p-Cresol)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dioxane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-butanone (MEK)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Methylnaphthalene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl)ether	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Nitrosodiphenylamine	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4 DDD	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-trimethylbenzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-propylbenzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-121	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-149	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-4 2,2'-Dichlorobiphenyl	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-44	g/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-101	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-118	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-138	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-153	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-52	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB-105	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15-C36	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C7-C36	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C7-C9	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thermotolerant (Faecal) Coliforms	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl) phthalate	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl benzyl phthalate	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylphthalate	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutanoic acid (PFBA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0026	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	-	-	0.0028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	-	-	0.0015	-25%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	-	-	0.0022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	µg/L	-	-	0.0008	-27%	-	-	-	-	-	-	0.0008	-27%	-	-	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroundecanoic acid (PFUnDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorododecanoic acid (PFDoDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (di-branched)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (mono-branched)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFHxS (Total)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (di-branched)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (mono-branched)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOS (Total)	µg/L	-	-	0.0019	90%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropropanesulfonic acid (PFPrS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutane sulfonic acid (PFBS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorohexane sulfonic acid (PFHxS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctane sulfonic acid (PFOS)	µg/L	-	-	0.0024	140%	-	-	0.0026	160%	-	-	0.0012	20%	-	-	-	-	-	-
Perfluorononanesulfonic acid (PFNS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanesulfonic acid (PFDS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctane sulfonamide (FOSA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	-	-	0.006	-	-	-	0.028	-	-	-	0.081	-	-	-	0.001	-	-	-
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum (PFHxS (Total) + PFOS (Total))*	µg/L	-	-	0.0019	90%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum of PFHxS and PFOS	µg/L	-	-	0.0024	140%	-	-	0.0026	160%	-	-	0.0012	20%	-	-	-	-	-	-
PFAS (Sum of Total)	µg/L	-	-	0.0092	-	-	-	0.0306	-	-	-	0.083	-	-	-	0.0036	-	-	-

Appendix C

Letter provided by Eurofins Environment Testing Australia

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13th September 2023

ATN: Cecilia Gately
GHD
Level 3, 138 Victoria Street
Christchurch, New Zealand, 8141

PFAS analysis performed on Eurofins report 931160 (Project Ref GILF Closure Consent 12547621) was initially reported on the 31st of October 2022 with report reference 931160-W_INT. PFAS results for locations MW4C (K22-Oc0022580) and W Pond (by MW0) (K22-Oc0022586) were then queried by GHD on the 2nd March 2023. Both sample locations showed elevated PFAS levels and profiles across PFOS and PFHxS compared to the remainder of the sample location dataset. Sample location MW4C was repeated and returned non-detect. This was repeated further to confirm the non-detect of PFAS within the location. Sample location W Pond (by MW0) did not have sufficient volume to perform repeat analysis, and unfortunately, no further investigation could be performed.

Additional duplicate analysis was also performed on a selection of samples for further QA/QC purposes and encompassed the following sample locations – MW0C, MW8C, and E Pond. All duplicate analyses confirmed the originally reported results.

Considering the error identified in sample location MW4C and the insufficient remaining volume for location W Pond (by MW0), there is a gap in the ability to sufficiently investigate and assess the robustness of the data set as a whole. As a result, the dataset within report 931160 should be voided from site characterisation, assessment, and action.

As a result of the identified error, a formal corrective and preventative action (CAPA-0338-B) process has been initiated to document the investigation to date, the determination of the root cause and the required steps for preventative action. I apologise for the timeline and outcome of this process in answering the raised questions. If there are any further questions, please don't hesitate to contact me.

Regards,

Jonathon Angell
General Manager - QLD

Eurofins Environment Testing Australia

Environment Testing

Appendix D

ProUCL statistical outputs

General Statistics on Uncensored Data

Date/Time of Computation	ProUCL 5.116/08/2023 12:29:49 PM
User Selected Options	
From File	WorkSheet.xls
Full Precision	OFF

From File: WorkSheet.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
Ammonia_Upstream	48	0	40	8	16.67%	0.005	0.01	0.0758	0.00694	0.0833	1.098
Ammonia_Downstream	55	0	52	3	5.45%	0.005	0.01	0.195	0.108	0.329	1.687
Nitrite_Upstream	8	0	7	1	12.50%	0.002	0.002	0.005	7.75E-06	0.00278	0.557
Nitrite_Downstream	13	0	10	3	23.08%	0.001	0.02	0.0116	2.16E-04	0.0147	1.265
Nitrate_Upstream	18	0	18	0	0.00%	N/A	N/A	0.592	0.637	0.798	1.348
Nitrate_Downstream	24	0	23	1	4.17%	0.02	0.02	0.551	0.772	0.878	1.594
Chromium_Upstream	48	0	19	29	60.42%	2.00E-04	0.002	2.88E-04	2.25E-08	1.50E-04	0.522
Chromium_Downstream	56	0	35	21	37.50%	2.00E-04	0.002	3.95E-04	1.19E-07	3.45E-04	0.874
Lead_Upstream	48	0	26	22	45.83%	5.00E-05	5.00E-04	1.57E-04	2.15E-08	1.47E-04	0.933
Lead_Downstream	56	0	44	12	21.43%	5.00E-05	0.001	2.31E-04	2.82E-08	1.68E-04	0.726
Zinc_Upstream	14	0	14	0	0.00%	N/A	N/A	0.027	5.22E-04	0.0228	0.846
Zinc_Downstream	21	0	17	4	19.05%	0.004	0.01	0.0186	9.64E-04	0.031	1.67

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
Ammonia_Upstream	40	0	0.006	0.38	0.0898	0.0895	0.00735	0.0857	0.103	1.358	0.955
Ammonia_Downstream	52	0	0.008	2.44	0.206	0.15	0.114	0.338	0.104	5.873	1.644
Nitrite_Upstream	7	0	0.002	0.009	0.00543	0.005	8.62E-06	0.00294	0.00297	0.239	0.541
Nitrite_Downstream	10	0	0.0016	0.06	0.0141	0.009	2.75E-04	0.0166	0.00445	2.827	1.174
Nitrate_Upstream	18	0	0.069	2.8	0.592	0.343	0.637	0.798	0.251	2.372	1.348
Nitrate_Downstream	23	0	0.002	3.2	0.575	0.21	0.828	0.91	0.263	2.112	1.583
Chromium_Upstream	19	0	2.00E-04	7.90E-04	3.97E-04	3.60E-04	3.32E-08	1.82E-04	1.33E-04	0.876	0.459
Chromium_Downstream	35	0	2.00E-04	0.0018	4.76E-04	3.10E-04	1.63E-07	4.04E-04	1.04E-04	2.233	0.848
Lead_Upstream	26	0	5.50E-05	6.10E-04	2.42E-04	2.00E-04	2.38E-08	1.54E-04	1.26E-04	1.186	0.639
Lead_Downstream	44	0	6.10E-05	8.00E-04	2.59E-04	2.00E-04	2.83E-08	1.68E-04	1.26E-04	1.276	0.65
Zinc_Upstream	14	0	0.0036	0.077	0.027	0.0185	5.22E-04	0.0228	0.0151	1.035	0.846
Zinc_Downstream	17	0	0.0014	0.152	0.0222	0.014	0.00119	0.0345	0.00964	3.718	1.556

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
Ammonia_Upstream	48	0	0.0074	0.01	0.01	0.036	0.11	0.12	0.182	0.24	0.324
Ammonia_Downstream	55	0	0.0174	0.04	0.06	0.14	0.2	0.264	0.33	0.41	1.43
Nitrite_Upstream	8	0	0.002	0.0024	0.00275	0.004	0.0075	0.0082	0.009	0.01	0.009
Nitrite_Downstream	13	0	0.00112	0.00336	0.006	0.008	0.014	0.0146	0.019	0.04	0.0552
Nitrate_Upstream	18	0	0.11	0.149	0.169	0.343	0.448	0.541	1.479	2.63	2.766
Nitrate_Downstream	24	0	0.00415	0.0277	0.0504	0.201	0.412	0.674	1.849	2.71	3.108
Chromium_Upstream	48	0	2.00E-04	2.00E-04	2.00E-04	2.00E-04	4.63E-04	5.00E-04	6.30E-04	0.0008	0.002
Chromium_Downstream	56	0	2.00E-04	2.00E-04	2.33E-04	3.15E-04	5.00E-04	5.80E-04	0.00125	0.002	0.002
Lead_Upstream	48	0	5.00E-05	5.00E-05	5.00E-05	1.00E-04	2.18E-04	2.62E-04	4.93E-04	0.0005	5.96E-04
Lead_Downstream	56	0	5.55E-05	1.00E-04	1.18E-04	2.00E-04	4.70E-04	5.00E-04	5.35E-04	0.001	0.001
Zinc_Upstream	14	0	0.00536	0.0083	0.00948	0.0185	0.042	0.049	0.0569	0.07	0.0747
Zinc_Downstream	21	0	0.004	0.0054	0.0056	0.01	0.0198	0.02	0.028	0.03	0.127

General Statistics on Uncensored Data

Date/Time of Computation	ProUCL 5.2 13/12/2023 5:17:23 PM
User Selected Options	
From File	WorkSheet.xls
Full Precision	OFF

From File: WorkSheet.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
PFOA_Upstream	5	0	1	4	80.00%	5.00E-04	0.001	6.20E-04	5.76E-08	2.40E-04	0.387
PFOA_Downstream	7	0	5	2	28.57%	5.00E-04	0.001	9.00E-04	1.27E-07	3.56E-04	0.395
PFHxS_Upstream	5	0	0	5	100.00%	5.00E-04	0.001	N/A	N/A	N/A	N/A
PFHxS_Downstream	7	0	0	7	100.00%	5.00E-04	0.001	N/A	N/A	N/A	N/A
PFOS_Upstream	5	0	3	2	40.00%	0.001	0.001	6.80E-04	5.76E-08	2.40E-04	0.353
PFOS_Downstream	7	0	5	2	28.57%	0.001	0.001	0.00176	1.86E-06	0.00136	0.775
PFHxS+PFOS_Upstream	5	0	3	2	40.00%	0.001	0.001	6.80E-04	5.76E-08	2.40E-04	0.353
PFHxS+PFOS_Downstream	6	0	5	1	16.67%	0.001	0.001	0.00187	2.08E-06	0.00144	0.772

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
PFOA_Upstream	1	0	0.0011	0.0011	0.0011	0.0011	N/A	N/A	0	N/A	N/A
PFOA_Downstream	5	0	6.00E-04	0.0014	0.00104	0.0012	1.33E-07	3.65E-04	2.97E-04	-0.482	0.351
PFHxS_Upstream	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PFHxS_Downstream	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PFOS_Upstream	3	0	4.00E-04	0.001	7.33E-04	8.00E-04	9.33E-08	3.06E-04	2.97E-04	-0.935	0.417
PFOS_Downstream	5	0	9.00E-04	0.0047	0.0021	0.0012	2.74E-06	0.00165	4.45E-04	1.265	0.788
PFHxS+PFOS_Upstream	3	0	4.00E-04	0.001	7.33E-04	8.00E-04	9.33E-08	3.06E-04	2.97E-04	-0.935	0.417
PFHxS+PFOS_Downstream	5	0	9.00E-04	0.0047	0.00206	0.001	2.83E-06	0.00168	1.48E-04	1.266	0.817

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
PFOA_Upstream	5	0	5.00E-04	5.00E-04	5.00E-04	0.001	0.001	0.00102	0.00106	0.00108	0.0011
PFOA_Downstream	7	0	5.60E-04	6.20E-04	6.50E-04	0.001	0.00125	0.00128	0.00134	0.00137	0.00139
PFHxS_Upstream	5	0	5.00E-04	5.00E-04	5.00E-04	0.001	0.001	0.001	0.001	0.001	0.001
PFHxS_Downstream	7	0	5.00E-04	5.00E-04	5.00E-04	5.00E-04	0.001	0.001	0.001	0.001	0.001
PFOS_Upstream	5	0	5.60E-04	7.20E-04	8.00E-04	0.001	0.001	0.001	0.001	0.001	0.001
PFOS_Downstream	7	0	9.00E-04	9.20E-04	9.50E-04	0.001	0.002	0.00248	0.00356	0.00413	0.00459
PFHxS+PFOS_Upstream	5	0	5.60E-04	7.20E-04	8.00E-04	0.001	0.001	0.001	0.001	0.001	0.001
PFHxS+PFOS_Downstream	6	0	9.00E-04	9.00E-04	9.25E-04	0.001	0.00235	0.0028	0.00375	0.00423	0.00461

General Statistics on Uncensored Data

Date/Time of Computation	ProUCL 5.119/08/2023 6:56:49 AM
User Selected Options	
From File	WorkSheet.xls
Full Precision	OFF

From File: WorkSheet.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
E Pond_Ammonia_F	25	0	22	3	12.00%	0.005	0.01	1.253	2.618	1.618	1.291
E Pond_Nitrate_T	4	0	4	0	0.00%	N/A	N/A	0.48	0.342	0.585	1.219
E Pond_Nitrate_F	6	0	6	0	0.00%	N/A	N/A	0.27	0.117	0.342	1.265
E Pond_Nitrite_F	4	0	4	0	0.00%	N/A	N/A	0.02	4.87E-05	0.00698	0.349
E Pond_Al_T	1	0	1	0	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
E Pond_Al_F	2	0	2	0	0.00%	N/A	N/A	0.0545	0.00344	0.0587	1.077
E Pond_Cr_T	1	0	1	0	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
E Pond_Cr_F	25	0	20	5	20.00%	5.00E-04	0.002	5.99E-04	1.29E-07	3.59E-04	0.599
E Pond_Cu_T	1	0	1	0	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
E Pond_Cu_F	25	0	22	3	12.00%	0.002	0.002	0.0016	1.37E-06	0.00117	0.729
E Pond_Fe_T	4	0	4	0	0.00%	N/A	N/A	2.94	1.309	1.144	0.389
E Pond_Fe_F	5	0	5	0	0.00%	N/A	N/A	0.234	0.0607	0.246	1.053
E Pond_Pb_T	1	0	1	0	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
E Pond_Pb_F	25	0	17	8	32.00%	5.00E-05	5.00E-04	5.50E-04	2.20E-06	0.00148	2.695
E Pond_PFOA	2	0	2	0	0.00%	N/A	N/A	0.0201	8.82E-06	0.00297	0.148
E Pond_PFHxS	2	0	2	0	0.00%	N/A	N/A	0.0105	5.00E-07	7.07E-04	0.0673
E Pond_PFOS	2	0	2	0	0.00%	N/A	N/A	0.011	0	0	N/A
E Pond_PFOS+PFHxS	2	0	2	0	0.00%	N/A	N/A	0.0182	1.62E-05	0.00403	0.222

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
E Pond_Ammonia_F	22	0	0.015	6.55	1.423	0.725	2.864	1.692	0.918	1.759	1.189
E Pond_Nitrate_T	4	0	0.011	1.25	0.48	0.33	0.342	0.585	0.451	0.9	1.219
E Pond_Nitrate_F	6	0	0.023	0.915	0.27	0.11	0.117	0.342	0.0933	1.794	1.265
E Pond_Nitrite_F	4	0	0.011	0.026	0.02	0.0215	4.87E-05	0.00698	0.00593	-0.778	0.349
E Pond_Al_T	1	0	1.99	1.99	1.99	1.99	N/A	N/A	0	N/A	N/A
E Pond_Al_F	2	0	0.013	0.096	0.0545	0.0545	0.00344	0.0587	0.0615	N/A	1.077
E Pond_Cr_T	1	0	0.0039	0.0039	0.0039	0.0039	N/A	N/A	0	N/A	N/A
E Pond_Cr_F	20	0	2.00E-04	0.0016	6.21E-04	4.35E-04	1.43E-07	3.78E-04	1.04E-04	1.559	0.609
E Pond_Cu_T	1	0	0.0051	0.0051	0.0051	0.0051	N/A	N/A	0	N/A	N/A
E Pond_Cu_F	22	0	2.60E-04	0.0051	0.00168	0.00145	1.54E-06	0.00124	9.64E-04	1.309	0.74
E Pond_Fe_T	4	0	1.43	4.13	2.94	3.1	1.309	1.144	0.986	-0.74	0.389
E Pond_Fe_F	5	0	0.03	0.65	0.234	0.2	0.0607	0.246	0.193	1.644	1.053
E Pond_Pb_T	1	0	0.00764	0.00764	0.00764	0.00764	N/A	N/A	0	N/A	N/A
E Pond_Pb_F	17	0	5.00E-05	0.00763	7.73E-04	2.00E-04	3.27E-06	0.00181	1.48E-04	3.832	2.34
E Pond_PFOA	2	0	0.018	0.0222	0.0201	0.0201	8.82E-06	0.00297	0.00311	N/A	0.148
E Pond_PFHxS	2	0	0.01	0.011	0.0105	0.0105	5.00E-07	7.07E-04	7.41E-04	N/A	0.0673
E Pond_PFOS	2	0	0.011	0.011	0.011	0.011	0	0	0	N/A	N/A
E Pond_PFOS+PFHxS	2	0	0.0153	0.021	0.0182	0.0182	1.62E-05	0.00403	0.00423	N/A	0.222

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
E Pond_Ammonia_F	25	0	0.012	0.0852	0.113	0.53	1.6	2.014	3.744	4.14	5.972
E Pond_Nitrate_T	4	0	0.0194	0.0278	0.032	0.33	0.778	0.872	1.061	1.156	1.231
E Pond_Nitrate_F	6	0	0.0466	0.0702	0.0799	0.11	0.323	0.394	0.655	0.785	0.889
E Pond_Nitrite_F	4	0	0.0131	0.0152	0.0163	0.0215	0.0253	0.0254	0.0257	0.0259	0.026
E Pond_Al_T	1	0	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99
E Pond_Al_F	2	0	0.0213	0.0296	0.0338	0.0545	0.0753	0.0794	0.0877	0.0919	0.0952
E Pond_Cr_T	1	0	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039
E Pond_Cr_F	25	0	3.84E-04	4.00E-04	4.00E-04	5.00E-04	0.0011	0.00116	0.00184	0.002	0.002
E Pond_Cu_T	1	0	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051
E Pond_Cu_F	25	0	4.82E-04	7.80E-04	8.00E-04	0.0015	0.002	0.0022	0.00326	0.00378	0.00479
E Pond_Fe_T	4	0	1.841	2.252	2.458	3.1	3.583	3.692	3.911	4.021	4.108
E Pond_Fe_F	5	0	0.046	0.062	0.07	0.2	0.22	0.306	0.478	0.564	0.633
E Pond_Pb_T	1	0	0.00764	0.00764	0.00764	0.00764	0.00764	0.00764	0.00764	0.00764	0.00764
E Pond_Pb_F	25	0	5.00E-05	5.00E-05	6.30E-05	2.00E-04	4.40E-04	4.52E-04	9.80E-04	0.00132	0.00612
E Pond_PFOA	2	0	0.0184	0.0188	0.0191	0.0201	0.0212	0.0214	0.0218	0.022	0.0222
E Pond_PFHxS	2	0	0.0101	0.0102	0.0103	0.0105	0.0108	0.0108	0.0109	0.011	0.011
E Pond_PFOS	2	0	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
E Pond_PFOS+PFHxS	2	0	0.0159	0.0164	0.0167	0.0182	0.0196	0.0199	0.0204	0.0207	0.0209

General Statistics on Uncensored Data

Date/Time of Computation	ProUCL 5.119/08/2023 7:04:04 AM
User Selected Options	
From File	WorkSheet_a.xls
Full Precision	OFF

From File: WorkSheet_a.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
NE Pond_Ammonia_F	15	0	15	0	0.00%	N/A	N/A	69.52	5195	72.07	1.037
NE Pond_Nitrate_F	13	0	13	0	0.00%	N/A	N/A	0.396	0.63	0.793	2.003
NE Pond_Nitrite_F	15	0	15	0	0.00%	N/A	N/A	0.0389	0.00274	0.0523	1.345
NE Pond_Al_T	15	0	14	1	6.67%	0.03	0.03	0.206	0.18	0.424	2.058
NE Pond_Al_F	15	0	14	1	6.67%	0.003	0.003	0.124	0.116	0.341	2.745
NE Pond_Cr_T	15	0	12	3	20.00%	0.0027	0.0053	0.0053	1.74E-05	0.00418	0.788
NE Pond_Cr_F	15	0	13	2	13.33%	0.003	0.003	0.0035	1.08E-05	0.00328	0.937
NE Pond_Cu_T	15	0	9	6	40.00%	5.30E-04	0.0053	0.00188	2.99E-06	0.00173	0.921
NE Pond_Cu_F	14	0	9	5	35.71%	5.00E-04	0.003	0.424	2.323	1.524	3.593
NE Pond_Fe_T	12	0	12	0	0.00%	N/A	N/A	4.602	15.92	3.99	0.867
NE Pond_Fe_F	15	0	15	0	0.00%	N/A	N/A	1.493	1.667	1.291	0.865
NE Pond_Pb_T	15	0	14	1	6.67%	5.00E-04	5.00E-04	8.56E-04	1.53E-07	3.91E-04	0.457
NE Pond_PFOA	2	0	2	0	0.00%	N/A	N/A	0.031	9.68E-04	0.0311	1.004
NE Pond_PFHxS	2	0	2	0	0.00%	N/A	N/A	0.097	0.0138	0.117	1.21
NE Pond_PFOS	2	0	2	0	0.00%	N/A	N/A	0.54	0.387	0.622	1.152
NE Pond_PFOS+PFHxS	2	0	2	0	0.00%	N/A	N/A	0.63	0.562	0.75	1.19

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
NE Pond_Ammonia_F	15	0	0.43	221	69.52	41	5195	72.07	59.02	0.949	1.037
NE Pond_Nitrate_F	13	0	0.019	3	0.396	0.181	0.63	0.793	0.126	3.436	2.003
NE Pond_Nitrite_F	15	0	0.012	0.22	0.0389	0.023	0.00274	0.0523	0.0119	3.386	1.345
NE Pond_Al_T	14	0	0.0196	1.74	0.219	0.0465	0.204	0.452	0.0381	3.368	2.064
NE Pond_Al_F	14	0	0.0032	1.39	0.133	0.017	0.133	0.364	0.0141	3.66	2.744
NE Pond_Cr_T	12	0	0.0015	0.014	0.00613	0.00415	2.00E-05	0.00447	0.00348	0.867	0.73
NE Pond_Cr_F	13	0	4.00E-04	0.012	0.00384	0.0029	1.24E-05	0.00353	0.00326	1.168	0.919
NE Pond_Cu_T	9	0	6.20E-04	0.0063	0.00257	0.00161	3.89E-06	0.00197	0.00147	0.887	0.767
NE Pond_Cu_F	9	0	2.90E-04	5.92	0.66	0.0024	3.891	1.973	0.00252	3	2.991
NE Pond_Fe_T	12	0	0.669	12.3	4.602	2.95	15.92	3.99	2.431	0.879	0.867
NE Pond_Fe_F	15	0	0.0011	3.82	1.493	1.14	1.667	1.291	1.626	0.555	0.865
NE Pond_Pb_T	14	0	4.50E-04	0.00188	8.85E-04	8.40E-04	1.63E-07	4.04E-04	2.74E-04	1.487	0.456
NE Pond_PFOA	2	0	0.009	0.053	0.031	0.031	9.68E-04	0.0311	0.0326	N/A	1.004
NE Pond_PFHxS	2	0	0.014	0.18	0.097	0.097	0.0138	0.117	0.123	N/A	1.21
NE Pond_PFOS	2	0	0.1	0.98	0.54	0.54	0.387	0.622	0.652	N/A	1.152
NE Pond_PFOS+PFHxS	2	0	0.1	1.16	0.63	0.63	0.562	0.75	0.786	N/A	1.19

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
NE Pond_Ammonia_F	15	0	1.754	11.32	13.6	41	110	125	172.4	197.9	216.4
NE Pond_Nitrate_F	13	0	0.0424	0.0914	0.0963	0.181	0.225	0.294	0.484	1.512	2.702
NE Pond_Nitrite_F	15	0	0.014	0.0159	0.0167	0.023	0.0315	0.0324	0.0581	0.118	0.2
NE Pond_Al_T	15	0	0.0236	0.0292	0.03	0.042	0.14	0.178	0.356	0.802	1.552
NE Pond_Al_F	15	0	0.00472	0.0078	0.0095	0.016	0.0575	0.0726	0.126	0.516	1.215
NE Pond_Cr_T	15	0	0.00234	0.0027	0.0027	0.003	0.00755	0.0084	0.0123	0.0139	0.014
NE Pond_Cr_F	15	0	6.40E-04	7.88E-04	0.00136	0.003	0.005	0.0058	0.00778	0.00941	0.0115
NE Pond_Cu_T	15	0	5.66E-04	6.92E-04	9.05E-04	0.00161	0.00345	0.00416	0.00494	0.0056	0.00616
NE Pond_Cu_F	14	0	3.95E-04	5.00E-04	5.00E-04	0.00185	0.003	0.0034	0.00435	2.075	5.151
NE Pond_Fe_T	12	0	1.238	1.42	1.475	2.95	7.85	8.84	9.65	10.87	12.01
NE Pond_Fe_F	15	0	0.0182	0.473	0.585	1.14	2.55	2.84	3.282	3.575	3.771
NE Pond_Pb_T	15	0	5.12E-04	5.38E-04	5.65E-04	8.30E-04	9.70E-04	9.92E-04	0.00134	0.00166	0.00184
NE Pond_PFOA	2	0	0.0134	0.0178	0.02	0.031	0.042	0.0442	0.0486	0.0508	0.0526
NE Pond_PFHxS	2	0	0.0306	0.0472	0.0555	0.097	0.139	0.147	0.163	0.172	0.178
NE Pond_PFOS	2	0	0.188	0.276	0.32	0.54	0.76	0.804	0.892	0.936	0.971
NE Pond_PFOS+PFHxS	2	0	0.206	0.312	0.365	0.63	0.895	0.948	1.054	1.107	1.149

	General Statistics on Uncensored Data
Date/Time of Computation	ProUCL 5.2 14/12/2023 10:53:55 AM
User Selected Options	
From File	WorkSheet.xls
Full Precision	OFF

From File: WorkSheet.xls

General Statistics for Censored Datasets (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
NE Pond_Pb_F	15	0	10	5	33.33%	5.00E-05	5.00E-04	2.74E-04	4.16E-08	2.04E-04	0.745

General Statistics for Raw Dataset using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
NE Pond_Pb_F	10	0	1.00E-04	6.10E-04	3.56E-04	3.90E-04	3.88E-08	1.97E-04	2.74E-04	-0.0892	0.553

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
NE Pond_Pb_F	15	0	1.00E-04	1.00E-04	1.10E-04	3.90E-04	5.00E-04	5.06E-04	5.72E-04	6.03E-04	6.09E-04

General Statistics on Uncensored Data
ProUCL 5.119/08/2023 7:08:48 AM

	WorkSheet_b.xls
Date/Time of Computation	OFF
User Selected Options	
From File	
Full Precision	

From File: WorkSheet_b.xls

		# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method		0	15	0	0.00%	N/A	N/A	0.893	0.75	0.866	0.969
		0	10	3	23.08%	0.002	0.002	0.339	0.615	0.784	2.312
Variable	NumObs	0	13	0	0.00%	N/A	N/A	0.0132	1.06E-04	0.0103	0.781
SE Pond_Ammonia_F	15	0	15	0	0.00%	N/A	N/A	0.263	0.167	0.409	1.557
SE Pond_Nitrate_F	13	0	15	0	0.00%	N/A	N/A	0.13	0.0942	0.307	2.357
SE Pond_Nitrite_F	13	0	11	4	26.67%	5.30E-04	5.30E-04	8.07E-04	4.22E-07	6.50E-04	0.805
SE Pond_Al_T	15	0	9	6	40.00%	5.00E-04	5.00E-04	6.17E-04	2.29E-07	4.79E-04	0.776
SE Pond_Al_F	15	0	14	0	0.00%	N/A	N/A	0.00263	2.90E-06	0.0017	0.647
SE Pond_Cr_T	15	0	13	2	13.33%	5.00E-04	5.00E-04	0.00171	1.61E-06	0.00127	0.742
SE Pond_Cr_F	15	0	11	0	0.00%	N/A	N/A	1.959	1.615	1.271	0.649
SE Pond_Cu_T	14	0	15	0	0.00%	N/A	N/A	0.961	0.175	0.418	0.435
SE Pond_Cu_F	15	0	15	0	0.00%	N/A	N/A	0.00102	4.04E-07	6.36E-04	0.621
SE Pond_Fe_T	11	0	14	1	6.67%	1.00E-04	1.00E-04	3.78E-04	2.94E-08	1.71E-04	0.453
SE Pond_Fe_F	15	0	2	0	0.00%	N/A	N/A	0.0033	3.38E-06	0.00184	0.557
SE Pond_Pb_T	15	0	1	1	50.00%	0.001	0.001	0.0065	3.03E-05	0.0055	0.846
SE Pond_Pb_F	15	0	2	0	0.00%	N/A	N/A	0.00615	4.70E-05	0.00686	1.115
SE Pond_PFOA	2	0	2	0	0.00%	N/A	N/A	0.0122	2.35E-04	0.0153	1.263
SE Pond_PFHxS	2										
SE Pond_PFOS	2										
SE Pond_PFOS+PFHxS	2										

		# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
General Statistics for Raw Data Sets using Detected Data Only		0	0.114	2.7	0.893	0.66	0.75	0.866	0.726	1.134	0.969
		0	0.0128	3	0.44	0.095	0.839	0.916	0.0586	2.968	2.08
Variable	NumObs	0	0.003	0.032	0.0132	0.009	1.06E-04	0.0103	0.00445	1.205	0.781
SE Pond_Ammonia_F	15	0	0.038	1.69	0.263	0.15	0.167	0.409	0.111	3.454	1.557
SE Pond_Nitrate_F	10	0	0.012	1.23	0.13	0.041	0.0942	0.307	0.0297	3.761	2.357
SE Pond_Nitrite_F	13	0	3.30E-04	0.0028	9.65E-04	6.90E-04	5.31E-07	7.29E-04	4.00E-04	1.947	0.755
SE Pond_Al_T	15	0	2.50E-04	0.0021	8.13E-04	7.00E-04	3.20E-07	5.66E-04	5.04E-04	1.615	0.696
SE Pond_Al_F	15	0	7.20E-04	0.0061	0.00263	0.002	2.90E-06	0.0017	0.00177	0.722	0.647
SE Pond_Cr_T	11	0	6.40E-04	0.0046	0.0019	0.0015	1.73E-06	0.00132	0.00125	0.888	0.693
SE Pond_Cr_F	9	0	0.69	4.6	1.959	1.65	1.615	1.271	0.682	1.4	0.649
SE Pond_Cu_T	14	0	0.22	1.77	0.961	0.88	0.175	0.418	0.385	0.0257	0.435
SE Pond_Cu_F	13	0	3.50E-04	0.0027	0.00102	9.00E-04	4.04E-07	6.36E-04	6.38E-04	1.36	0.621
SE Pond_Fe_T	11	0	2.00E-04	6.50E-04	3.98E-04	4.25E-04	2.75E-08	1.66E-04	2.37E-04	0.0417	0.417
SE Pond_Fe_F	15	0	0.002	0.0046	0.0033	0.0033	3.38E-06	0.00184	0.00193	N/A	0.557
SE Pond_Pb_T	15	0	0.012	0.012	0.012	0.012	N/A	N/A	0	N/A	N/A
SE Pond_Pb_F	14	0	0.0013	0.011	0.00615	0.00615	4.70E-05	0.00686	0.00719	N/A	1.115
SE Pond_PFOA	2	0	0.0013	0.023	0.0122	0.0122	2.35E-04	0.0153	0.0161	N/A	1.263
SE Pond_PFHxS	1										
SE Pond_PFOS	2										
SE Pond_PFOS+PFHxS	2										

		# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
Percentiles using all Detects (Ds) and Non-Detects (NDs)		0	0.162	0.169	0.195	0.66	1.22	1.518	2.264	2.56	2.672
		0	0.002	0.00632	0.0128	0.0572	0.123	0.247	0.528	1.547	2.709
Variable	NumObs	0	0.00552	0.006	0.006	0.009	0.0141	0.0218	0.031	0.032	0.032
SE Pond_Ammonia_F	15	0	0.0646	0.0734	0.0775	0.15	0.24	0.294	0.371	0.795	1.511
SE Pond_Nitrate_F	13	0	0.0194	0.024	0.026	0.041	0.0695	0.0856	0.143	0.482	1.08
SE Pond_Nitrite_F	13	0	4.64E-04	5.30E-04	5.30E-04	5.80E-04	8.75E-04	0.00101	0.00149	0.0021	0.00266
SE Pond_Al_T	15	0	3.60E-04	4.72E-04	5.00E-04	5.00E-04	7.50E-04	8.10E-04	0.00106	0.00147	0.00197
SE Pond_Al_F	15	0	7.72E-04	0.00117	0.00143	0.002	0.00355	0.00404	0.00484	0.00532	0.00594
SE Pond_Cr_T	15	0	5.56E-04	6.56E-04	6.80E-04	0.0011	0.00255	0.00274	0.00354	0.00397	0.00447
SE Pond_Cr_F	15	0	0.9	0.97	1.08	1.65	2.045	2.09	4.1	4.35	4.55
SE Pond_Cu_T	14	0	0.46	0.724	0.74	0.88	1.265	1.282	1.408	1.553	1.727
SE Pond_Cu_F	15	0	3.90E-04	4.60E-04	5.50E-04	9.00E-04	0.00127	0.00137	0.00168	0.00204	0.00257
SE Pond_Fe_T	11	0	2.00E-04	2.00E-04	2.20E-04	3.80E-04	5.20E-04	5.46E-04	5.88E-04	6.15E-04	6.43E-04
SE Pond_Fe_F	15	0	0.00226	0.00252	0.00265	0.0033	0.00395	0.00408	0.00434	0.00447	0.00457
SE Pond_Pb_T	15	0	0.0021	0.0032	0.00375	0.0065	0.00925	0.0098	0.0109	0.0115	0.0119
SE Pond_Pb_F	15	0	0.00227	0.00324	0.00373	0.00615	0.00858	0.00906	0.01	0.0105	0.0109
SE Pond_PFOA	2	0	0.00347	0.00564	0.00673	0.0122	0.0176	0.0187	0.0208	0.0219	0.0228
SE Pond_PFHxS	2										
SE Pond_PFOS	2										
SE Pond_PFOS+PFHxS	2										

General Statistics on Uncensored Data
ProUCL 5.119/08/2023 7:13:44 AM

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Date/Time of Computation	OFF
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	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method	24	0	20	4	16.67%	0.005	0.1	1.063	1.948	1.396	1.313
	4	0	3	1	25.00%	0.02	0.02	4.593	62.63	7.914	1.723
Variable	5	0	4	1	20.00%	0.002	0.002	0.124	0.0143	0.12	0.966
W Pond_Ammonia_F	4	0	3	1	25.00%	0.02	0.02	0.107	0.0126	0.112	1.045
W Pond_Nitrate_T	1	0	1	0	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
W Pond_Nitrate_F	2	0	2	0	0.00%	N/A	N/A	0.029	2.00E-04	0.0141	0.488
W Pond_Nitrite_F	1	0	1	0	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
W Pond_Al_T	24	0	21	3	12.50%	0.002	0.005	0.00168	6.28E-07	7.93E-04	0.472
W Pond_Al_F	1	0	1	0	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
W Pond_Cr_T	24	0	21	3	12.50%	0.002	0.005	0.00161	1.25E-06	0.00112	0.697
W Pond_Cr_F	4	0	4	0	0.00%	N/A	N/A	1.7	0.32	0.566	0.333
W Pond_Cu_T	5	0	4	1	20.00%	0.2	0.2	0.107	0.00268	0.0517	0.485
W Pond_Cu_F	1	0	1	0	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
W Pond_Fe_T	24	0	11	13	54.17%	5.00E-05	0.001	1.20E-04	8.37E-09	9.15E-05	0.763
W Pond_Fe_F	2	0	2	0	0.00%	N/A	N/A	0.0119	6.85E-06	0.00262	0.221
W Pond_Pb_T	2	0	1	1	50.00%	5.00E-04	5.00E-04	0.00325	7.56E-06	0.00275	0.846
W Pond_Pb_F	2	0	2	0	0.00%	N/A	N/A	0.0083	3.70E-05	0.00608	0.733
W Pond_PFOA	2	0	2	0	0.00%	N/A	N/A	0.0113	3.38E-06	0.00184	0.163
W Pond_PFHxS											
W Pond_PFOS											
W Pond_PFOS+PFHxS											

	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
General Statistics for Raw Data Sets using Detected Data Only	20	0	0.03	4.96	1.271	0.575	2.188	1.479	0.736	1.294	1.164
	3	0	0.023	18.3	6.118	0.03	111.3	10.55	0.0104	1.732	1.725
Variable	4	0	0.0172	0.315	0.154	0.143	0.0177	0.133	0.141	0.356	0.861
W Pond_Ammonia_F	3	0	0.008	0.28	0.14	0.133	0.0185	0.136	0.185	0.242	0.97
W Pond_Nitrate_T	1	0	0.726	0.726	0.726	0.726	N/A	N/A	0	N/A	N/A
W Pond_Nitrate_F	2	0	0.019	0.039	0.029	0.029	2.00E-04	0.0141	0.0148	N/A	0.488
W Pond_Nitrite_F	1	0	0.0068	0.0068	0.0068	0.0068	N/A	N/A	0	N/A	N/A
W Pond_Al_T	21	0	7.20E-04	0.0044	0.00171	0.0017	6.96E-07	8.34E-04	7.41E-04	1.724	0.488
W Pond_Al_F	1	0	0.0028	0.0028	0.0028	0.0028	N/A	N/A	0	N/A	N/A
W Pond_Cr_T	21	0	4.20E-04	0.0048	0.00167	0.0012	1.39E-06	0.00118	9.04E-04	1.283	0.706
W Pond_Cr_F	4	0	1.02	2.3	1.7	1.74	0.32	0.566	0.608	-0.302	0.333
W Pond_Cu_T	4	0	0.05	0.2	0.113	0.1	0.00403	0.0634	0.0445	1.082	0.564
W Pond_Cu_F	1	0	0.00505	0.00505	0.00505	0.00505	N/A	N/A	0	N/A	N/A
W Pond_Fe_T	11	0	6.00E-05	3.00E-04	1.77E-04	2.00E-04	8.74E-09	9.35E-05	1.48E-04	0.0982	0.528
W Pond_Fe_F	2	0	0.01	0.0137	0.0119	0.0119	6.85E-06	0.00262	0.00274	N/A	0.221
W Pond_Pb_T	1	0	0.006	0.006	0.006	0.006	N/A	N/A	0	N/A	N/A
W Pond_Pb_F	2	0	0.004	0.0126	0.0083	0.0083	3.70E-05	0.00608	0.00638	N/A	0.733
W Pond_PFOA	2	0	0.01	0.0126	0.0113	0.0113	3.38E-06	0.00184	0.00193	N/A	0.163
W Pond_PFHxS											
W Pond_PFOS											
W Pond_PFOS+PFHxS											

	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
Percentiles using all Detects (Ds) and Non-Detects (NDs)	24	0	0.039	0.0822	0.0993	0.445	1.52	2.152	2.952	3.893	4.751
	4	0	0.0209	0.0218	0.0223	0.0265	4.598	7.338	12.82	15.56	17.75
Variable	5	0	0.00808	0.0142	0.0172	0.0787	0.207	0.229	0.272	0.293	0.311
W Pond_Ammonia_F	4	0	0.0116	0.0152	0.017	0.0765	0.17	0.192	0.236	0.258	0.276
W Pond_Nitrate_T	1	0	0.726	0.726	0.726	0.726	0.726	0.726	0.726	0.726	0.726
W Pond_Nitrate_F	2	0	0.021	0.023	0.024	0.029	0.034	0.035	0.037	0.038	0.0388
W Pond_Nitrite_F	1	0	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068
W Pond_Al_T	24	0	9.72E-04	0.00106	0.00118	0.0018	0.00205	0.00224	0.00264	0.00415	0.00486
W Pond_Al_F	1	0	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
W Pond_Cr_T	24	0	5.69E-04	8.72E-04	9.75E-04	0.00135	0.0023	0.0026	0.00357	0.00462	0.00495
W Pond_Cr_F	4	0	1.158	1.296	1.365	1.74	2.075	2.12	2.21	2.255	2.291
W Pond_Cu_T	5	0	0.066	0.082	0.09	0.11	0.2	0.2	0.2	0.2	0.2
W Pond_Cu_F	1	0	0.00505	0.00505	0.00505	0.00505	0.00505	0.00505	0.00505	0.00505	0.00505
W Pond_Fe_T	24	0	5.00E-05	5.00E-05	5.00E-05	9.50E-05	2.78E-04	3.00E-04	5.00E-04	5.00E-04	8.85E-04
W Pond_Fe_F	2	0	0.0104	0.0107	0.0109	0.0119	0.0128	0.013	0.0133	0.0135	0.0137
W Pond_Pb_T	2	0	0.00105	0.0016	0.00188	0.00325	0.00463	0.0049	0.00545	0.00573	0.00595
W Pond_Pb_F	2	0	0.00486	0.00572	0.00615	0.0083	0.0105	0.0109	0.0117	0.0122	0.0125
W Pond_PFOA	2	0	0.0103	0.0105	0.0107	0.0113	0.012	0.0121	0.0123	0.0125	0.0126
W Pond_PFHxS											
W Pond_PFOS											
W Pond_PFOS+PFHxS											

	General Statistics on Uncensored Data
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	WorkSheet_d.xls
Date/Time of Computation	OFF
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Full Precision	

From File: WorkSheet_d.xls

	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method	15	0	14	1	6.67%	0.01	0.01	0.531	1.227	1.108	2.085
	13	0	12	1	7.69%	0.002	0.002	0.809	5.883	2.425	2.996
Variable	12	0	10	2	16.67%	0.002	0.002	0.0256	0.00206	0.0454	1.775
W Pond (by MW0)_Ammonia_F	15	0	15	0	0.00%	N/A	N/A	0.996	1.41	1.187	1.192
W Pond (by MW0)_Nitrate_F	15	0	13	2	13.33%	0.06	0.06	0.0421	0.00307	0.0554	1.316
W Pond (by MW0)_Nitrite_F	15	0	12	3	20.00%	5.30E-04	0.011	0.00358	1.83E-05	0.00427	1.193
W Pond (by MW0)_Al_T	15	0	7	8	53.33%	2.00E-04	0.01	7.15E-04	2.59E-07	5.09E-04	0.711
W Pond (by MW0)_Al_F	15	0	14	1	6.67%	0.011	0.011	0.00311	5.38E-06	0.00232	0.745
W Pond (by MW0)_Cr_T	15	0	12	3	20.00%	2.00E-04	0.01	0.00137	1.04E-06	0.00102	0.744
W Pond (by MW0)_Cr_F	12	0	12	0	0.00%	N/A	N/A	2.714	10.52	3.244	1.195
W Pond (by MW0)_Cu_T	15	0	13	2	13.33%	0.4	0.4	0.23	0.0522	0.229	0.993
W Pond (by MW0)_Cu_F	14	1	14	0	0.00%	N/A	N/A	0.00283	9.98E-06	0.00316	1.117
W Pond (by MW0)_Fe_T	14	1	9	5	35.71%	1.00E-04	0.002	1.34E-04	8.15E-09	9.03E-05	0.673
W Pond (by MW0)_Fe_F	3	0	3	0	0.00%	N/A	N/A	0.0191	9.12E-04	0.0302	1.578
W Pond (by MW0)_Pb_T	3	0	1	2	66.67%	5.00E-04	0.001	0.434	0.375	0.613	1.413
W Pond (by MW0)_Pb_F	3	0	3	0	0.00%	N/A	N/A	2.068	12.81	3.579	1.731
W Pond (by MW0)_PFOA	3	0	3	0	0.00%	N/A	N/A	2.501	18.74	4.329	1.731
W Pond (by MW0)_PFHxS											
W Pond (by MW0)_PFOS											
W Pond (by MW0)_PFOS+PFHxS											

	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
General Statistics for Raw Data Sets using Detected Data Only	14	0	0.012	4.43	0.569	0.13	1.394	1.181	0.138	3.133	2.077
	12	0	0.0057	9.2	0.877	0.0918	6.888	2.624	0.116	3.448	2.994
Variable	10	0	0.0019	0.172	0.0303	0.013	0.00259	0.0509	0.0101	2.916	1.681
W Pond (by MW0)_Ammonia_F	15	0	0.042	3.9	0.996	0.621	1.41	1.187	0.646	1.747	1.192
W Pond (by MW0)_Nitrate_F	13	0	0.004	0.24	0.0447	0.025	0.00375	0.0612	0.0193	3.117	1.37
W Pond (by MW0)_Nitrite_F	12	0	4.90E-04	0.0146	0.00422	0.00265	2.24E-05	0.00473	0.00206	1.779	1.12
W Pond (by MW0)_Al_T	7	0	4.30E-04	0.0017	0.00105	8.00E-04	2.48E-07	4.98E-04	5.49E-04	0.218	0.472
W Pond (by MW0)_Al_F	14	0	9.50E-04	0.0081	0.00311	0.00215	5.79E-06	0.00241	0.00119	1.321	0.773
W Pond (by MW0)_Cr_T	12	0	7.00E-04	0.0046	0.00147	0.0012	1.10E-06	0.00105	5.93E-04	2.791	0.713
W Pond (by MW0)_Cr_F	12	0	0.41	10.2	2.714	1.205	10.52	3.244	1.097	1.613	1.195
W Pond (by MW0)_Cu_T	13	0	0.06	0.931	0.245	0.15	0.0626	0.25	0.0993	2.001	1.021
W Pond (by MW0)_Cu_F	14	1	2.20E-04	0.0098	0.00283	0.00146	9.98E-06	0.00316	0.0015	1.562	1.117
W Pond (by MW0)_Fe_T	9	1	7.90E-05	4.10E-04	1.45E-04	1.10E-04	1.05E-08	1.02E-04	2.37E-05	2.689	0.707
W Pond (by MW0)_Fe_F	3	0	0.0014	0.054	0.0191	0.002	9.12E-04	0.0302	8.90E-04	1.731	1.578
W Pond (by MW0)_Pb_T	1	0	1.3	1.3	1.3	1.3	N/A	N/A	0	N/A	N/A
W Pond (by MW0)_Pb_F	3	0	0.0011	6.2	2.068	0.0018	12.81	3.579	0.00104	1.732	1.731
W Pond (by MW0)_PFOA	3	0	0.0011	7.5	2.501	0.0018	18.74	4.329	0.00104	1.732	1.731
W Pond (by MW0)_PFHxS											
W Pond (by MW0)_PFOS											
W Pond (by MW0)_PFOS+PFHxS											

	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
Percentiles using all Detects (Ds) and Non-Detects (NDs)	15	0	0.0192	0.0404	0.0515	0.129	0.32	0.394	1.158	2.414	4.027
	13	0	0.00576	0.00976	0.0154	0.09	0.172	0.255	0.414	3.944	8.149
Variable	12	0	0.002	0.0024	0.0035	0.0112	0.0183	0.0254	0.0363	0.0979	0.157
W Pond (by MW0)_Ammonia_F	15	0	0.112	0.185	0.188	0.621	1.015	1.344	2.808	3.55	3.83
W Pond (by MW0)_Nitrate_F	15	0	0.0111	0.0162	0.0175	0.029	0.057	0.06	0.0612	0.115	0.215
W Pond (by MW0)_Nitrite_F	15	0	6.50E-04	0.00105	0.00111	0.0025	0.00425	0.00588	0.0124	0.0138	0.0144
W Pond (by MW0)_Al_T	15	0	4.58E-04	5.00E-04	5.00E-04	7.30E-04	0.0015	0.00154	0.00668	0.01	0.01
W Pond (by MW0)_Al_F	15	0	0.00119	0.00154	0.00165	0.0022	0.0051	0.00674	0.00778	0.00897	0.0106
W Pond (by MW0)_Cr_T	15	0	7.16E-04	7.88E-04	8.95E-04	0.0013	0.0017	0.00228	0.00784	0.01	0.01
W Pond (by MW0)_Cr_F	12	0	0.461	0.508	0.614	1.205	2.81	4.636	7.46	8.825	9.925
W Pond (by MW0)_Cu_T	15	0	0.0692	0.083	0.0865	0.2	0.4	0.408	0.476	0.629	0.871
W Pond (by MW0)_Cu_F	14	1	4.16E-04	7.28E-04	8.83E-04	0.00146	0.00315	0.00422	0.00812	0.00941	0.00972
W Pond (by MW0)_Fe_T	14	1	9.58E-05	1.00E-04	1.00E-04	1.10E-04	3.48E-04	6.46E-04	0.0017	0.002	0.002
W Pond (by MW0)_Fe_F	3	0	0.00152	0.00164	0.0017	0.002	0.028	0.0332	0.0436	0.0488	0.053
W Pond (by MW0)_Pb_T	3	0	6.00E-04	7.00E-04	7.50E-04	0.001	0.651	0.78	1.04	1.17	1.274
W Pond (by MW0)_Pb_F	3	0	0.00124	0.00138	0.00145	0.0018	3.101	3.721	4.96	5.58	6.076
W Pond (by MW0)_PFOA	3	0	0.00124	0.00138	0.00145	0.0018	3.751	4.501	6	6.75	7.35
W Pond (by MW0)_PFHxS											
W Pond (by MW0)_PFOS											
W Pond (by MW0)_PFOS+PFHxS											

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