EPA WHYTES GULLY LANDFILL ANNUAL REPORT 2024/2025



Contact Information

Wollongong City Council

Waste + Resource Recovery

Document Information

Prepared for Wollongong City Council

Project Name Whytes Gully Annual Report

2024/2025

Date 4th August 2025

Version Number 1

Author(s):

Nicole Diatloff

Senior Environmental Officer (Waste)

Wollongong City Council

Della Kutzner

WHS Quality Environmental Officer

Wollongong City Council

Approved By:

Lisa Brownlee

Waste + Resource Recovery Manager (Acting)

Wollongong City Council

Date Approved

L. Brenles-

10/09/2025

Signed:

Paul Tracey

Manager Open Space + Environmental Services

Wollongong City Council

Date Approved

Parthally

10/09/2025

Signed:

Contents

1	In	troduction	4
	1.1	Background	4
	1.2	Objectives	4
	1.3	Scope	4
	1.3.1	Fieldwork	4
	1.3.2	Reporting	5
	1.4	Site History and Configuration	5
	1.4.1	Site History	5
2	Si	te Setting	6
	2.1	Topography and Drainage	6
	2.2	Soil and Geology	7
	2.3	Climate	7
3	Pe	erformance Criteria	9
	3.1	Surface Gas	9
	3.2	Subsurface Gas	9
	3.3	Gas Accumulation	9
	3.4	Water	9
	3.4.1	Stormwater	9
	3.4.2	Leachate Discharge	10
	3.4.3	Groundwater	10
	3.5	Dust	10
	3.6	Trade Wastewater	10
	3.7	Waste – Tyres	10
	3.8	Odour	11
4	Re	esults	12
	4.1	Gas	12
	4.1.1	Surface Gas	12
	4.1.2	Subsurface Gas	12
	4.1.3	Gas Accumulation	12
	4.2	Stormwater	12
	4.3	Leachate	13
	4.4	Groundwater	13
	4.4.1	Groundwater Levels	13
	4.4.2	Laboratory Results	13
	4.5	Trade Wastewater	15
	4.6	Waste Tyres	15
	4.7	Odour and Dust	16
5	Q	uality Assurance / Quality Control	16

	5.1	Laboratory QA/QC	16			
	5.2	Data Useability				
6	_	Discussion				
	6.1	Surface Gas				
	6.2	Subsurface Gas				
	6.3	Gas Accumulation				
	6.4	Stormwater				
	6.4.1					
	6.5	Groundwater				
	6.5.1					
	6.5.2					
	6.5.3	•				
	6.5.4	•				
	6.5.5					
	6.6	Trade Wastewater				
	6.7	Waste Tyres				
		•				
	6.8	Odour				
_	6.8.1					
7		Conclusions and Recommendations				
	7.1	Conclusions				
_	7.2	Recommendations				
8		imitations				
9		References				
A		ICIES				
	Appendix A					
	• • •	endix B				
	Appe	endix C	46			

1 Introduction

1.1 Background

Wollongong City Council (Council) owns and operates the Wollongong Waste and Resource Recovery Park (the Site), which is located on Reddalls Road, Kembla Grange NSW. The Site is situated at the foothills of the Illawarra Escarpment southwest of the Wollongong central business district on approximately 50 hectares. The Site is formally identified as Lots 50, 52 and 53 of Deposited Plan (DP) 1022266 and Lot 2 of DP 240557. The Site location is shown on Figure 1 of Appendix A and a Site plan provided on Figure 2 of Appendix A.

Council holds an Environmental Protection Licence (EPL) issued by the NSW Environment Protection Authority (EPA) under the Protection of the Environment Operations Act 1997 (POEO Act). The Licence Number is 5862 and authorises the scheduled activity of waste disposal (application to land) at the Site with no limit on the scale of the activity.

A Landfill Environmental Management Plan (LEMP) was prepared in 2014 (Golder 2014) on behalf of Council to ensure that environmental compliance is maintained throughout Site operations. This plan has recently been updated and is currently being reviewed by Council. The management measures provided in the updated LEMP, and associated appendices are developed in consideration of the NSW Environmental Guidelines: Solid Waste Landfills (EPA, 1996) and address the monitoring and reporting requirements of EPL 5862.

1.2 Objectives

The objectives of this Annual Report are to provide the EPA with the following:

- A summary of compliance monitoring data gathered during the reporting period of the 29th of May 2024 to the 28th of May 2025.
- Interpretation of monitoring data to assess the environmental performance of the Site in consideration of the conditions of the EPL.

1.3 Scope

1.3.1 Fieldwork

To meet the objectives of the Annual Report the following scope of works was undertaken during the reporting period in accordance with the requirement of EPL 5862:

- Surface gas monitoring at areas where intermediate or final cover has been placed;
- Subsurface gas monitoring of twelve (12) landfill gas monitoring wells;
- Gas accumulation monitoring within all buildings within 250m of deposited waste;
- Water monitoring at three (3) stormwater monitoring points;
- Groundwater monitoring at thirteen (13) monitoring wells;
- · Tracking of waste tyres received at the Site; and
- Monitoring of trade wastewater at one (1) sampling point located at the pre-treatment discharge.

1.3.2 Reporting

Section 6 (R1) of EPL 5862 states that Annual Return and an Annual Report must be prepared by the licence holder. In accordance with Section 6 (R1.8) of the EPL this Annual Report provides an assessment of environmental performance relevant to the licence conditions including:

- Tabulated results of all monitoring data required to be collected by this licence;
- A graphical presentation of data from at least the last three years in order to show variability and/or trends;
- An analysis and interpretation of all monitoring data;
- An analysis of and response to any complaints received;
- Identification of any deficiencies in environmental performance identified by the monitoring data, trends or incidents and of remedial action taken or proposed to be taken to address these deficiencies; and
- Recommendations on improving the environmental performance of the facility.

This report has been prepared in accordance with the reporting conditions provided in Section 6 of the EPL and in consideration of the *Environmental Guidelines: Solid Waste Landfills, Second edition* (EPA, 2016) and *Requirements for publishing pollution monitoring data* (EPA, 2013).

The Annual Return proforma for the 2024/2025 reporting period was provided to the NSW EPA via their online lodgement platform E-Connect.

In this reporting period, two NSW Government Natural Disasters (listed below) occurred leading to some difficulties in site, stormwater and leachate management due to catastrophic, heavy rainfall events.

AGRN 1119	NSW East Coast Flooding	1 April 2024 onwards
AGRN 1129	NSW Storms & Floods	4 June 2024 onwards

The Pollution Incident Response Management Plan (PIRMP) was activated in a timely manner and mitigation measures were put in place in accordance with the approved management plans.

1.4 Site History and Configuration

1.4.1 Site History

Whytes Gully was developed in the early 1980's as the principal landfill site for Wollongong's domestic and commercial waste streams. Initially, the 'western gully' section was landfilled. The western gully is unlined by modern standards and was used for waste deposition from 1982 to 1993. Initially coal wash refuse was used to provide daily cover, and later steel furnace slag was introduced around 1988 due to its stability in wet weather, as well as Council's inability to source local clean fill in sufficient quantities. The leachate collection network from the western gully passes through a series of rock drains at the centre of each lift. The rock drains connect with a riser and the leachate flows from riser to riser, and eventually to the leachate collection well at the base of the western gully. The western gully section of the landfill has been capped with clay with a thickness between 1m and 4m.

Development of the 'eastern gully' section received consent in approximately 1992, following extensive public consultation. The eastern gully section is lined with a single layer of HDPE smooth liner, over a subsoil drainage layer of 5mm gravel and a corrugated groundwater drainage system. The eastern gully was excavated to rock and was developed in two stages, beginning with the first stage 80 to 100m above the slope from the current toe of the landfill embankment. The leachate is drained from the first stage of the eastern gully via a 300mm corrugated drainage pipe at the base and a 300mm thick sand layer above the liner.

The second stage of the eastern gully is situated in front and above the first stage, with extended leachate drains and HDPE liner. From 2014 to 2016, the eastern gully underwent extensive surface reshaping works in order to reduce rainwater infiltration, increase surface water diversion, to ensure consistent cover depths and to prepare the surface for the new landfill cell base liner.

Construction of Stage 3 of the landfill commenced during August 2013, with the first cell, Cell 1A, completed in 2014 which is situated below the eastern gully. Placement of waste commenced in Cell 1A around March 2015. Council has since constructed Cell 1B in 2015 and completed filling in January 2019. Cell 2 commenced filling in January 2019 and continued through this reporting period.

Construction of Cell 2B-2 commenced on the 29th January 2024 with the expected completion date being late 2025.

The different areas of operations undertaken in this reporting period are outlined below:

- Weighbridge and gatehouse
- Landfill working area (not accessible to the public)
- Community Recycling Centre
- Small Vehicle Transfer Station
- Leachate and stormwater management; and associated monitoring
- Monitoring Areas landfill gas, groundwater, noise and air quality
- Green Waste Transfer Area
- Landfill gas flare & associated collection infrastructure
- Stockpiling areas
- Environmental controls
- Weed Control and Revegetation works
- Weather Station

The site runs 364 days a year (closed Christmas Day).

During this reporting period, the filling of Cell 1B continued in parallel with the construction of the new cell. Gas infrastructure was again expanded within the new fill areas and connected to the existing landfill gas flare system.

Leachate is collected from all landfilled areas at the site and treated in a 3-stage process. The leachate is initially collected in a primary holding pond that utilises biological process and aeration primarily to strip the leachate of ammonia. The leachate is then pumped to a smaller, shallower pond with a larger surface area to increase the speed of this process on a batch-by-batch basis. From the smaller pond the leachate is then pumped to a sequential batch reactor that in conjunction with a filtration system eliminates the residual contaminants in the leachate to a standard that is suitable for acceptance by sewer under the sites Trade Wastewater Agreement with Sydney Water.

The location of each cell and significant Site features such as leachate ponds and shown on Figure 2 of Appendix A.

2 Site Setting

2.1 Topography and Drainage

The Site is situated on a southwest facing slope, which is dominated by a roughly east-west directional ridgeline along the northern boundary. The landfill deposition areas are located within two historical gullies, the western gully landfill and the eastern gully landfill. The eastern gully landfill is the current location of waste deposition with the western gully was historically filled until approximately 1993.

The topography of the Site is subject to variability due to the nature of landfilling, however, in general the Site is characterised by moderate to steep slopes. An elevation profile created utilising Nearmap for an aerial image captured in December 2024 shows that the lowest elevations of the Site are located in the south western portion with an approximate relative level (RL) of 15 m Australian Height Datum (AHD), and the highest elevations are located in the north eastern portion with an approximate RL of 100 m AHD. Approximate contours are shown on Figure 3 of Appendix A.

2.2 Soil and Geology

The 1:100,000 geological map 'Wollongong-Port Hacking' (Department of Primary Industries, 1985) shows that the Site is on the boundary of two major geological formations. The southern portion of the site is underlain by fluvial sands, silts and clays associated with Dapto Creek, with sandstone of the Budgong formation underlying alluvial soils. The Budgong Sandstone formation typically comprises of red, brown and grey lithic sandstone. The northern portion of the site is underlain by interbedded lithic sandstone, coal, carbonaceous claystone, siltstone and claystone of the Pheasants Nest Formation. It is inferred that the Pheasants Nest formation would mainly be encountered on the ridgelines in the higher elevations of the Site.

A geotechnical investigation completed by Golder Associates (Golder 2012) summarised the Site geology into the following areas:

- Pheasants Nest Formation: the Pheasants Nest Formation was noted on the upper slopes across the northern portion the site. The material encountered was generally weathered sandstone that grades into fresh sandstone at depths typically less than 10 m below ground level (bgl). The residual soil is generally less than 2 m thick. Siltstone was encountered in zones throughout the sandstone at depths greater than about 15 m (based on the Maunsell 1992 investigation). Siltstone was not encountered in the Golder 2012 investigation.
- Budgong Sandstone Formation: the Budgong Sandstone Formation was located across the southern portion of the site. The sandstone generally had a weathering profile that extended to depths up to 15 m bgl. Zones of weathered siltstone had a maximum thickness of approximately 3m and were located intermittently throughout this formation.
- Alluvial Soils: alluvial soils consisted of colluvial / alluvial soil material (silty clay and silt with some sands and sub angular gravels and cobbles) and was located across the middle and south west portion of the site. Zones of alluvial soil had a maximum thickness of approximately 11m. This geological unit was inferred to be underlain by Budgong Sandstone.
- Capping Layer and Landfill: landfill and a capping layer are located across the completed areas of landfilling. The capping material consists of generally low to medium plasticity sandy clay and is typically has a thickness less than 1.5m. Landfill waste is located beneath the capping layer consisting predominantly of domestic waste including paper, plastic, wood, rubble and other materials. The depth to the base of the general waste fill was not well defined, however, a review of historical topographic data suggests that the thickness of the fill could be up to 52m within the eastern gully landfill. The landfilled areas were inferred to be underlain by the Pheasants Nest Formation.

2.3 Climate

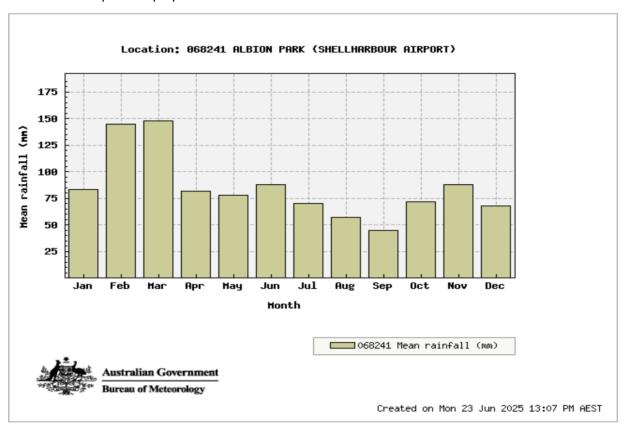
Climate data for the Site has been taken from the Albion Park (Wollongong Airport) Bureau of Meteorology (BOM) Weather Station (ID 068241). The weather station is located approximately 10 km south of the Site and is considered an accurate representation of the conditions experienced at the landfill during the reporting period. **Table 2-1** summaries the key climatic data from the Albion Park weather station.

Table 2-1 Climatic Data – Albion Park Weather Station

	2024						2025					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Rainfall (mm)	225	56.8	27	45.8	21.2	122.4	41.6	125.3	41.2	147.8	63.8	207.8
Mean max temperature (°C)	17.4	17.2	20.9	22.4	22.1	25.5	27.4	26.3	27.0	26.3	24.7	21.2

	2024							2025				
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Mean min temperature (°C)	8.2	8.3	8.9	9.2	10.9	16.2	16.6	17.3	17.2	17.5	14.2	15.9
Mean 9am wind speed (km/h)	16	18	10	18	11	11	9	10	10	9	10	9
Mean 3pm wind speed (km/h)	13	18	18	22	19	17	20	18	19	18	15	15
Mean 9am relative humidity (%)	72	68	72	48	61	71	66	76	72	82	72	80
Mean 3pm relative humidity (%)	63	56	57	46	60	71	64	72	66	70	61	65

Long-term rainfall averages for the Albion Park weather station are shown below and have been included for comparative purposes.



The climate data showed rainfall occurred in every month, ranging from 21.2 mm in October 2024 to 225 mm in June 2024. Total rainfall was 1125.7 mm, 110 mm more than the long-term average.

3 Performance Criteria

Environmental monitoring data gathered during the reporting period was screened against the applicable criteria for each sample type / matrix as summarised below.

3.1 Surface Gas

The results of surface gas monitoring were screened against the criteria provided in the *Environmental Guidelines* (EPA 2016). Specifically, the threshold level for further investigation and potential action was detection of methane at any point of the landfill above 500 parts per million (ppm).

3.2 Subsurface Gas

The results of subsurface gas monitoring were screened against the criteria provided in the *Environmental Guidelines* (EPA 2016). Specifically, the threshold levels for further investigation and corrective action were detection of methane at concentrations above 1% (volume/volume) and carbon dioxide at concentrations of 1.5% (v/v) above established natural background levels.

3.3 Gas Accumulation

The results of gas accumulation monitoring within enclosed buildings and structures were screened against the criteria provided in the *Environmental Guidelines* (EPA 2016). Specifically, the threshold level for further investigation and corrective action was detection of methane at concentrations above 1% (v/v).

3.4 Water

3.4.1 Stormwater

- > Stormwater EPL 5862 requirements are currently being reviewed by Council and the EPA. A draft licence variation has been developed and will be finalised in the next reporting period.
- > In accordance with Section 3 (L1.2) of EPL 5862 the performance criteria for stormwater was no discharge of contaminated stormwater to waters under dry weather conditions (less than 10mm of rainfall within a 24hr period) or a storm event/s of less than 1:10 year, 24 hour recurrence interval (less than 297.4 mm of rainfall within a 24 hour time period).
- > The performance criteria for stormwater monitoring at the discharge point at Reddalls Road, known as Monitoring Point 1 are:
 - pH: a 100-percentile concentration limit of 6.5 to 8.5
 - Total Suspended Solids: a 100-percentile concentration limit of 50 mg/L

In the previous reporting period, the EPA requested that leachate contamination of stormwater be addressed via the following (as Part of a Pollution Reduction Program):

- 1. Complete a preliminary review of the existing stormwater management system;
- 2. Prepare a comprehensive water balance assessment;
- 3. Conduct an independent assessment of the revised stormwater management system.

These reviews and assessments have been completed this reporting period.

3.4.2 Leachate Discharge

In accordance with Section 3 (L1.3) of EPL 5862 the limit for leachate was no discharge of leachate to waters under dry weather conditions (less than 10mm of rainfall within a 24hr period) or a storm event/s of less than the 1:25 Average Return Interval (ARI), 24 hour recurrence interval (less than 371.5 mm of rainfall within a 24 hour time period). The performance criteria adopted for leachate discharges was based on records regarding the timing and nature of leachate discharges during the reporting period.

3.4.3 Groundwater

The selected performance criteria for groundwater samples were based on the recommendations of the *Environmental Guidelines* (EPA 2016) and in consideration of the land use, site setting and the plausible interactions between potential contaminants and human and environmental receptors.

The Environmental Guidelines (EPA 2016) screening groundwater analytical results against the *National Environment Protection (Assessment of Site Contamination) Measure* (National Environment Protection Council, 2013), specifically:

- Schedule B1, Table 1C Groundwater Investigation Levels, which summarises guideline trigger values from ANZECC & ARMCANZ (2000):
- > Relevant guideline trigger levels were applied to groundwater data gathered during the reporting period, however, given the high level of disturbance at the site and the predominantly industrial surrounding land use the 90% levels are considered most appropriate to adopt as a performance.
- > Australian Drinking Water Guidelines (National Health and Medical Research Council and the Natural Resource Management Ministerial Council) (ADWG).
- > Surface water and groundwater are not utilised for human consumption at the Site; however, it is plausible that groundwater is used for agricultural (irrigation and stock watering). As such the ADWG have been adopted.
- > Schedule B1, Table 1A (4) Health Screening Levels groundwater for petroleum hydrocarbons.

3.5 Dust

The results of dust monitoring were assessed against criteria provided within the Environmental: Solid Waste Landfills (2016) which have been derived from Table 7.1 of Approved methods for the modelling and assessment of Air Pollutants in New South Wales (NSW DEC 2022).

3.6 Trade Wastewater

Trade wastewater analytical results were screened against the criteria provided in the *Consent* (Sydney Water, 2023). The *Consent* provides criteria for a variety of parameters for the long-term average daily mass (LTADM) and the maximum daily mass (MDM).

In addition to analytical performance criteria the *Consent* provides limits for aesthetic properties of trade wastewater including temperature, colour, pH, fibrous materials, gross solids and flammability, and limits to the rate of discharge of wastewater to sewer.

3.7 Waste – Tyres

Section 3 (L3.2) of EPL 5862 states that the licensee must not dispose of any tyres on the premises which:

- > Have a diameter of less than 1.2 metres;
- Are delivered at the premises in a load containing more than 5 whole tyres; and
- > Became waste in the Sydney Metropolitan Area.
- > Section 3 (L3.3) states that tyres stockpiled on the premises must:

- > Not exceed fifty tonnes of tyre at one time;
- > Be located in a clearly defined area away from the tipping face;
- > Be managed to control vermin; and
- > Be managed to prevent any tyres from catching fire.

3.8 Odour

In accordance with Section 3 (L4) of EPL 5862 offensive odour must not emit beyond the boundary of the premises. The performance criteria adopted for potential offensive odour emissions was occurrences (if any) of complaints from members of the public relating to odour. Regular odour monitoring is conducted weekly, and results are recorded in the Environmental Matrix.

In 2020/21, the EPA had several meetings with Council to express their concerns regarding odour management at Whytes Gully. This resulted in the inclusion of special conditions E1.4 and E1.5 requiring Council to undertake an odour assessment and for submission to the EPA. These conditions were satisfactorily met and resulted in a modification that removed these conditions and replaced them with the following:

- E2.1 The licensee must provide monthly updates on the implementation of the recommendations made in the report titled "Whytes Gully Waste and Resource Recovery Centre Odour Investigation Assessment (The Odour Unit 2021).
- E2.2 The monthly updates must be provided by the last day of each month, or the next business day if the last day falls on a weekend or public holiday.

These conditions have been subsequently met and have been removed in the latest license review expected to be finalised in the upcoming reporting period.

11

4 Results

Monitoring results gathered during the reporting period are provided in the data tables in Appendix B and are summarised in the relevant subsections below. Laboratory certificates of analysis and quality reports have not been appended to this report due to the large number of files, however, are available upon request.

4.1 Gas

4.1.1 Surface Gas

Approximately 900 surface gas samples were recorded this reporting period. On two sampling events, two transects (Transect 7(1) and 8(2) recorded levels above 500 ppm (two readings) within the reporting period.

These were recorded as follows:

Sampling Date	Transect No.	Location - Methane result (ppm)
21/08/2024	7	1-3885
19/09/2024	8	2-3586

Due to construction of the new cell, some data transects could not be sampled.

4.1.2 Subsurface Gas

All concentrations of methane measured were under 0.1% (v/v), during the reporting period, below the threshold level for further investigation and corrective action of 1% (v/v).

Subsurface gas monitoring results from the reporting period are summarised in Appendix B.

4.1.3 Gas Accumulation

All reported concentration of methane was below the threshold level for further investigation and corrective action of 1 % (v/v). As shown in the graphs in Appendix C, the methane concentrations accumulating into buildings have remained low even though there has been a slight increase in levels over the last reporting period.

Gas accumulation monitoring results from the reporting period are summarised in Appendix B.

4.2 Stormwater

Surface water was monitored throughout overflow events and annually during this period.

In total, there were 38 overflow days with 29 events constituting non-compliances based on the license constraints for pH and TSS. Significant rainfall events occurred in June 2024, November 2024, January 2025 and May 2025 which constituted almost 75 % of total rainfall. During this period, pH levels at the discharge point fluctuated between 7.6 and 8.8 based on the rainfall events experienced.

There were 5 non-compliant pH results ranging between 8.5 and 8.8, influenced by operational and construction overflows, as well as sediment loads captured in the surface pond network.

During four significant events (on 24 individual occasions), Point 1 TSS values were recorded at or over 50 mg/L. Values ranged between 6 - 622 mg/L correlating directly with rain events. Sediment loads increased due to construction run off, compared to previously years under operating conditions only.

Upstream and downstream results showed some fluctuation during rain events, however, were more stable than Point 1 results. There was no identifiable trend showing discharge was contributing to downstream results.

4.3 Leachate

Based on the reported results pertaining to trade wastewater discharged, the facility was in conformance for the 2024-25 reporting period. High levels of ammonia-N were reported in leachate samples; however, this does not impact the facility's successful operation, as this leachate is treated and discharged as trade wastewater, with the trade wastewater reporting all analyte concentrations, including ammonia-N below the performance criteria.

However, one leachate breach was recorded this reporting period. Between the 6/06/2024 and 9/06/2024, the back-up pond overflowed, spilling dilute leachate into the stormwater system. This overflow event was a direct result of a severe storm and declared natural disaster event.

To manage the spill as quickly as possible, leachate was transferred between ponds to manage levels. Controlled discharge to sewer undertaken until minimum levels were reached.

Appendix B shows the full results for leachate.

4.4 Groundwater

4.4.1 Groundwater Levels

Groundwater levels measured at the site during the reporting period are summarised in Appendix B and ranged from 1.76 m below ground level (bgl) in groundwater monitoring Point 15 (GMW108D0) to 11.00 m bgl in groundwater monitoring point 12 (GMW105). These have remained at relatively the same levels as the previous reporting period and may be attributed to continual heavy rainfall.

Groundwater flows in a south westerly direction through the site. The minimum and maximum recorded SWLs (metres below top of casing (m b ToC)) were as follows:

Table 4-3: Standing Water Levels

Monitoring Event	Minimum Depth (m bToC)	Maximum Depth (m bToC)
20/08/2024	1.76 (Point 15)	10.04 (Point 12)
20/11/2024	2.05 (Point 15)	11.00 (Point 12)
17/02/2025	2.02 (Point 15)	11.00 (Point 12)
14/05/2025	2.03 (Point 15)	10.70 (Point 12)

4.4.2 Laboratory Results

Groundwater pH was reported to range between acidic (5.7 at Point 12) and neutral (7.3 at Point 9,10 and 11) for the reporting period.

Electrical Conductivity varied greatly across the site with the lowest value recorded being 181 μ S/L at Point 12 and the highest value recorded being 4850 μ S/L at Point 5.

Concentrations of calcium, magnesium, potassium, chloride, fluoride, sulfate and sodium varied across the groundwater network. It does appear that groundwater is dominated by calcium, sodium and chloride ions, with all groundwater wells exhibiting higher concentrations of these ions compared to others.

Groundwater within the site is generally described as very hard to extremely hard. Monitoring Point 5 recorded the highest CaCO3 concentrations during the reporting period, ranging between 894 mg/L to 1020 mg/L. Monitoring Point 12 had the lowest concentrations ranging between 34 mg/L and 40 mg/L.

Continued heavy rainfall resulted in all bores being active across the site during this reporting period.

Groundwater data tables are provided in Appendix B with the pertinent findings summarised below:

- > Benzene, toluene, ethylbenzene and xylenes (BTEX) and TPH were not detected above the laboratory limits of reporting (LORs) in any groundwater sample collected during the reporting period (refer to Appendix B).
- > PAH was not detected above the laboratory LORs in any sample; however, it is noted that the adopted criteria for anthracene and benzo(a)pyrene were below the laboratory limit of reporting (refer to Appendix B). Therefore, the results of anthracene and benzo(a)pyrene cannot be screened against the criteria.

A summary of heavy metals results is provided below and tabulated in Appendix B:

- Aluminium (total) concentrations ranged from 0.3 mg/L in Point 19 to 24.9 mg/L in Point 18, with all groundwater bores containing aluminium levels above the ANZECC 90% guideline trigger value of 0.08 mg/L. Note there is insufficient data to derive a reliable guideline trigger value where pH is less than 6.5.
- Arsenic and mercury were reported at concentrations below the adopted performance criteria for all samples.
- Cobalt (total) concentrations ranged from 0.003-0.039 mg/L. Note there is insufficient data to derive a reliable 90% guideline trigger although the results are below the long and short-term trigger values for agricultural irrigation and livestock drinking water
- Chromium (hexavalent) was not detected above the laboratory limit of reporting in all groundwater samples collected during the reporting period, however, it is noted that the adopted criteria is below the laboratory limit of reporting. Therefore, the results cannot be screened against the performance criteria.
- > Chromium (total) concentrations were below that related to long and short terms trigger values for agricultural and livestock drinking water.
- Copper (total) concentrations were elevated on four occasions above the ANZECC 90% guideline trigger value of 0.0018 mg/L as listed below (note the guideline value has not been adjusted for local water hardness):
- > Point 9 (0.016 mg/L)
 - > Point 15 (0.025 mg/L)
 - > Point 16 (0.031 mg/L)
 - > Point 18 (0.033 mg/L)
 - Lead (total) concentrations were above the 90% guideline trigger value of 0.0056 mg/L on four occasions, listed below (note guideline values have not been adjusted for local water hardness):
- > Point 9 (0.008 mg/L)
 - > Point 15 (0.008 mg/L)
 - > Point 16 (0.013 mg/L)
 - > Point 18 (0.017 mg/L)
 - Manganese (total) concentrations were above the 90% guideline value of 2.5 mg/L on one occasion as listed below:

- > Point 16 (4.71 mg/L)
- Specific guideline values were not available in the adopted performance criteria for calcium, total chromium and potassium.
- A summary of inorganics is provided below and tabulated in Appendix B:
 - Ammonia concentrations ranged from below the laboratory limit of reporting (multiple samples) to 0.78 mg/L in Point 18, with all samples below the adopted performance criteria of 1.43 mg/L.
 - > Fluoride concentrations ranged from 0.1 mg/L (Point 16) to 4.9 mg/L (Point 11).
 - Nitrate concentrations ranged from under 0.01 mg/L (multiple samples) to 6.28 mg/L at Point 17. This was the one value above the performance criteria of 3.4 mg/L.
 - Specific 90% guideline trigger values were not available in the adopted performance criteria for alkalinity, chloride, fluoride, sodium, TDS, TOC and sulfate.
- > A summary organochlorine pesticides is provided below and tabulated in Appendix B:
 - OCP contaminants aldrin and dieldrin, chlordane, dichlorodiphenyltrichloroethane (DDT), endrin, lindane and heptachlor were not detected above the laboratory limit of reporting in any sample, however, it is noted that the adopted criteria were below the laboratory limit of reporting.
- > A summary organophosphorus pesticides is provided below and tabulated in Appendix B:
 - OPP contaminants azinophos methyl, chlorpyrifos, diazinon, dimethoate, malathion, methyl
 parathion and parathion were not detected above the laboratory limit of reporting in any
 sample, however, it is noted that the adopted criteria were below the laboratory limit of
 reporting.
 - Bromophos-ethyl, carbophenothion, chlorfenvinphos, dichlorvos, ethion, fenthion, fethyl
 parathion, monocrotophos, fenamiphos and pirimphos-ethyl were not detected above the
 laboratory limit of reporting and were therefore below the adopted performance criteria.

4.5 Trade Wastewater

Trade wastewater monitoring data is provided in Appendix B. Trade wastewater was undertaken 19 times during the reporting period. The results of monitoring showed that on each occasion volume discharge, total dissolved solids, suspended solids, ammonia as N, biochemical oxygen demand and temperature were within the acceptable criteria provided in the *Consent* (Sydney Water, 2025). pH was measured at the commencement and completion of each monitoring event and no non-conformances with the Sydney Water criteria were recorded.

4.6 Waste Tyres

Section 3 (L3.2) of the EPL provides limitations on the size and number of waste tyres that can be disposed at the premises. Council do not dispose of waste tyres on Site but instead receives and temporarily stores them until they are collected by an external contractor, Tyrecycle Pty Ltd, for recycling. As such the license condition L3.2 was achieved during the reporting period.

Section 3 (L3.3) of the EPL states a number of requirements relating to tyre stockpiles at the Site. Stockpiles of types on Site during the reporting period were compliant with L3.3, specifically:

- Tyre stockpiles did not exceed fifty tonnes at one time. The tyre storage bin at the site has a
 capacity of 150 tyres, which when full equates to significantly less than fifty tonnes. Council's
 Operations team regularly scheduled outbound loads of waste tyres to ensure that the
 capacity of the bin is not exceeded;
- The tyre stockpile was clearly defined and situated approximately 450m from the tipping face during the reporting period; and

 The tyre stockpile was scheduled for frequent removal mitigating the potential for vermin impact and fire risk.

4.7 Odour and Dust

Council received a total of 18 complaints through the EPA during the reporting period relating to offensive odours emanating from the Kembla Grange Industrial Precinct. These complaints are sent to a number of facilities with the precinct, not just Whytes Gully Landfill.

The number of complaints has continued to decrease from the previous reporting periods.

During the previous reporting periods, there were a number of changes in land use in the surrounding catchment. With the implementation of FOGO, increase in commercial organics composting has occurred in the industrial precinct adjacent to the facility. There has also been an increase in bitumen production in the same period, resulting in an increase in potential odour sources close to the landfill. This has proved a challenge to manage, however commitment to monitor and improve practices is ongoing.

EPA continues to work with Council to quantify and manage odours within the catchment. All complaints are followed up with the complainant, logged and an incident report sent through to the EPA (or included in the monthly update).

5 Quality Assurance / Quality Control

A summary of the results of the QA/QC performance are included in this section.

5.1 Laboratory QA/QC

The selected analytical laboratory, ALS Environmental, undertake internal QA/QC procedures which include the analysis of method blanks, internal duplicate samples, laboratory control samples, matrix spikes and surrogate recovery. Additionally, laboratory QA/QC measures include receipt, logging, storage, preservation, holding time and analysis of samples within the method specified.

A review of the laboratory QA/QC procedures indicates that laboratory QA/QC procedures were within specified ranges for all samples with the exception of three duplicates, four laboratory control samples and four matrix spikes. In addition, five matrix spike recoveries were unable to be determined as the background level was greater than or equal to the four times the spike level.

Samples were received and stored appropriately, and all samples were analysed within the specified holding time.

5.2 Data Useability

The data validation process of laboratory QA/QC data indicates that the reported analytical results are representative of the conditions at the sample locations and that the analytical data can be relied upon for the purpose of the Annual Report for EPL 5862.

6 Discussion

The data and information gathered during the reporting period is discussed below in consideration of the performance criteria. In addition, and in accordance with Section 6 (R1.8) of EPL 5862, historical laboratory results have been tabulated and presented in graphical format that compares data from at least three years (where available).

Trend graphs are provided in Appendix C and summarised below. Where there is insufficient data to establish trends (i.e. results predominately below LOR), then no trend graph has been prepared.

6.1 Surface Gas

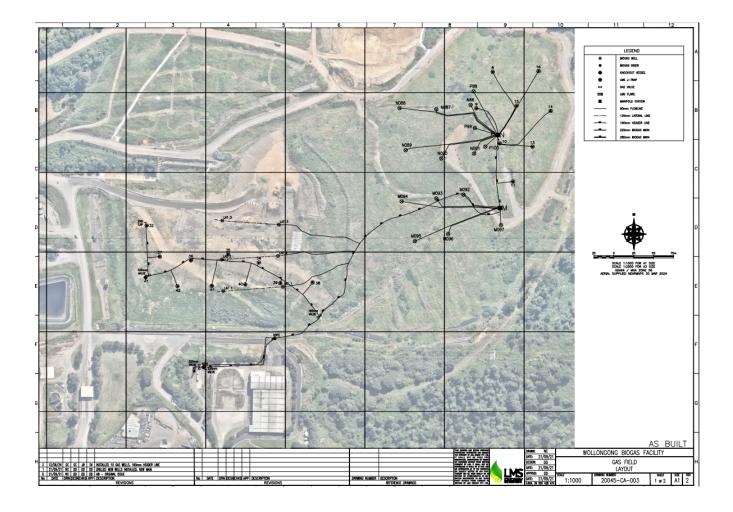
Approximately 900 surface gas samples were recorded this reporting period. On two sampling events, two transects (Transect 7(1) and 8(2) recorded levels above 500 ppm (two readings) within the reporting period.

These were recorded as follows:

Sampling Date	Transect No.	Location - Methane result (ppm)
21/08/2024	7	1-3885
19/09/2024	8	2-3586

Investigations found that the manifold connections had been closed as a precaution for construction/relocation works. Once opened, no further elevated levels were detected.

Construction of the next cell also resulted in Transects C to N being taken offline until completion. A lay out schematic of the current landfill gas layout is provided below.



6.2 Subsurface Gas

Subsurface gas monitoring completed during the reporting period did not identify subsurface methane at concentrations that exceeded the threshold level. As such non-conformances of the EPL did not occur during the reporting period with respect to subsurface gas.

6.3 Gas Accumulation

Gas accumulation monitoring completed during the reporting period did not identify methane at concentrations that exceeded the threshold level. As such non-conformances of the EPL did not occur during the reporting period with respect to gas accumulation.

6.4 Stormwater

6.4.1 Trend Analysis

A series of graphs showing trends in stormwater contaminant and parameter levels are provided in Appendix C and are discussed below. Monitoring results generally fluctuated with rainfall events (including upstream and downstream results to a lesser extent).

In this reporting period, two NSW Government Natural Disasters (listed below) occurred leading to some difficulties in site, stormwater and leachate management due to catastrophic, heavy rainfall events.

AGRN 1119	NSW East Coast Flooding	1 April 2024 onwards
AGRN 1129	NSW Storms & Floods	4 June 2024 onwards

The two months (November and December 2024) significantly influenced pH, ammonia and TSS in the stormwater system. The other parameters were also influenced but remained within threshold limits. In general, the water column remains unbalanced with fluctuating levels of dissolved oxygen, nutrients and most other parameters.

Monitoring results generally fluctuated with rainfall events (including upstream and downstream results to a lesser extent). Continual fluctuations of water quality is most likely due to the large volume of water passing through the catchment over the last few years, mobilising contaminants and flushing them through the water column downstream.

Of interest, is the changing nature of the catchment. Until the last five years, the surrounding land use was predominantly rural residential land use. Whilst upstream remains relatively stable with limited to no development, adjacent land use has become predominantly light industrial (e.g. vehicle storage, bitumen plants, commercial composting) and now, increasingly residential. This will undoubtably impact surrounding water quality.

Rainfall during this period also disrupted the construction of Cell 2B-2 causing time delays and material scour on several occasions. Stormwater management in the construction area proved to be challenging due to topography, limited space for collection and treatment infrastructure and continual heavy rainfall events.

In April 2024, the Construction Stormwater Management Plan was modified to utilise the existing drainage infrastructure at Whytes Gully. This included creating a series of detention ponds in the eastern drain and using the first two stormwater ponds (in the series of three) for sediment settling. Flocculation was undertaken when appropriate.

6.5 Groundwater

6.5.1 Groundwater Levels

Interpretation of groundwater levels across the Site from the reporting period indicate that the inferred groundwater flow direction is from the north east to the south west, which is consistent with the local topography and is shown on Figure 4 of Appendix A. Groundwater is situated at the greatest depths in the higher elevations of the Site toward the north eastern corner and is shallowest in the south western boundary in close proximity to the nearest surface water body, Dapto Creek.

It is noted that the water table remained high throughout the reporting period with samples collected at all sampling events.

6.5.2 Trend Analysis

A series of graphs showing groundwater level trends are provided in Appendix C and discussed below. It can be seen that there has been increase in some levels of groundwater parameters including nitrate, ammonia, pH and conductivity as water enters the groundwater system and soluble analytes are mobilised. It remains difficult to discern any trends until heavy rainfall events decrease, and groundwater levels and flow stabilise under normal climatic conditions.

6.5.3 Laboratory Results

Groundwater analysis completed during the reporting period showed that the majority of contaminants and parameters of interest specified in EPL 5862 were below the laboratory LORs or the performance criteria, including BTEX, TPH, PAH, ammonia and fluoride.

Performance criteria are not provided for alkalinity, barium, chloride, nitrite, sodium, TDS, TOC and sulfate however the results were generally comparable with historical data and are not considered unusual or concerning in the context of the Site and surrounding land use. EPA monitoring points 5, 17, 18 and 20 are located in the lower elevations of the Site toward the western and southern western boundary and generally had the highest concentrations. EPA monitoring points 9, 10, 12 and 14 generally contained the lowest levels of the parameters, with the wells located in the higher elevations toward the northern and eastern boundary. This indicates that wells situated down gradient have the relatively higher concentrations. Groundwater flows in a south westerly direction through the site. The minimum and maximum recorded SWLs (metres below top of casing (m b ToC) were as follows:

Standing Water Levels

Monitoring Event	Minimum Depth (m bToC)	Maximum Depth (m bToC)
20/08/2024	1.76 (Point 15)	10.04 (Point 12)
20/11/2024	2.05 (Point 15)	11.00 (Point 12)
17/02/2025	2.02 (Point 15)	11.0 0 (Point 12)
14/05/205	2.03 (Point 15)	10.7 (Point 12)

pH and Electrical Conductivity

Groundwater pH was reported to fluctuate from acidic to neutral ranging between 5.7 to 7.3 for the reporting period.

Electrical Conductivity varied greatly across the site with the lowest value recorded being 181 μ S/L at Point 12 on the 14/05/2025 and the highest value recorded being 5340 μ S/L at Point 5 also on 20/11/2024.

All bores being remained active across the site during this reporting period.

6.5.4 Laboratory Analysis Results

Tabulated analysis results for the 2024/25 annual reporting period are provided in Appendix B, with a summary of the results presented in the following sections.

Metals

Metals were detected in groundwater at all sampling locations, with concentrations of arsenic and mercury below the ANZWQG (2000) criteria for freshwater. However, the following results were above the guideline assessment criteria although no consideration for pH or local water hardness has been considered:

Table 4-4 Metals Above Guideline Criteria

Metal	Monitoring Point	Value (mg/L)	Assessment Criteria* (mg/L) (AWQG 2000)
Aluminium	5 9 10 11 12 14 15 16 17 18 19	4.81 (17/02/25) 4.69 (17/02/25) 1.7 (17/02/25) 5.15 (17/02/25) 2.31 (17/02/25) 2.39 (17/02/25) 8.85(17/02/25) 7.05 (17/02/25) 0.8 (17/02/25) 24.9 (17/02/25) 0.3 (17/02/25) 1.11 (17/02/25)	0.08 (>6.5pH)
Copper	9 15 16 18	0.016 (17/02/25) 0.025 (17/02/25) 0.031 (17/02/25) 0.033 (17/02/25)	0.0018
Lead	9 15 16 18	0.008 (17/02/25) 0.008 (17/02/25) 0.013 (17/02/25) 0.017 (17/02/25)	0.0056
Manganese	16	4.71 (17/02/25)	2.5

Zinc	9	0.055 (17/02/25)	0.015
	16	0.05 (17/02/25)	
	18	0.068 (17/02/25)	

^{*} Criteria not adjusted for pH or local water hardness

Hydrocarbons

Concentrations of BTEX, TRH, PAH and total phenolics were reported below the laboratory PQLs and below the adopted assessment criteria. Graphs of these values have not been included and the Results Table in Appendix B has shown them as a 0 value.

Major Anions and Cations

Concentrations of calcium, magnesium, potassium, chloride, fluoride, sulfate and sodium varied across the groundwater network. It does appear that groundwater is dominated by calcium, sodium and chloride ions, with all groundwater wells exhibiting higher concentrations of these ions compared to others.

Groundwater within the site is generally described as very hard to extremely hard. Monitoring Point 5 recorded the highest CaCO₃ concentrations during the reporting period, with levels peaking at 1020 mg/L (17/02/2025).

Monitoring Point 12 had the lowest concentrations ranging between 16 mg/L (15/05/2024) and 40 mg/L (17/02/2025).

Total Dissolved Solids (TDS)

Groundwater across the site was reported to be 'fresh' to 'brackish', with TDS concentrations ranging between 175 mg/L at Point 12 (15/05/2024) and 3890 mg/L at Monitoring Point 5 (17/02/2025). Concentrations fluctuated significantly throughout the site and appear to be linked to the rainfall events during the reporting period. TDS levels were consistent with the last reporting period, most likely due to dilution factors from the volume of rainfall received at the site in the previous 24 months.

Total Organic Carbon (TOC)

No trigger values were adopted for TOC as none were available in the ANZWQ (2000) guidelines. Concentrations across the site range from below the laboratory PQL (<1 mg/L) through to 32 mg/L (Point 16) on the 15/05/2024.

OC and OP Pesticides

OC and OP pesticides were reported below the laboratory PQLs during the reporting period. It is noted however, that several PQLs were higher than the ANZWQ (2000) guideline values.

Nutrients

Nutrient concentrations tested include nitrate, nitrite and ammonia-N concentrations. This reporting period, an elevated level of 6.28mg/L Nitrate at Monitoring Point 17on the 17/02/2025 was recorded.

Nitrite levels remained low (under 1 mg/L) this reporting period.

Ammonia levels fluctuated below the guideline value of 1.43mg/L with values recorded between <0.01 mg/L to 0.69 mg/L at Point 16 on the 20/08/24 as rainfall travelled through the aguifer network.

6.5.5 Trend Analysis

A trend graph and discussion has not been provided for OCP, OPP, PAH, BTEXN or Phenolics as these contaminants have never been reported above the laboratory limit of reporting.

A series of graphs showing trends in groundwater contaminant and parameter levels for annual monitoring are provided in Appendix C and are discussed below.

The trend graphs from the annual groundwater monitoring event shows that contaminant and parameter concentrations have remained steady and relatively consistent with the three years prior, with a general decline in contaminant concentrations. It is noted that one monitoring well was unable to be sampled during the annual monitoring event and therefore trend analysis was unable to be completed for the well network. This well has since been repaired and is back online.

6.6 Trade Wastewater

Trade wastewater was discharged into the sewer network in accordance with the Consent (Sydney Water 2025). Based on the monitoring data over the reporting period, no breaches were recorded.

6.7 Waste Tyres

Waste tyres received at the site are managed in accordance with a procedure that satisfies Councils obligations under the POEO (Waste) Regulation 2014. Tyres are temporarily stored at the site before being collected by a third-party contractor for recycling. In this reporting period, 3489 tyres came though the Facility.

Non-conformances of the EPL did not occur during the reporting period with respect to waste tyres.

6.8 Odour

Section 3 (L4) of EPL 5862 states that offensive odour must not emit beyond the boundary of the premises. A total of 18 complaints relating to odour were received from members of the public during the reporting period. This is a continuing reduction from the previous two reporting periods.

During the previous reporting periods, there were a number of changes in land use in the surrounding catchment. With the implementation of FOGO, increase in commercial organics composting has occurred in the industrial precinct adjacent to the facility. There has also been an increase in bitumen production in the same period, resulting in an increase in potential odour sources close to the landfill. This has proved a challenge to manage, however commitment to monitor and improve practices is ongoing.

In response to odour concerns in the catchment, Council worked with EPA to assess the Site's odour management and address a set Special Conditions included in EPL 5862. This assessment met the requirements of EPA Licence No. 5862- Licence Variation No. 1604123 (Special Conditions E1.4 and E1.5) and, as a result, these conditions were removed on the 27th June 2025.

6.8.1 Data Gaps and Uncertainties

As part of an annual license review, the EPA reviewed existing groundwater monitoring data from the site dating back to July 2022. It was found that metal concentrations exceeded groundwater investigation trigger values (as listed in the National Environment Protection Assessment of Site Contamination Measure (National Environment Protection Council, 2013 (NEPM)) on various occasions across the site as outlined below.

- Aluminium concentrations in all measured samples (NEPM trigger value 0.055 mg/L).
- Copper concentrations in multiple samples (NEPM trigger value 0.0014 mg/L).
- Lead concentrations in multiple samples (NEPM trigger value 0.0034 mg/L).
- Manganese concentrations in multiple samples (NEPM trigger value 1.9 mg/L).
- Cobalt concentrations in multiple samples (NEPM trigger value 0.0014 mg/L).

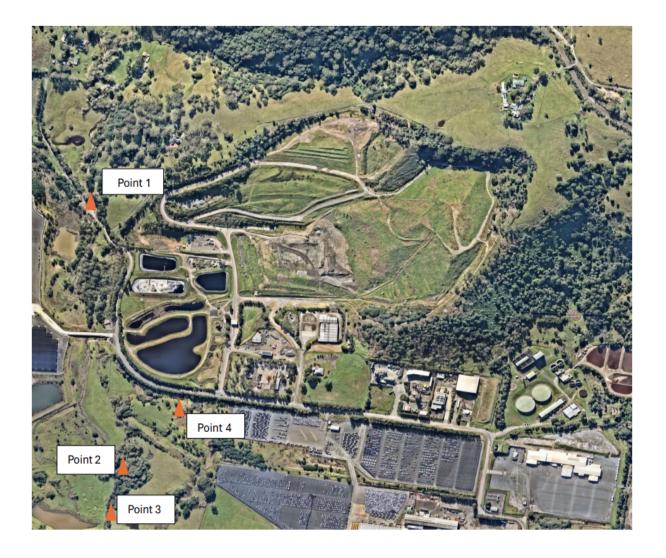
Many of these elevated levels are at the downgradient boundary of the Facility. While there are no registered downgradient groundwater bores within the vicinity, the EPA considers that the migration of groundwater from the landfill and may potentially pose an ecological risk to downstream surface water bodies.

The EPA has requested that Council undertake a monitoring program to assess metal concentrations in surface water bodies near the Facility in the next reporting period.

This monitoring program includes sampling of surface water at four monitoring locations:

- Point 1 (upstream Dapto Creek) -Same as Point 34
- Point 2 (downstream Dapto Creek) Same as Point 33
- Point 3 (Tributary to Dapto Creek)
- **Point 4** (Stormwater Outlet into tributary to Dapto Creek)

Sampling will be undertaken in May 2025, August 2025, October 2025, December 2025, February 2026 and April 2026 in accordance with the Approved methods for the sampling and analysis of water pollutants in NSW (EPA, 2022). Following the completion of the program, a report outlining the monitoring results will be provided to the EPA by the end of April 2026. Monitoring results will also be available to the EPA as required.



7 Conclusions and Recommendations

7.1 Conclusions

Construction of the new cell began in March 2024 has run through this reporting period. This has influenced some of the current licence conditions and a review was subsequently undertaken this reporting period.

In recent years, annual reporting has outlined instances of leachate overflows and non-compliant stormwater discharges following significant rainfall events, and those associated with natural disaster events.

In 2021, the Environment Protection Authority (EPA) implemented a Pollution Reduction Program (PRP) on the licence, requiring an independent assessment of the stormwater management system, and recommendations for improvements of water management.

Following the findings of this PRP, Council will complete a range of improvement works at the premises to reduce the volume of leachate generated and improve stormwater discharge quality. A new PRP has been introduced requiring the completion of these works. In addition two licence conditions exempting stormwater and leachate discharges under significant rainfall conditions will be updated.

Overall, the following can be concluded based on the monitoring undertaken during the reporting period:

- The continued impact at the site as a result of declared natural disasters made it extremely challenging to undertake environmental monitoring and compliance activities. Although some exceedances and non-compliances were identified during this period, Council responded to the circumstances and minimised any material harm to the community and the environment.
- Council implemented an environmental monitoring program during the 2024/25 reporting period that satisfied the conditions and requirements of EPL 5862 and the *Consent to Discharge Industrial Trade Wastewater* (Sydney Water, 2023).
- Surface gas readings were significantly lower during this reporting period compared to the previous reporting period. This was likely influenced by the installation of addition gas infrastructure.
- Management and handling of waste tyres at the Site was undertaken in a manner that was compliant with the EPL conditions.
- Reduced levels of complaints from the public relating to offensive odours originating from the Site
 were received during the reporting period. Each complaint was investigated by Council to confirm
 the nature of the complaint and to identify suitable corrective actions. An assessment of odour
 management at Whytes Gully was completed and approved during this reporting period in
 accordance with EPA requirements.

7.2 Recommendations

Based on the conclusions of this report, the key recommendation is to address PRP (Stormwater and Leachate Management Improvement Works) milestones as follows:

- Stage 2B-2 Stormwater Infrastructure completion by 31st December 2025 (dependent on weather).
- Planning application for the Eastern Gully Stormwater Diversion (MOD 3) lodged by 1st October 2025.
- Trade waste sewer upgrade Design proposal submitted to Sydney Water for approval by December 2025.
- Stormwater ponds to be desilted within three months of the completion of Stage 2B-2 cell works.
- A report assessing the effectiveness of the Improvement Works to be submitted by 20th June 2026.

8 Limitations

This assessment has been undertaken in accordance with Environmental Protection Licence 5862.

The assessment may not identify contamination occurring in all areas of the site, or occurring after sampling was conducted. Subsurface conditions may vary considerably away from the sample locations where information has been obtained.

Natural disasters continued during this reporting period and influenced the effectiveness of environmental management practices on site.

9 References

- Australian Water Quality Guidelines (2020)
- Australian Standards (1999), AS 4482.2-1999 Guide to the Sampling and Investigation of Potentially Contaminated Soil - Volatile Substances, 1999
- Golder Associates (2012), Geotechnical Investigation, Whytes Gully Landfill, 2012
- Golder Associates (2014), Landfill Environmental Management Plan, Whytes Gully Landfill, 2014.
- NEPC (2013), National Environment Protection (Assessment of Site Contamination) Measure 2013.
- NHMRC (2014), Australian Drinking Water Guidelines, 2014
- NSW EPA (1996), NSW Environmental Guidelines: Solid Waste Landfills, 1996 NSW EPA (2013), Requirements for publishing pollution monitoring data, 2013 NSW EPA (2015), Asbestos and Waste Tyre Guidelines, 2015
- NSW EPA (2016), Environmental Guidelines: Solid Waste Landfills (Second Edition), 2016
 NSW EPA (2017), Guidelines for the NSW Site Auditor Scheme (3rd Edition), 2017
- NSW DPI (1985), 1:100,000 geological map Wollongong-Port Hacking, 1985 Sydney Water (2017), Consent to Discharge Industrial Trade Wastewater, 2017
- US EPA (2000), Guidance for the Data Quality Objectives Process and Data Quality Objectives Process for Hazardous Waste Site Investigations, 2000.

APPENDICIES

Appendix A

Figure 1: Locality Plan



Figure 2: Site Aerial Plan



Figure 3: Groundwater Sampling Locations

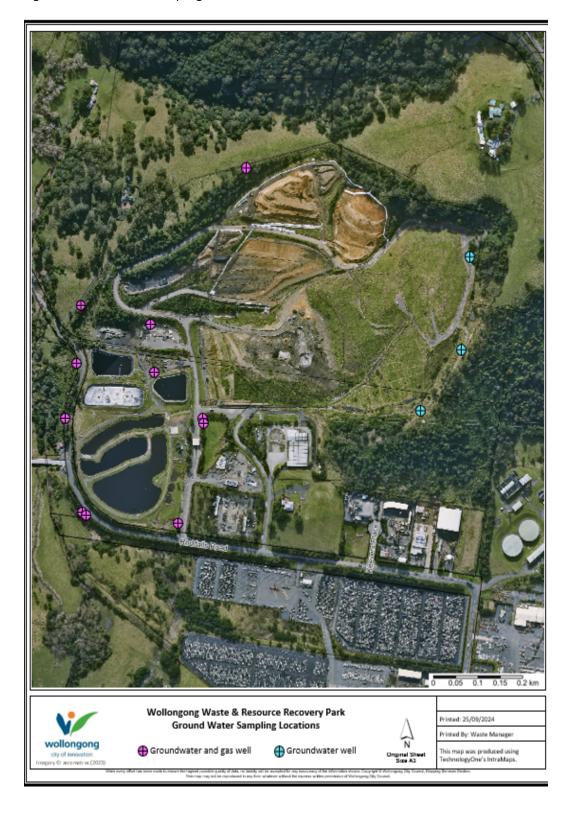


Figure 4: Wastewater and Leachate Sampling Locations

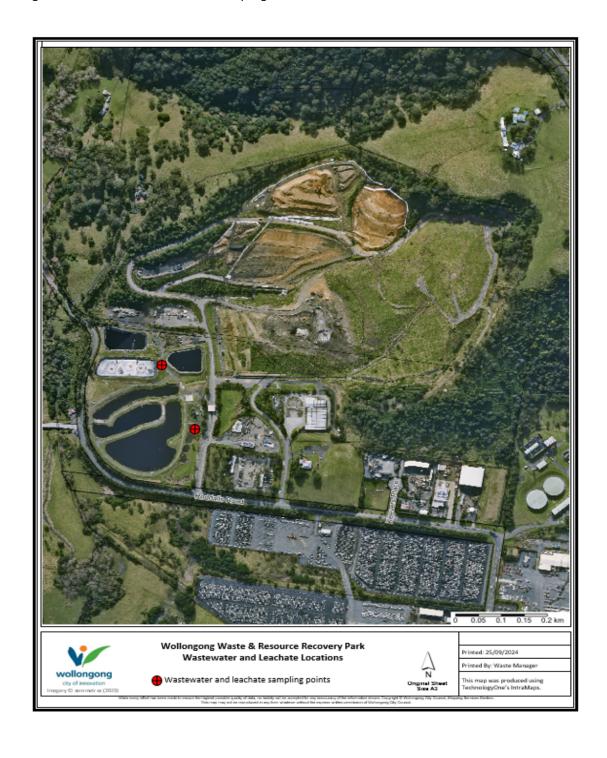


Figure 5: Landfill Gas Monitoring Locations



Figure 6: Dust Monitoring Locations



Appendix B

Table 1: Groundwater Results 2024/25 Reporting Period

	•	Akalinity (as calcium carbonate)	Aluminium	Ammonia	Arsenic	Barium	Benzene	Cadmium	Calcium	Chloride	Chromium (hexavalent)	Chromium (Total)	Cobalt	Conductivity	Copper	Depth	Ethylbenzene	Huoride	Lead
Un	its	mg/L	mg/L	mg/L	mg/L	mg/L	μg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	μS/cm	mg/L	Meters	μg/L	mg/L	mg/l
Site Name	Sample Date																		
(Point 5) -	20/08/2024	894		0.03					287	1020						4.40			
GABH02	20/11/2024	1010		0.04					313	1110						4.78			
	17/02/2025	1020	4.81	0.02	<0.001	0.028	<1	<0.0001	315	1060	<0.01	0.003	0.003		0.005	4.65	<2	0.6	0.002
	14/05/2025	952		0.02					216	1100				5320		4.55			
(Point 9) -	20/08/2024	114		0.09					26	14						9.68			
GMW102	20/11/2024	591		0.02					212	435						8.14			
	17/02/2025	546	4.69	0.02	0.001	0.078	<1	<0.0001	192	354	<0.01	0.011	0.008		0.016	7.77	<2	0.5	0.008
(Point 10) -	20/08/2024	422		0.04					134	171						7.55			
GMW103	20/11/2024	478		0.01					122	245						7.61			
	17/02/2025	427	1.70	0.02	<0.001	0.016	<1	<0.0001	126	211	<0.01	0.002	0.003		0.007	7.67	<2	0.4	0.004
	14/05/2025	437		<0.01					121	205				1540		7.40			
(Point 11) -	20/08/2024	243		0.05					40	129						6.54			
GMW104	20/11/2024	410		0.05					59	134						7.49			
	17/02/2025	229	5.15	0.11	<0.001	0.019	<1	<0.0001	34	106	<0.01	0.002	0.004		0.009	7.12	<2	4.9	0.003
	14/05/2025	114		0.03					20	52				488		6.58			
(Point 12) -	20/08/2024	34		<0.01					7	38						10.04			
GMW105	20/11/2024	35		0.01					6	39						11.0			
	17/02/2025	40	2.31	<0.01	<0.001	0.011	<1	<0.0001	6	32	<0.01	<0.001	<0.001		0.004	11.0	<2	0.4	<0.00
	14/05/2025	34		0.02					4	24				181		10.70			
(Point 14) -	20/08/2024	217		0.11					42	176						2.30			
GMW108S	20/11/2024	408		0.14					100	522						2.52			
	17/02/2025	214	2.39	0.10	<0.001	0.056	<1	<0.0001	29	128	<0.01	0.002	0.004		0.004	2.47	<2	0.4	0.001
	14/05/2025	158		0.08					17	47				505		2.48			
(Point 15) -	20/08/2024	390		0.37					156	586						1.76			
GMW108D	20/11/2024	459		0.58					136	575						2.05			
	17/02/2025	320	8.85	0.17	0.001	0.133	<1	0.0001	92	391	<0.01	0.006	0.012		0.025	2.02	<2	0.3	0.008
	14/05/2025	295		0.17					121	427				1960		2.03			
(Point 16) -	20/08/2024	309		0.69					103	249						3.30			
GMW109S	20/11/2024	297		0.53					106	362						3.55			
	17/02/2025	290	7.05	0.67	0.002	0.244	<1	0.0003	122	400	<0.01	0.011	0.039		0.031	3.42	2	0.1	0.013
	14/05/2025	290		0.63					132	381				1860		3.17			
(Point 17) -	20/08/2024	572		<0.01					207	805						3.88			
GMW110	20/11/2024	630		0.10					196	864						4.07			
	17/02/2025	628	0.80	<0.01	<0.001	0.004	<1	<0.0001	211	845	<0.01	<0.001	<0.001		0.003	3.92	2	0.4	<0.00
	14/05/2025	577		<0.01					212	810				4000		3.85			
(Point 18) -	20/08/2024	568		0.14					72	310				.000		6.34			
GMW111	20/11/2024	418		0.09					36	150						6.39			
G	17/02/2025	208	24.9	0.28	0.002	0.166	<1	0.0001	19	22	<0.01	0.013	0.012		0.033	6.46	<2	0.3	0.017
	14/05/2025	255		0.78	5.552	300		3.000	23	41	0.0.	0.0.0	3.0.2	654	3.000	6.38	_	0.0	5.517
(Point 19) -	20/08/2024	207		0.13					116	505				-31		2.81			
GMW109D	20/11/2024	226		0.11					108	566						3.05			
	17/02/2025	224	0.30	<0.01	<0.001	0.169	<1	<0.0001	118	576	<0.01	<0.001	0.002		<0.001	3.05	<2	0.4	<0.00
	14/05/2025	209	0.00	0.12	0.001	5. 105		0.0001	121	510	-0.01	0.001	3.00Z	2020	0.001	2.88	*-	0.7	-5.50
(Point 20) -	20/08/2024	535		0.32					98	640						2.40			
(1 OH (20) = BH6	20/11/2024	645		0.18					112	778						2.47			-
DI IO	17/02/2025	660	1.11	0.18	0.003	0.179	<1	<0.0001	163	901	<0.01	0.002	0.012		0.004	2.32	<2	0.7	0.004
	14/05/2025	618	1.11	0.28	5.005	5.175	- 1	-0.0001	164	840	-0.01	0.002	0.012	4140	3.004	2.32	~	0.7	0.00

Table 2 – Stormwater Results 2024/25 Reporting Period

		Alkalinity (as calcium carbonate)	Ammonia	Calcium	Chloride	Conductivity	Dissolved Oxygen	Filterable iron	Huoride	Magnesium	Nitrate as N	pН	Potassium	Sodium	Sulfate	Temperature	Total organic carbon	Total Phenolics	Total suspended solids
nits		mg/L	mg/L	mg/L	mg/L	μS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	pН	mg/L	mg/L	mg/L	℃	mg/L	mg/L	mg/L
	Sample Date					000				ļ	4.00				- 10			0.05	
Point 1)	07/06/2024	127	3.36	26	24	283	8.72	0.07	0.3	11	1.00	7.8	9	34	10	14.4	15	<0.05	235
	08/06/2024	178	10.5	24	56	626	7.90	0.10	0.3	12	0.85	7.7	19	66	12	13.4	28	<0.05	228
	09/06/2024	186	11.8	25	74	673	7.76	0.24	0.3	12	<0.01	8.0	20	72	12	14.0	23	<0.05	186
	10/06/2024	219	13.7	26	80	780	7.15	0.09	0.4	13	<0.01	8.2	23	84	13	13.9	18	<0.05	104
	11/06/2024	231	15.2	29	89	848	8.26	0.10	0.3	16	<0.01	8.1	30	105	13	13.0	27	<0.05	77
	12/06/2024	244	16.2	28	110	909	8.52	0.10	0.3	16	<0.01	8.1	32	106	13	12.8	26	<0.05	68
	04/07/2024	265	18.4	31	130		11.2	0.06	0.3	18	2.08	8.6	34	127	16	14.1	38	<0.05	12
	05/07/2024	260	17.8	35	127		11.9	0.06	0.3	19	1.10	8.6	33	128	15	13.0	37	<0.05	11
	09/07/2024	306	18.7	34	135		11.9	<0.05	0.3	19	4.98	8.8	34	139	16	14.2	40	<0.05	21
	10/07/2024	204	15.8	47	232		8.01	0.17	0.3	26	11.0	7.8	43	153	21	15.3	36	<0.05	24
	02/12/2024	235	0.39	28	131		7.32	<0.05	0.6	20	1.38	8.3	19	126	27	29.9	27	<0.05	78
	03/12/2024	219	0.44	31	141		7.06	<0.05	0.4	20	1.52	8.4	20	134	25	26.0	29	<0.05	56
	04/12/2024	216	0.37	28	138		7.41	<0.05	0.5	19	1.55	8.4	18	122	28	24.7	23	<0.05	70
	05/12/2024	220	0.25	29	136		7.99	<0.05	0.6	19	1.68	8.5	18	128	28	25.8	28	<0.05	91
	06/12/2024	202	0.32	30	136		7.69	<0.05	0.4	20	1.43	8.2	19	129	28	25.6	15	<0.05	84
	16/01/2025	233	0.11	29	126		24.0	<0.05	0.5	14	0.16	8.7	15	113	29	7.1	22	<0.05	52
	17/01/2025	210	0.23	26	127		7.00	<0.05	0.5	16	0.40	8.4	14	113	31	22.8	9	<0.05	97
	18/01/2025	205	0.33	31	118		7.69	<0.05	0.6	19	0.45	8.2	17	123	31	20.8	15	<0.05	121
	19/01/2025	199	0.41	30	123		7.87	<0.05	0.6	19	0.48	8.3	17	122	31	21.5	16	<0.05	92
	20/01/2025	204	0.40	28	108		7.28	<0.05	0.6	19	0.49	8.2	17	116	31	23.2	22	<0.05	96
	21/01/2025	204	0.37	28	110		7.53	<0.05	0.6	17	0.45	8.3	15	118	30	22.0	12	<0.05	104
	23/01/2025	206	0.26	28	108		8.20	<0.05	0.5	20	0.52	8.4	17	115	31	23.3	20	<0.05	67
	24/01/2025	208	0.28	25	115		7.97	<0.05	0.6	18	0.49	8.4	15	115	30	23.5	14	<0.05	20
	29/01/2025	206	0.32	28	113		7.10	<0.05	0.5	18	0.61	8.2	14	114	30	25.0	17	<0.05	22
	30/01/2025	205	0.34	28	111		7.70	<0.05	0.6	17	0.51	8.2	14	112	30	23.6	13	<0.05	18
	31/01/2025	207	0.36	28	108		7.72	<0.05	0.5	16	0.50	8.2	13	116	34	23.7	18	<0.05	13
	11/02/2025	223	0.41	32	122		7.86	<0.05	0.6	19	0.15	8.4	16	119	34	26.1	15	<0.05	10
	12/02/2025	220	0.41	30	125		7.70	<0.05	0.5	19	0.16	8.4	14	118	39	24.8	11	<0.05	6
	01/04/2025	194	0.66	27	109		8.32	<0.05	0.6	16	0.40	8.1	11	108	37	20.8	17	<0.05	48
	02/04/2025	189	0.76	30	104		7.83	<0.05	0.6	19	0.62	8.1	12	119	37	19.2	16	<0.05	18
	03/04/2025	217	0.73	31	105		7.65	<0.05	0.6	17	0.45	8.1	12	112	66	21.3	16	<0.05	5
	04/04/2025	190	0.73	29	103		8.07	<0.05	0.5	18	0.45	8.1	12	110	37	20.8	15	<0.05	15
	22/05/2025	170	0.70	30	69	589	9.66	0.13	0.4	16	1.63	8.1	8	76	36	16.3	12	<0.05	283
	23/05/2025	95	0.64	23	25	296	8.55	0.35	0.2	13	1.51	7.6	6	34	15	17.7	9	<0.05	622
	24/05/2025	102	0.83	24	24	300	8.79	0.33	0.3	14	1.35	8.0	7	32	13	17.7	10	<0.05	580
	25/05/2025	102	0.88	24	23	303	9.00	0.33	0.3	13	1.33	8.0	7	32	14	15.5	9	<0.05	485
	26/05/2025	105	0.92	25	24	313	8.85	0.26	0.3	13	1.32	8.0	7	33	14	14.9	19	<0.05	499
	27/05/2025	112	0.94	25	24	318	9.61	0.24	0.3	12	1.27	8.1	6	35	15	15.0	22	<0.05	357

		Alkalinity (as calcium carbonate)	Ammonia	Calcium	Chloride	Conductivity	Dissolved Oxygen	Filterable iron	Huoride	Magnesium	Nitrate as N	pН	Potassium	Sodium	Sulfate	Temperature	Total organic carbon	Total Phenolics	Total suspended solids
Jnits		mg/L	mg/L	mg/L	mg/L	μS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	рН	mg/L	mg/L	mg/L	°C	mg/L	mg/L	mg/L
Site Name	Sample Date																		
(Point 33)	07/06/2024	44	0.51	9	12	105	9.96	0.26	<0.1	4	0.54	7.3	3	14	7	14.0	8	<0.05	122
	08/06/2024	58	0.67	13	21	210	9.81	0.23	0.1	6	0.35	7.3	4	19	12	12.9	6	<0.05	31
	09/06/2024	68	0.90	16	24	247	9.84	0.21	0.1	7	0.23	7.4	4	23	14	12.8	5	<0.05	22
	10/06/2024	67	0.41	16	25	241	10.0	0.08	0.2	7	0.33	7.5	4	21	14	12.6	3	<0.05	11
	11/06/2024	71	0.53	18	26	257	10.6	<0.05	0.1	9	0.80	7.4	4	26	15	11.2	4	<0.05	10
	12/06/2024	91	2.04	20	38	351	9.84	0.06	0.1	10	0.36	7.6	8	34	16	11.6	6	<0.05	13
	04/07/2024	77	0.03	26	40		10.6	<0.05	0.1	12	0.15	7.6	6	40	20	12.8	2	<0.05	12
	05/07/2024	55	0.06	19	29		10.5	0.15	<0.1	8	0.50	7.4	3	21	13	12.0	5	<0.05	31
	09/07/2024	93	0.09	25	34		9.76	0.05	0.1	10	0.26	7.5	3	30	18	13.9	4	<0.05	7
	10/07/2024	118	2.52	29	59		9.06	0.12	0.2	12	2.10	7.6	9	51	20	13.5	9	<0.05	6
	02/12/2024	92	0.05	19	35		6.45	<0.05	0.2	8	0.27	7.5	4	33	14	25.9	8	<0.05	6
	03/12/2024	78	0.05	20	33		5.89	<0.05	0.1	8	0.17	7.4	4	32	12	24.6	7	<0.05	8
	04/12/2024	73	0.03	19	27		5.63	0.05	0.1	7	0.10	7.4	3	26	9	23.9	6	<0.05	8
	05/12/2024	72	0.03	17	22		5.07	0.06	0.1	7	0.07	7.4	2	23	8	24.1	5	<0.05	13
	06/12/2024	84	0.06	22	28		4.16	0.10	0.1	9	0.06	7.3	3	29	10	24.9	4	<0.05	13
	16/01/2025	94	0.05	20	38		20.6	0.09	0.2	6	0.36	7.5	4	33	18	6.8	10	<0.05	24
	17/01/2025	76	0.03	17	33		6.68	0.10	0.2	6	0.18	7.4	4	34	15	20.8	9	<0.05	14
	18/01/2025	74	0.04	19	30		6.89	0.05	0.2	7	0.11	7.2	4	32	14	19.4	5	<0.05	12
	19/01/2025	77	0.04	24	29		6.94	<0.05	0.1	8	0.08	7.4	4	30	16	20.9	4	<0.05	8
	20/01/2025	73	0.03	19	26		6.71	<0.05	0.1	8	0.05	7.2	3	27	13	21.1	5	<0.05	6
	21/01/2025	74	0.04	18	26		5.22	0.06	0.1	6	0.04	7.3	2	26	11	21.4	4	<0.05	11
	23/01/2025	98	0.04	25	34		3.66	0.11	0.2	10	0.04	7.3	3	33	13	23.4	5	<0.05	9
	24/01/2025	101	0.05	22	33		5.60	0.07	0.2	10	0.14	7.3	3	32	15	21.1	6	<0.05	6
	29/01/2025	102	0.04	23	38		3.68	0.07	0.2	10	0.07	7.3	4	37	13	23.4	6	<0.05	6
	30/01/2025	158	0.06	28	63		4.88	<0.05	0.4	14	0.23	7.6	8	79	24	22.6	10	<0.05	14
	31/01/2025	155	0.07	28	61		4.75	<0.05	0.4	12	0.24	7.4	7	76	22	22.5	4	<0.05	23
	11/02/2025	116	0.04	30	41		4.94	0.14	0.2	12	0.04	7.5	4	37	15	23.1	6	<0.05	5
	12/02/2025	94	0.02	22	34		4.55	0.12	0.2	8	0.03	7.2	3	35	13	22.6	5	<0.05	<5
	17/02/2025	79	0.03	17	24		4.65	0.15	0.1	6	0.01	7.4	2	24	8	21.4	4	<0.05	<5
	01/04/2025	82	0.06	21	34		8.06	0.05	0.2	8	0.18	7.5	4	36	17	19.3	6	<0.05	9
	02/04/2025	81	0.05	20	32		7.13	<0.05	0.2	9	0.36	7.5	3	33	16	18.5	5	<0.05	<5
	03/04/2025	101	0.05	21	32		7.02	<0.05	0.2	8	0.13	7.5	3	34	15	18.8	5	<0.05	<5
	04/04/2025	112	0.05	24	38		6.71	<0.05	0.2	10	0.18	7.5	4	44	17	19.0	5	<0.05	<5
	22/05/2025	57	0.06	15	26	209	8.49	0.31	0.1	6	1.09	7.2	4	22	14	16.1	9	<0.05	86
	23/05/2025	19	0.06	8	13	110	8.18	0.40	<0.1	4	0.49	6.8	6	10	<1	17.9	10	<0.05	454
	24/05/2025	49	0.06	14	26	206	8.98	0.10	0.1	7	0.63	7.3	3	19	12	16.1	6	<0.05	56
	25/05/2025	59	0.07	18	28	235	9.82	0.13	0.1	8	0.52	7.5	5	20	13	13.4	6	<0.05	39
	26/05/2025	64	0.08	18	27	240	9.74	0.06	0.1	9	0.46	7.4	4	21	14	13.0	6	<0.05	43
	27/05/2025	67	0.06	19	29	246	9.28	0.07	0.1	9	0.40	7.4	3	24	15	15.0	6	<0.05	36

		Alkalinity (as calcium carbonate)	Ammonia	Calcium	Chloride	Conductivity	Dissolved Oxygen	Filterable iron	Huoride	Magnesium	Nitrate as N	pН	Potassium	Sodium	Sulfate	Temperature	Total organic carbon	Total Phenolics	Total suspended solids
Units		mg/L	mg/L	mg/L	mg/L	μS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	рН	mg/L	mg/L	mg/L	°C	mg/L	mg/L	mg/L
Site Name	Sample Date																		
(Point 34)	07/06/2024	40	<0.01	9	13	99	10.8	0.22	<0.1	4	0.39	7.4	3	13	8	14.0	6	<0.05	92
	08/06/2024	56	0.02	14	23	215	11.0	0.13	0.1	6	0.29	7.6	4	18	15	13.4	4	<0.05	20
	09/06/2024	68	0.02	19	28	261	10.9	0.06	0.1	8	0.22	7.6	2	22	19	13.3	3	<0.05	11
	10/06/2024	77	0.01	22	31	293	11.1	<0.05	0.1	9	0.23	7.7	2	24	21	12.8	3	<0.05	9
	11/06/2024	83	0.01	26	35	315	11.4	<0.05	0.1	12	0.18	7.7	3	30	22	11.7	3	<0.05	6
	12/06/2024	86	<0.01	25	36	328	10.6	0.05	<0.1	12	0.16	7.7	3	28	24	12.3	2	<0.05	<5
	04/07/2024	87	<0.01	29	44		12.2	<0.05	0.1	12	0.08	8.0	5	33	24	12.7	4	<0.05	16
	05/07/2024	67	<0.01	23	33		11.4	0.16	0.1	10	0.28	7.7	3	24	17	11.4	5	<0.05	29
	09/07/2024	106	0.02	33	42		11.7	0.05	0.1	13	0.03	7.8	2	34	25	13.1	2	<0.05	6
	10/07/2024	101	0.02	34	48		13.2	0.06	0.1	14	0.02	8.0	3	35	27	12.7	2	<0.05	<5
	02/12/2024	114	0.03	30	38		7.98	<0.05	0.2	13	0.34	7.4	4	31	25	24.7	5	<0.05	<5
	03/12/2024	114	0.01	36	40		7.33	<0.05	0.2	14	0.22	7.5	3	33	23	22.7	4	<0.05	<5
	04/12/2024	125	0.01	38	42		8.05	<0.05	0.2	15	0.15	7.6	3	34	27	22.7	4	<0.05	<5
	05/12/2024	129	<0.01	38	39		8.43	<0.05	0.2	17	0.09	7.5	4	34	27	22.2	4	<0.05	8
	06/12/2024	136	0.02	41	44		5.89	<0.05	0.1	17	0.06	7.3	5	36	26	22.3	2	<0.05	8
	16/01/2025	74	<0.01	21	28		20.2	0.20	0.2	6	0.54	7.6	3	21	17	8.2	10	<0.05	18
	17/01/2025	105	0.01	29	35		7.91	0.06	0.2	11	0.40	7.6	3	30	24	18.6	5	<0.05	14
	18/01/2025	122	0.02	40	44		7.63	<0.05	0.2	15	0.27	7.5	4	37	26	18.4	3	<0.05	<5
	19/01/2025	123	0.02	40	42		8.19	0.05	0.2	15	0.16	7.7	4	37	27	19.1	3	<0.05	<5
	20/01/2025	129	0.04	37	41		8.31	<0.05	0.2	17	0.10	7.5	4	35	25	20.2	4	<0.05	<5
	21/01/2025	136	0.02	40	43		7.51	<0.05	0.2	14	0.07	7.4	3	37	51	19.0	3	<0.05	<5
	23/01/2025	149	0.01	44	45		7.53	<0.05	0.2	19	0.01	7.4	4	37	26	21.6	3	<0.05	6
	24/01/2025	138	0.02	34	41		8.22	<0.05	0.2	16	0.16	7.6	4	36	25	19.7	8	<0.05	8
	29/01/2025	156	<0.01	42	47		6.90	<0.05	0.2	17	0.02	7.4	4	37	24	21.9	3	<0.05	<5
	30/01/2025	156	0.02	44	42		5.48	<0.05	0.1	17	0.02	7.2	4	37	24	21.2	7	<0.05	<5
	31/01/2025	158	0.02	44	43		6.04	<0.05	0.2	16	0.04	7.2	3	37	27	21.3	3	<0.05	<5
	11/02/2025	176	0.13	53	48		8.13	<0.05	0.2	20	0.03	7.7	5	40	33	24.6	2	<0.05	<5
	12/02/2025	176	0.02	48	46		5.40	<0.05	0.2	19	0.05	7.3	4	39	30	21.4	1	<0.05	53
	17/02/2025	171	0.05	38	49		6.28	<0.05	0.2	17	0.01	7.7	3	38	28	19.2	2	<0.05	<5
	01/04/2025	102	0.03	31	35		9.19	<0.05	0.2	11	0.33	7.6	3	29	23	18.2	4	<0.05	<5
	02/04/2025	114	<0.01	36	37		8.55	<0.05	0.2	15	0.24	7.7	3	30	24	17.0	4	<0.05	<5
	03/04/2025	146	0.02	38	37		8.81	<0.05	0.2	14	0.18	7.7	3	32	23	17.7	3	<0.05	<5
	04/04/2025	131	0.02	41	37		8.91	<0.05	0.2	16	0.14	7.7	3	34	24	17.9	3	<0.05	<5
	22/05/2025	57	0.01	16	27	215	9.74	0.29	0.1	6	0.76	7.3	3	20	15	16.0	9	<0.05	46
	23/05/2025	15	0.02	6	11	87	9.45	0.48	<0.1	3	0.31	7.0	4	9	<1	17.7	9	<0.05	466
	24/05/2025	55	0.01	17	29	227	9.66	0.13	0.1	8	0.36	7.6	3	20	13	16.0	5	<0.05	16
	25/05/2025	66	0.01	20	31	267	10.3	0.10	0.1	10	0.29	7.6	3	22	16	13.7	3	<0.05	20
	26/05/2025	81	0.02	24	34	299	10.2	0.06	0.1	12	0.23	7.6	3	25	17	13.1	4	<0.05	11
	27/05/2025	90	0.01	26	35	319	9.75	<0.05	0.1	12	0.19	7.6	3	26	25	14.6	4	<0.05	<5

Table 3: Trade Waste Results 2024/25 Reporting Period

Î		Ammonia	Biochemical Oxygen Demand	Electrical Conductivity @25°C	Temperature	Total Dissolved Solids (Calc.)	Total suspended solids	Volume Discharged	Meter Reading (start)	Meter Reading (finish)	pH (start)	pH (finish)
Units		mg/L	mg/L	µУст	°C	mg/L	mg/L	kL	kL	kL	pН	pН
Ste Name	Sample Date											
11205	21/06/2024	55.2	121	4200		2730	23	<0.001	0	0		
Comp -	12/07/2024	32.8	41	4760		3090	22	275	284861.20	285136.11		
Composite	06/08/2024	36.4	128	5570		3620	75	296	291833.15	292129.54		
	28/08/2024	40.0	96	5710		3710	66	275	298242.18	298517.56		
	18/09/2024	7.0	75	6660		4330	64	272	304062.60	304334.89		
	09/10/2024	36.4	82	5910		3840	23	335	311149.24	311484.14		
	31/10/2024	8.4	63	9110		5920	43	199	317661.59	317860.58		
	20/11/2024	66.6	141	8400		5460	33	180	320908.38	321088.32		
	17/12/2024	13.7	48	5030		3270	28	328	327019.22	327347.34		
	10/01/2025	14.6	77	8220		5340	33	173	333146.53	333319.36		
	31/01/2025	5.0	40	5550		3610	38	202	337539.31	337741.38		
	19/02/2025	14.8	74	7410		4820	118	151	341139.06	341290.11		
	14/03/2025	17.6	69	7650		4970	20	161	344082.64	344244.09		
	08/04/2025	19.9	55	4690		3050	32	180.44	347696.46	347876.90		
	22/05/2025	17.9	32	4690		3050	28	247	357573.39	357820.04		
11205 Dis -	20/06/2024										8.0	
Discrete	11/07/2024										7.7	
Start	05/08/2024										7.9	
	27/08/2024										7.6	
	17/09/2024										8.1	
	08/10/2024										7.7	
	30/10/2024										7.4	
	19/11/2024										7.8	
	16/12/2024										7.8	
	09/01/2025										8.0	
	30/01/2025										7.3	
	18/02/2025										7.4	
	13/03/2025										7.7	
	07/04/2025										7.6	
	21/05/2025										7.4	
11205 Dis	21/06/2024				15							7.9
fin -	12/07/2024				12							8.0
Discrete	06/08/2024				15							7.9
Finish	28/08/2024				20							7.7
	18/09/2024				18							7.7
	09/10/2024				15							8.1
	31/10/2024				24							7.4
	20/11/2024				24							7.4
	17/12/2024				36							7.9
	10/01/2025				23							7.4
	31/01/2025				26							7.2
	19/02/2025				26							7.2
	14/03/2025				22							7.6
	08/04/2025				20							7.5
	22/05/2025				18							7.3
	00 _00_0	,										

Table 4: Subsurface Gas Results 2024/25 Reporting Period

			Bal	Baro	OH4	CH4 Peak	Φ	002	CO2 Peak	Flow	H2S	Relative Pressure	SWL	Well Depth
	Units		%	hPa	%v/v	%/v	ppm	%v/v	%v/v	l/h			Meters	Meter
Monitoring Point ID	Sample ID	Sample Date												
21	LFGMW1	29/05/2024	79.2	0.00	<0.1	<0.1	0	0.1	0.1	<0.1	0	1023	2.61	10.2
		26/06/2024	79.3	1012	<0.1	<0.1	0	<0.1	0.2	0.3	0	0.05	2.23	10.2
		15/07/2024	78.5	1005	<0.1	<0.1	0	0.1	0.1	<0.1	0	-0.02	2.27	10.2
		20/08/2024	78.6	1013	<0.1	<0.1	1	<0.1	0.2	0.3	0	-0.02	2.63	10.2
		18/09/2024	78.8	1015	<0.1	<0.1	0	0.1	0.1	<0.1	0	0.05	3.09	10.2
		16/10/2024	79.0	1015	<0.1	<0.1	1	<0.1	0.1	0.1	0	0.00	3.14	10.2
		11/11/2024	78.8	1019	<0.1	<0.1	1	0.1	0.1	<0.1	0	-0.05	3.44	10.2
		17/12/2024	78.7	1010	<0.1	<0.1	1	<0.1	0.1	0.4	0	0.02	3.26	10.2
		22/01/2025	79.0	1002	<0.1	<0.1	0	0.1	0.1	<0.1	0	0.03	3.18	10.2
		18/02/2025	79.5	1006	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.03	3.38	10.2
		19/03/2025	79.3	1013	<0.1	<0.1	0	<0.1	<0.1	0.0	0	-0.02	3.56	10.2
		28/05/2025	78.9	1013	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	0.03	3.00	10.2
22	LFGMW2	29/05/2024	79.0	0.02	<0.1	<0.1	0	0.1	0.1	<0.1	0	1023	8.87	10.3
		26/06/2024	79.1	1012	<0.1	<0.1	1	0.1	2.4	0.3	0	-0.02	9.18	10.3
		15/07/2024	78.5	1005	<0.1	<0.1	0	0.1	0.1	<0.1	0	0.00	8.90	10.3
		20/08/2024	78.6	1013	<0.1	<0.1	1	0.1	1.6	0.2	0	0.00	10.11	10.3
		18/09/2024	79.3	1015	<0.1	<0.1	0	0.1	0.1	<0.1	0	0.02	DRY	10.3
		16/10/2024	79.1	1015	<0.1	<0.1	0	<0.1	1.8	0.3	0	0.03	DRY	10.3
		11/11/2024	78.9	1019	<0.1	<0.1	1	0.1	0.1	<0.1	0	-0.05	DRY	10.3
		17/12/2024	78.7	1010	<0.1	<0.1	1	<0.1	0.4	0.3	0	0.05	DRY	10.6
		22/01/2025	79.6	1002	<0.1	<0.1	0	0.2	0.3	<0.1	0	0.05	DRY	10.3
	18/02/2025	79.7	1006	<0.1	<0.1	<0.1 0	0.1	0.1	<0.1	⊲ 0.1	0.02	DRY	10.3	
		19/03/2025 28/05/2025	79.4 79.2	1013 1011	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 0.1	<0.1 0.1	0.0 <0.1	<0.1	-0.03 0.00	DRY 8.21	10.3 10.3
22 15	LECTAVA	29/05/2024	79.2	-0.03	<0.1	<0.1	0.1	2.4	2.4	<0.1	0.1	1019	5.19	10.5
23 LFG	LGIVIVS	26/06/2024	79.2	1012	40.1	<0.1	0	2.4	2.4	0.1	0	0.05	4.59	10.5
		15/07/2024	78.0	998	<0.1	<0.1	0	3.3	3.3	<0.1	0	0.05	3.98	10.5
		20/08/2024	78.2	1013	<0.1	<0.1	0	1.9	1.9	0.2	0	-0.02	5.40	10.5
		18/09/2024	78.3	1015	<0.1	<0.1	0	2.7	2.7	<0.1	0	0.02	5.73	10.5
		16/10/2024	79.1	1015	<0.1	<0.1	0	1.9	1.9	0.4	0	-0.05	5.72	10.5
		11/11/2024	78.3	1019	<0.1	<0.1	1	2.6	2.6	<0.1	0	0.03	5.73	10.5
		17/12/2024	79.6	1010	<0.1	<0.1	0	<0.1	3.0	0.2	0	0.00	8.30	10.5
		22/01/2025	79.7	1002	<0.1	<0.1	0	3.7	3.7	0.1	0	-0.02	5.09	10.5
		18/02/2025	79.6	1006	<0.1	<0.1	<0.1	1.6	1.6	<0.1	<0.1	0.03	5.70	10.5
		19/03/2025	79.0	1013	<0.1	<0.1	0	3.2	3.2	0.0	0	0.02	5.66	10.5
		28/05/2025	79.3	1007	<0.1	<0.1	<0.1	2.2	2.2	<0.1	<0.1	0.02	4.92	10.5
24	LFGMW4	29/05/2024	79.4	0.05	<0.1	<0.1	0	0.4	0.4	<0.1	0	1019	8.23	9.27
		26/06/2024	80.4	1012	<0.1	<0.1	0	1.7	8.4	0.4	0	0.02	7.82	9.27
		15/07/2024	83.1	998	<0.1	<0.1	0	10.6	10.6	0.3	0	-0.02	7.79	9.27
		20/08/2024	79.6	1013	<0.1	<0.1	1	1.6	1.8	0.2	0	0.03	7.74	9.15
		18/09/2024	79.6	1015	<0.1	<0.1	0	0.4	1.1	<0.1	0	0.00	8.05	9.27
		16/10/2024	80.0	1015	<0.1	<0.1	0	0.8	2.1	0.3	0	0.05	7.83	9.27
		11/11/2024	79.4	1019	<0.1	<0.1	1	1.0	1.2	<0.1	0	0.03	8.27	9.27
		17/12/2024	79.3	1010	<0.1	<0.1	0	<0.1	8.5	0.3	0	0.00	7.95	9.2
		22/01/2025	79.5	1002	<0.1	<0.1	0	0.2	0.3	<0.1	0	0.05	7.40	9.2
		18/02/2025 19/03/2025	81.1	1006	<0.1 <0.1	<0.1 <0.1	< 0.1 0	2.4 0.6	2.5 0.6	<0.1 0.0	<0.1	0.03	8.25 7.88	9.2
		28/05/2025	79.8 79.2	1013 1007	<0.1	<0.1	<0.1	<0.1	0.6	<0.0	0 <0.1	0.02	7.88	9.2
25	I EC MAAG	29/05/2024						8.2						
25	GIVIVO	26/06/2024	84.5 84.9	0.03 1012	<0.1 <0.1	<0.1 <0.1	0	9.2	8.2 9.5	<0.1 0.3	0	1018 0.00	8.93 8.67	12.0 12.0
		15/07/2024	85.1	998	<0.1	<0.1	0	11.3	11.3	0.3	0	0.00	9.16	12.0
		20/08/2024	82.2	1014	<0.1	<0.1	1	9.1	9.1	0.1	0	-0.02	10.04	12.0
		18/09/2024	79.5	1015	<0.1	<0.1	0	9.0	9.0	<0.1	0	-0.02	10.56	12.0
		16/10/2024	79.5	1015	<0.1	<0.1	0	1.9	1.9	0.3	0	0.00	10.30	12.0
		11/11/2024	79.2	1019	<0.1	<0.1	0	5.4	5.4	<0.1	0	-0.02	11.20	12.0
		17/12/2024	81.7	1010	<0.1	<0.1	1	9.0	9.0	0.3	0	0.02	10.74	12.0
		22/01/2025	81.3	1002	<0.1	<0.1	0	9.7	9.7	<0.1	0	0.07	10.73	12.0
		18/02/2025	83.3	1006	<0.1	<0.1	<0.1	7.3	7.3	<0.1	<0.1	-0.05	11.20	12.0
		19/03/2025	80.2	1013	<0.1	<0.1	1	5.0	5.0	0.0	0	0.02	11.40	12.0
		28/05/2025	89.9	1007	<0.1	<0.1	<0.1	10.4	10.4	<0.1	<0.1	0.02	8.48	12.0

	l lnite		Bal %	Baro	0H4	CH4 Peak	00	002	CO2 Peak	Flow	H2S	Relative Pressure	SWL	Well Dept
	Units		%	hPa	%v/v	%v/v	ppm	%v/v	%v/v	l/h			Meters	Mete
Monitoring Point ID	Sample ID	Sample Date												
26	LFGMW6	29/05/2024	79.3	0.05	<0.1	<0.1	0	0.6	0.6	<0.1	0	1020	DRY	10.8
		26/06/2024	81.9	1012	<0.1	<0.1	1	5.2	5.2	0.5	0	0.05	DRY	10.8
		15/07/2024	82.7	998	<0.1	<0.1	0	6.5	6.5	<0.1	0	0.05	DRY	10.8
		20/08/2024	80.2	1014	<0.1	<0.1	1	2.1	2.1	0.5	0	0.02	DRY	10.8
		18/09/2024	81.4	1015	<0.1	<0.1	0	4.3	4.3	<0.1	0	0.02	DRY	10.8
		16/10/2024	80.0	1015	<0.1	<0.1	0	1.4	1.4	0.4	0	0.00	DRY	10.8
		11/11/2024 17/12/2024	79.6 79.5	1019 1011	<0.1 <0.1	<0.1 <0.1	0	1.8 <0.1	1.8 0.2	<0.1 0.1	0	-0.03 0.03	DRY DRY	10.8
		22/01/2025	82.7	1002	<0.1	40.1	0	6.5	6.5	<0.1	0	0.03	DRY	10.8
		18/02/2025	81.6	1002	<0.1	<0.1	<0.1	4.1	4.1	<0.1	40.1	-0.02	DRY	10.8
		19/03/2025	79.4	1016	<0.1	<0.1	0.1	0.3	0.3	0.0	0.1	0.02	DRY	10.8
		28/05/2025	79.2	1007	<0.1	<0.1	<0.1	0.3	0.3	<0.1	<0.1	0.07	DRY	10.8
27	LFGMW7	29/05/2024	79.1	0.00	<0.1	<0.1	0	0.6	0.6	<0.1	0	1020	6.73	12.3
<u>~1</u>	L GIVIVV/	26/06/2024	79.1	1012	<0.1	<0.1	0	0.0	0.6	0.3	0	0.02	6.52	12.3
		15/07/2024	78.3	998	<0.1	<0.1	0	0.2	0.3	<0.1	0	0.02	6.65	12.
		20/08/2024	79.4	1014	<0.1	<0.1	0	0.2	0.2	0.3	0	0.02	7.05	12.
		18/09/2024	78.9	1015	<0.1	<0.1	0	0.1	0.1	<0.1	0	0.00	7.38	12.
		16/10/2024	79.5	1015	<0.1	<0.1	0	0.5	0.5	0.4	0	-0.05	7.53	12.
		11/11/2024	78.8	1019	<0.1	<0.1	1	0.2	0.2	<0.1	0	0.02	7.83	12.
		17/12/2024	79.6	1011	<0.1	<0.1	0	0.2	0.4	0.3	0	0.07	7.66	12.
		22/01/2025	79.6	994	<0.1	<0.1	0	0.8	1.4	<0.1	0	0.00	7.65	12.
		18/02/2025	79.8	1006	<0.1	<0.1	<0.1	0.4	0.5	<0.1	<0.1	0.03	7.97	12.
		19/03/2025	79.4	1016	<0.1	<0.1	0	0.2	0.5	0.0	0	0.02	8.02	12.
		28/05/2025	79.2	1007	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	-0.02	7.28	12.
28	LFGMW8	29/05/2024	79.1	0.07	<0.1	<0.1	0	0.1	0.2	<0.1	0	1020	6.66	10.
		26/06/2024	79.5	1012	<0.1	<0.1	0	0.1	2.1	0.3	0	0.00	6.43	10.
		15/07/2024	78.3	998	<0.1	<0.1	0	0.1	0.1	<0.1	0	0.00	6.60	10.
		20/08/2024	79.3	1016	<0.1	<0.1	0	0.1	3.0	<0.1	0	0.02	7.55	10.
		18/09/2024	78.9	1015	<0.1	<0.1	0	0.3	0.3	<0.1	0	0.05	7.86	10.
		16/10/2024	79.5	1015	<0.1	<0.1	0	0.1	1.3	0.3	0	0.02	7.69	10.
		11/11/2024	78.7	1019	<0.1	<0.1	0	0.1	0.1	<0.1	0	0.02	7.92	10.
		17/12/2024	79.5	1011	<0.1	<0.1	0	<0.1	2.9	0.2	0	0.02	7.67	10.
		22/01/2025	79.6	994	<0.1	<0.1	0	0.1	0.1	<0.1	0	0.02	7.36	10.
		18/02/2025	79.8	1006	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	0.02	9.60	10.
		19/03/2025	79.4	1016	<0.1	<0.1	0	0.4	0.4	0.0	0	-0.03	7.92	10.
		28/05/2025	79.1	1007	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.05	6.65	10.
29	LFGMW9	29/05/2024	80.4	0.03	<0.1	<0.1	0	1.8	1.8	<0.1	0	1020	3.96	10.
		26/06/2024	79.9	1012	<0.1	<0.1	0	2.1	2.1	0.4	0	-0.03	4.46	10.
		15/07/2024	78.7	998	<0.1	<0.1	0	0.8	0.8	<0.1	0	-0.05	4.24	10.
		20/08/2024	78.4	1016	<0.1	<0.1	1	3.1	3.1	0.1	0	0.02	6.16	10.
		18/09/2024	78.6	1015	<0.1	<0.1	0	1.5	1.5	<0.1	0	0.00	6.43	10.
		16/10/2024	79.6	1015	<0.1	<0.1	0	1.3	1.6	0.3	0	0.02	6.42	10.
		11/11/2024	78.3	1019	<0.1	<0.1	0	2.4	24	<0.1	0	0.05	6.72	10.
		17/12/2024	79.7	1011	<0.1	<0.1	0	3.0	3.8	0.3 <0.1	0	0.00	6.60	10.
		22/01/2025 18/02/2025	80.8 79.8	994 1006	<0.1 <0.1	<0.1 <0.1	<0.1	1.7 3.1	1.7 3.1	<0.1 <0.1	0 <0.1	0.02	3.45 5.74	10. 10.
		19/03/2025	79.8 79.1	1016	<0.1	<0.1	0.1	3. I 4.8	4.8	0.0	<0.1 0	-0.03	6.42	10.
		28/05/2025	80.8	1007	<0.1	<0.1	<0.1	1.9	1.9	<0.0	40.1	0.03	2.17	10.
30	LFG	29/05/2024	81.6	0.07	<0.1	40.1	0.1	1.5	1.5	<0.1	0.1	1020	9.89	12.
50	MW10	26/06/2024	80.7	1012	<0.1	<0.1	0	1.4	1.5	0.3	0	0.00	9.56	12.
		15/07/2024	81.6	1005	<0.1	<0.1	0	0.9	0.9	<0.1	0	0.07	9.73	12.
		20/08/2024	79.1	1016	<0.1	<0.1	0	1.0	1.6	0.2	0	0.03	9.85	12.
		18/09/2024	80.3	1015	<0.1	<0.1	0	2.0	2.0	<0.1	0	-0.09	10.28	12.
		16/10/2024	80.1	1015	<0.1	<0.1	0	1.6	3.2	0.3	0	0.00	9.99	12
		11/11/2024	78.9	1019	<0.1	<0.1	0	2.8	2.8	<0.1	0	0.00	10.42	12.
		17/12/2024	79.8	1011	<0.1	<0.1	0	3.7	5.9	0.3	0	0.02	9.90	12.
		22/01/2025	81.9	994	<0.1	<0.1	1	3.7	3.7	<0.1	0	-0.02	9.97	12.
		18/02/2025	80.9	1006	<0.1	<0.1	<0.1	4.7	4.7	<0.1	<0.1	0.00	10.23	12.
		19/03/2025	79.2	1016	<0.1	<0.1	0	3.5	3.5	0.0	0	-0.02	10.40	12.
		28/05/2025	85.3	1007	<0.1	<0.1	<0.1	2.0	2.0	<0.1	<0.1	0.07	9.20	12.

	ſ		Bal	Baro	CH4	CH4 Peak	ω	002	CO2 Peak	Flow	H2S	Relative Pressure	SWL	Well Depth
	Units		%	hPa	%v/v	%v/ v	ppm	%v/v	%v/v	l/h			Meters	Meters
Monitoring	Sample	Sample												
Point ID	ID	Date												
31	LFG	29/05/2024	79.3	-0.02	<0.1	<0.1	0	1.8	1.8	<0.1	0	1021	5.30	9.36
	MW11	26/06/2024	79.3	1012	<0.1	<0.1	0	1.4	4.1	0.4	0	0.00	5.23	9.36
		15/07/2024	81.9	1005	<0.1	<0.1	0	5.6	5.6	<0.1	0	0.00	4.91	9.36
		20/08/2024	79.5	1016	<0.1	<0.1	0	1.6	4.3	0.3	0	0.03	5.49	9.36
		18/09/2024	81.9	1015	<0.1	<0.1	0	4.2	4.2	<0.1	0	0.02	5.65	9.36
		16/10/2024	80.2	1015	<0.1	<0.1	0	3.4	3.4	0.3	0	0.03	5.45	9.36
		11/11/2024	80.1	1019	<0.1	<0.1	0	4.8	4.8	<0.1	0	-0.05	5.63	9.36
		17/12/2024	80.3	1011	<0.1	<0.1	0	5.9	6.0	0.1	0	-0.03	5.42	9.36
		22/01/2025	80.5	994	<0.1	<0.1	1	4.0	4.0	<0.1	0	0.02	3.65	9.36
		18/02/2025	80.3	1006	<0.1	<0.1	<0.1	5.5	5.5	<0.1	<0.1	0.02	5.50	9.36
		19/03/2025	79.4	1016	<0.1	<0.1	0	5.5	5.5	0.0	0	0.02	5.48	9.36
		28/05/2025	79.6	1007	<0.1	<0.1	<0.1	1.0	1.0	<0.1	<0.1	0.02	3.20	9.36
32	LFG	29/05/2024	87.6	0.02	<0.1	<0.1	0	4.9	4.9	<0.1	0	1021	4.84	10.46
	MW12	26/06/2024	86.6	1012	<0.1	<0.1	0	4.2	4.2	0.2	0	0.00	4.84	10.46
		15/07/2024	88.5	1005	<0.1	<0.1	0	5.2	5.2	<0.1	0	-0.02	4.47	10.46
		20/08/2024	83.6	1016	<0.1	<0.1	0	4.4	4.4	0.3	0	0.03	5.08	10.46
		18/09/2024	85.2	1015	<0.1	<0.1	0	5.4	5.4	<0.1	0	-0.03	5.14	10.46
		16/10/2024	80.0	1015	<0.1	<0.1	0	1.6	1.6	0.4	0	0.02	4.93	10.46
		11/11/2024	85.1	1019	<0.1	<0.1	1	6.2	6.2	<0.1	0	0.05	5.28	10.46
		17/12/2024	83.0	1011	<0.1	<0.1	0	6.3	6.3	0.4	0	0.00	5.09	10.46
		22/01/2025	84.9	994	<0.1	<0.1	0	5.3	5.3	<0.1	0	0.05	4.32	10.46
		18/02/2025	81.7	1006	<0.1	<0.1	<0.1	5.5	5.5	<0.1	<0.1	0.03	5.05	10.46
		19/03/2025	83.1	1016	<0.1	<0.1	0	8.3	8.3	0.0	0	0.00	5.10	10.46
		28/05/2025	81.7	1007	<0.1	<0.1	<0.1	1.6	2.3	<0.1	<0.1	0.03	3.01	10.46

Table 5: Surface Gas Results 2024/25 Reporting Period

Date_Units		29/05/2024 ppm	19/06/2024 ppm	16/07/2024 ppm	21/08/2024 ppm	19/09/2024 ppm	15/10/2024 ppm	12/11/2024 ppm	17/12/2024 ppm	15/01/2025 ppm	18/02/2025 ppm	18/03/2025 ppm	15/05/2025 ppm
Location													
Transect 1	1	6.9	2.3	0.0	7.9	0.0	1.6	2.0	0.0	2.1	17.9	2.1	1.4
	2	3.4	2.4	0.0	7.8	0.0	1.5	2.0	0.1	2.1		2.3	2.1
	3	3.5	2.3	0.0	6.1	0.1	1.5	2.0	0.0	2.1		2.1	2.9
Transect 2	1	6.3	28.5	0.0	6.7	1.1	1.4	1.9	0.0	2.1	7.8	2.1	5.5
	2	6.0	63.7	0.0	6.4	0.0	1.5	1.9	0.0	2.2	9.1	2.1	5.1
	3	8.4	26.7	0.0	6.7	0.0	1.5	1.9	0.0	2.2	20.4	2.1	3.1
	4	12.1	4.7	0.0	6.4	0.1	1.4	3.2	0.0	2.2		2.0	2.0
	5		2.6	0.0		0.0	1.4			2.2		2.0	
Transect 3	1	12.9	2.3	0.0	2.2	0.0	1.5	2.3	0.4	2.3	0.0	2.1	2.1
	2	6.6	2.7	0.0	2.0	0.0	1.7	22.9	0.0	2.3	5.7	2.1	1.9
	3	5.2	4.8	0.0	2.2	0.1	1.4	1.9	0.0	2.3	7.1	2.1	7.8
	4	4.4	24.1	0.0	8.9	12.4	1.4	1.9	0.1	2.4		2.1	3.9
	5	4.9	35.3	0.0	16.1	14.4	1.4	1.9	0.0	2.3		2.1	5.6
	6	1			12.5								
Transect 4	1	8.2	2.8	0.0	1.2	17.8	1.5	2.0	2.4	2.4		2.2	1.8
	2	9.6	25.0	9.0	22.9	9.8	1.5	2.4	5.1	2.4		2.2	1.9
	3	8.5	25.1	31.8	17.2	2.8	1.5	2.5	2.0	2.4		2.3	2.7
	4	9.6	21.3	21.7	12.9	0.6	1.4	2.0	1.3	2.4		2.2	2.6
	5	8.2	27.8	22.2	11.0	0.4	2.6	2.0	0.5	2.5		2.2	6.7
	6	16.2	39.9	19.2	11.9	0.7	2.0	2.0	0.0	2.4		2.1	2.1
	7	10.2	33.3	24.6	11.6			2.0		2.5		2.2	2.1
	8			24.1	11.0					2.0		2.2	
Transect 5	1	12.9	38.8	18.2	2.1	228	1.6	2.2	7.4	3.2	1.8	2.3	1.6
II all Sect 5	2	13.2	48.8	21.1	5.9	6.1	1.6	2.2	0.6	29.4	0.6	2.3	4.6
	3	6.7		11.6	0.2	13.4	1.5	2.2	1.5	2.9	0.5	3.7	39.8
	4	7.2	13.1 20.3	0.0	0.2	12.7	1.0	2.4	9.3	2.9	0.5	2.5	1.7
		- L					1.4				0.1		
	5	5.1	26.1	0.0	1.4	7.2	1.4	2.0	32.5	15.7 3.6	0.0	2.3	1.7
T		4.8	2.7		6.0	0.0	1.5	2.0	10.2		74.4	2.3	2.9
Transect 6	1	6.3	4.5	1.0	7.7	0.0	1.7	2.1	0.0	2.4	71.4	2.3	4.5
	2	6.4	20.6	0.0	5.8	11.4	1.7	2.3	0.1	2.4	7.1	2.3	2.3
	3	7.5	4.8	0.0	2.2	7.8	1.6	2.2	2.7	2.4	5.3	2.3	2.0
	4	6.5	18.8	1.8	1.9	1.5	1.5	2.2	7.1	2.5	5.4	2.3	
	5	9.4	31.5	4.7	0.1	8.4	1.8	2.2	3.1	4.2	5.7	2.3	
	6	10.3	22.8	14.2	0.7	4.2	1.9	2.8	2.8	2.8		2.3	
	7	10.2	18.3	0.0	0.9	47.0	3.2	2.4	13.2	2.6	40.0	2.3	0.4
Transect 7	1	31.6	16.2	12.4	3885	17.9	1.9	4.8	11.4	2.9	13.2	2.2	3.4
	2	17.3	29.9	11.0	2.2	4.4	10.4	19.9	9.1	2.5		2.4	1.7
	3	8.5	20.1	10.9	5.4	14.9	1.8	11.5	1.6	2.5		2.3	1.6
	4	9.6	21.3	13.1	7.4	11.4	185.6	2.8	1.4	2.6		2.2	2.0
	5	11.8	11.1	10.6	12.4	7.6	5.9	2.3	7.4	4.2		2.3	6.8
	6	5.6	13.3	0.0	1.9	0.1	1.6	2.1	5.4	2.8		2.2	2.6
T	7	10.0	47.5	0.0	1.9	0.4	10	0.4	0.0	2.4	0.4	2.2	10
Transect 8	1	18.8	17.5	0.0	1.0	0.1	1.8	2.1	9.9	2.4	0.4	2.2	1.6
	2	11.4	10.3	16.6	2.8	3586	58.6	2.2	36.4	2.6	12.0	2.3	5.9
	3	16.5	4.2	14.5	285.8	13.8	4.2	2.2	12.5	58.5	432	4.1	17.2
	4	37.0	13.6	11.3	5.4	15.6	92.5	2.3	11.3	10.1	14.8	16.6	58.2
	5	182	24.2	15.3	5.9	555	22.8	10.8	11.8	18.7	23.8	9.9	12.8
	6	23.7	24.2	17.9	38.4	18.5	16.6	5.5	13.8	468.2	121.5	2.9	2.6
	7	255										2.3	
_	9	1			0.8						16.7		
Transect 9	1	31.6	17.4	14.6	101.0	10.4	6.2	20.2	11.8	6.2	162	2.9	3.0
	2	18.8	11.8	42.9	11.0	14.5	2.2	5.7	47.2	4.4	10.4	15.4	9.8
	3	12.2	10.2	12.2	11.4	14.4	1.6	2.2	2.9	5.5	6.1	2.5	4.7
	4	8.0	9.8	10.9	15.5	13.3	1.6	2.1	5.4	61.2	5.5	2.3	1.8
	5	11.2	6.6	10.8	14.0	9.0	1.6	2.0	5.7	2.2	6.3	2.7	1.4
	6	438	3.0	10.4	10.4	0.0	1.6		2.8	2.3	1.3	2.2	7.0

Date Units		29/05/2024	19/06/2024	16/07/2024	21/08/2024	19/09/2024	15/10/2024	12/11/2024	17/12/2024	15/01/2025	18/02/2025	18/03/2025	15/05/2025
_		ppm	ppm	ppm	ppm	ppm	ppm						
Location													
Transect 10	1	2.6	12.5	0.0	0.0	8.3	15.2	2.0	0.1	2.6	1.5	4.2	3.0
	10	122	57.6	12.3	2.0	10.3	2.3	4.1	8.7	4.6	1.2	2.1	4.4
	11	9.3	13.4	11.6	5.7	22.8	10.1	2.2	102	3.2	1.9	2.1	5.0
	12	12.0	8.6	0.0	2.7	5.7	1.6	2.3	1.1	2.7	1.1	2.1	3.7
	13	9.2	15.0	1.2	2.2	7.1	1.6	2.1	12.3	2.8	1.9	2.1	9.0
	14	108	21.6	0.0	7.9	6.1	1.8	2.3	1.3	5.8	2.7	2.1	2.6
	15	10.3	11.8	10.1	12.3			2.1	1.0	2.7	2.0	2.1	2.5
	16	12.5	5.1	0.0				2.2	0.0	2.5	0.6	2.1	2.4
	17									2.4			5.8
	18									3.1			0.0
	2	2.7	8.7	1.1	5.5	1.5	5.9	2.1	0.1	2.7	1.2	3.6	3.3
	3	2.7	5.9	1.5	0.0	1.5	3.7	2.0	0.8	2.5	1.1	2.4	3.8
	4	2.7	4.7	0.0	0.0	0.6	4.8	2.2	0.8	3.6	0.9	2.4	6.0
	5												
		2.8 2.9	4.4	9.4	1.9	0.6	4.0	2.4	5.9	2.8	0.5	2.7	9.7
	6		4.5	9.3	0.9	2.4	4.6	13.3	11.1	10.0	5.2	2.2	11.2
	7	3.4	6.7	10.3	107	123	3.7	3.8	0.6	7.4	1.2	4.0	5.2
	8	14.7	6.0	0.0	5.7	27.1	15.2	5.7	0.6	11.4	1.2	5.4	3.5
	9	135	13.9	11.1		7.2	2.4	2.7	14.3	2.6	5.1	3.1	4.2
Transect 11	1	20.4	17.4	11.8	0.4	12.2	1.8	2.9	5.9	2.6	5.0	2.2	2.1
	2	21.3	14.2	13.7	0.1	9.3	7.7	7.9	1.4	2.4	0.4	2.1	6.0
	3	27.0	20.9	0.0	1.6	6.1	6.3	17.3	0.5	3.0	8.2	2.3	8.9
	4	29.9	12.4	0.0	2.2	5.5	8.5	2.3	1.8	6.6	42.0	2.3	56.2
	5	5.7	10.2	0.0	1.4	5.8	2.9	2.3	1.5	3.3	5.2	2.3	24.5
	6	7.9	12.1	11.2	17.9	5.9	4.9	2.3	0.3	4.2	1.8	2.3	24.9
	7	4.1	18.1	44.6	15.4		4.3		0.0	2.7	2.3	2.1	3.2
	8	43.5			37.9		4.4		0.0	2.7	8.1		6.0
Transect 12	1	78.7	84.7	92.0	23.1	15.6	23.5	7.3	11.6	5.2	49.3	2.7	
	2	66.6	64.0	38.3	32.0	120	5.8	2.8	16.6	6.5	42.6	6.3	
	3	11.2	44.9	13.8	7.6	14.2	9.9	2.8	0.8	6.2	36.1	2.3	
	4	13.5	64.5	17.1	0.2	35.0	2.4	2.6	0.6	6.2	20.3	2.4	
	5	12.2	18.0	10.6	10.1	13.5	2.1	2.4	28.1	4.5	14.8	2.3	
	6	6.6	20.6	0.0	10.1	11.1	2.0	2.5	1.1	4.3	13.1	2.1	
	7	7.8	21.5	46.1		16.1	25.4	5.4	1.0	6.0	8.6	2.2	
	8	7.0					20	U. .	0.3	8.7	0.0	2.9	
Transect A	1	2.0	2.2	0.0	0.7	0.0	1.4	2.9	0.0	9.6	0.0	3.4	1.8
Tansocr7	2	1.9	2.2	0.0	0.1	0.0	1.4	5.5	0.0	11.2	0.0	6.9	1.8
	3	1.9	2.2	0.0	0.1	0.0	1.4	5.3	0.0	2.5	0.0	2.8	1.9
	4	1.9	2.2	0.0	0.0	0.0	1.4	5.9	0.0	2.8	0.0	2.6	1.9
	5	1.8	2.2	0.0	0.0	0.0	1.4	7.2	0.2	2.0	0.0	2.5	1.9
	6	1.8	2.2	0.0	0.0		1.4	5.4			0.0	2.5	1.9
101 Daddalla Dd					0.0	0.0	1.0		0.0	4.5	0.2	2.2	10
181 Reddalls Rd,	1	2.1			0.0	0.0	1.8	2.3	0.0	4.5	0.2	2.3	1.9
Fenceline	2	2.0			0.1	0.0	1.8	2.3	0.1	5.2	0.0	2.3	1.9
	3	2.0			0.1	0.0	1.8	2.2	0.1	5.2	0.0	2.3	1.8
	4	2.0			0.0	0.0	1.8	2.2	0.0	3.4	0.0	2.3	1.9
	5	1.9			0.0	0.0	1.9	2.2		2.8	0.0	2.3	1.9
	6	2.0			0.0	0.0	1.8	2.4	0.0	4.1	0.0	2.3	1.8
	7	1.9			0.0	0.1	1.9	2.5	0.0	4.8	0.0	2.3	1.9
	8	1.9			0.1	0.0	1.9	2.7	0.0	2.7	0.0	2.3	1.8
	Max Garden Reading	1.9			0.1	0.0		2.8	0.0	2.7	0.1		1.8
	Max Gardening Reading						2.2						

Table 6: Respirable Dust Results 2024/25 Reporting Period

	Ste Name		Gengarry Cottage PM10	Gengarry Cottage TSP	Landfill PM10	Landfill TSP
Sample Date	Chemical Name	Units	1 10110	ia		
19/06/2024	PM10	μg/m³	21.4			
	PM10 (mass per filter)	mg/filter	33.3			
	Total Suspended Particulates	μg/m³	00.0	55.0		
	Total Suspended Particulates (mass per filter)	mg/filter		86.1		
20/06/2024	PM10	μg/m³			10.3	
	PM10 (mass per filter)	mg/filter			15.9	
	Total Suspended Particulates	μg/m³				19.3
	Total Suspended Particulates (mass per filter)	mg/filter				29.9
15/07/2024	PM10	μg/m³	12.5			
	PM10 (mass per filter)	mg/filter	19.2			
	Total Suspended Particulates	μg/m³	10.2	22.7		
	Total Suspended Particulates (mass per filter)	mg/filter		35.4		
16/07/2024	PM10	μg/m³		GG. 1	1.1	
10, 07, 202 1	PM10 (mass per filter)	mg/filter			1.7	
	Total Suspended Particulates	μg/m³			,	4.7
	Total Suspended Particulates (mass per filter)	mg/filter				7.2
20/08/2024	PM10	μg/m³	20.0			
20, 00, 202 1	PM10 (mass per filter)	mg/filter	30.6			
	Total Suspended Particulates	μg/m³	00.0	41.2		
	Total Suspended Particulates (mass per filter)	mg/filter		63.0		
21/08/2024	PM10	μg/m³		00.0	7.2	
21,00,2021	PM10 (mass per filter)	mg/filter			10.9	
	Total Suspended Particulates	μg/m³			10.5	17.1
	Total Suspended Particulates (mass per filter)	mg/filter				25.9
17/09/2024	PM10	μg/m³			7.6	20.0
177 037 2024	PM10 (mass per filter)	mg/filter			11.7	
	Total Suspended Particulates	μg/m³			11.7	16.8
	Total Suspended Particulates (mass per filter)	mg/filter				25.7
18/09/2024	PM10	μg/m³	41.0			20.7
10/03/2024	PM10 (mass per filter)	mg/filter	62.2			
	Total Suspended Particulates	μg/m³	02.2	101		
	Total Suspended Particulates (mass per filter)	mg/filter		154		
15/10/2024	PM10	μg/m³	14.2	104		
13/ 10/ 2024	PM10 (mass per filter)	mg/filter	22.1			
	Total Suspended Particulates	μg/m³	22.1	33.6		
	Total Suspended Particulates (mass per filter)	mg/filter		52.3		
16/10/2024	PM10	μg/m³		02.0	8.2	
10/10/2024	PM10 (mass per filter)	mg/filter			12.6	
	Total Suspended Particulates	μg/m³			12.0	15.3
	Total Suspended Particulates (mass per filter)	mg/filter				23.4
11/11/2024	PM10	μg/m³	14.8			20.4
111111111111111111111111111111111111111	PM10 (mass per filter)	mg/filter	22.7			
	Total Suspended Particulates	μg/m³	۲۲. ۱	30.4		
	Total Suspended Particulates (mass per filter)	μg/iii mg/filter		46.5		
12/11/2024	PM10	μg/m³		40.0	7.9	
12/11/2024	PM10 (mass per filter)	μg/III ^s mg/filter			11.9	
	Total Suspended Particulates	μg/m³			11.3	17.3
	·					
	Total Suspended Particulates (mass per filter)	mg/filter				25.9

	Ste Name		Gengarry Cottage PM10	Gengarry Cottage TSP	Landfill PM10	Landfill TSP
Sample Date	Chemical Name	Units				
16/12/2024	PM10	μg/m³	23.5			
	PM10 (mass per filter)	mg/filter	34.1			
	Total Suspended Particulates	μg/m³		53.8		
	Total Suspended Particulates (mass per filter)	mg/filter		79.8		
17/12/2024	PM10	μg/m³			20.4	
	PM10 (mass per filter)	mg/filter			30.3	
	Total Suspended Particulates	μg/m³				45.1
	Total Suspended Particulates (mass per filter)	mg/filter				66.1
13/01/2025	PM10	μg/m³	28.6			
	PM10 (mass per filter)	mg/filter	42.4			
	Total Suspended Particulates	μg/m³		52.0		
	Total Suspended Particulates (mass per filter)	mg/filter		75.7		
14/01/2025	PM10	μg/m³			19.3	
	PM10 (mass per filter)	mg/filter			28.3	
	Total Suspended Particulates	μg/m³				31.2
	Total Suspended Particulates (mass per filter)	mg/filter				45.1
17/02/2025	PM10	μg/m³			8.8	
	PM10 (mass per filter)	mg/filter			13.3	
	Total Suspended Particulates	μg/m³				22.5
	Total Suspended Particulates (mass per filter)	mg/filter				33.7
18/02/2025	PM10	μg/m³	19.2			
	PM10 (mass per filter)	mg/filter	28.9			
	Total Suspended Particulates	μg/m³		49.7		
	Total Suspended Particulates (mass per filter)	mg/filter		73.8		
18/03/2025	PM10	μg/m³	15.0			
	PM10 (mass per filter)	mg/filter	23.0			
	Total Suspended Particulates	μg/m³		40.3		
	Total Suspended Particulates (mass per filter)	mg/filter		61.0		
19/03/2025	PM10	μg/m³			18.7	
	PM10 (mass per filter)	mg/filter			28.0	
	Total Suspended Particulates	μg/m³				33.9
	Total Suspended Particulates (mass per filter)	mg/filter				50.1
14/04/2025	PM10	μg/m³	14.9			
	PM10 (mass per filter)	mg/filter	22.7			
	Total Suspended Particulates	μg/m³		25.9		
	Total Suspended Particulates (mass per filter)	mg/filter		39.1		
15/04/2025	PM10	μg/m³			8.5	
	PM10 (mass per filter)	mg/filter			13.0	
	Total Suspended Particulates	μg/m³				16.8
	Total Suspended Particulates (mass per filter)	mg/filter				25.4
15/05/2025	PM10	μg/m³			5.5	
	PM10 (mass per filter)	mg/filter			8.4	
· ·	Total Suspended Particulates	μg/m³			U. 1	14.5
	Total Suspended Particulates (mass per filter)	mg/filter				22.0
16/05/2025	PM10	μg/m ³	8.7			0
. 5. 55. 2525	PM10 (mass per filter)	mg/filter	12.3			
	Total Suspended Particulates	μg/m³	12.5	19.2		
_	Total Suspended Particulates (mass per filter)	mg/filter		26.9		

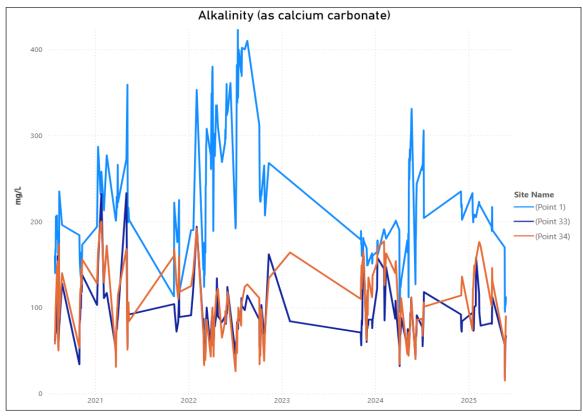
Table 7: Dust Deposition Results 2023/24 Reporting Period

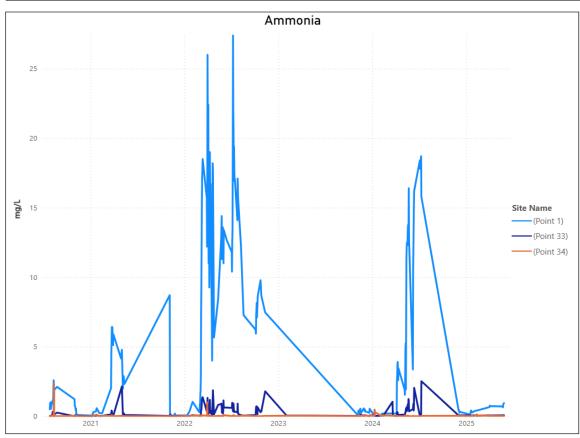
	Ste Name		DDG1	DDG2	DDG3	DDG4	DDG5
Sample Date	Chemical Name	Units					
03/06/2024	Ash Content	g/m².month	0.4	0.5	0.3		0.4
	Ash Content (mg)	mg	7	11	6		6
	Combustible Matter	g/m².month	0.2	0.1	0.1		0.2
	Combustible Matter (mg)	mg	4	2	3		2
	Total Insoluble Matter	g/m².month	0.6	0.6	0.4		0.6
	Total Insoluble Matter (mg)	mg	11	13	9		8
04/07/2024	Ash Content	g/m².month	0.1	0.4	0.5		0.1
	Ash Content (mg)	mg	2	8	10		2
	Combustible Matter	g/m².month	0.2	0.1	0.4		0.1
	Combustible Matter (mg)	mg	4	<2	8		<2
	Total Insoluble Matter	g/m².month	0.3	0.5	0.9		0.2
	Total Insoluble Matter (mg)	mg	6	9	18		3
05/08/2024	Ash Content	g/m².month	0.3	0.5		0.3	0.2
	Ash Content (mg)	mg	5	11		6	3
	Combustible Matter	g/m².month	<0.1	0.1		0.1	<0.1
	Combustible Matter (mg)	mg	<2	<2		2	<2
	Total Insoluble Matter	g/m².month	0.3	0.6		0.4	0.2
	Total Insoluble Matter (mg)	mg	6	12		8	4
06/09/2024	Ash Content	g/m².month	0.4	0.5	0.2	0.2	0.1
	Ash Content (mg)	mg	8	11	5	4	2
	Combustible Matter	g/m².month	0.2	0.1	0.3	<0.1	<0.1
	Combustible Matter (mg)	mg	3	2	5	<2	<2
	Total Insoluble Matter	g/m².month	0.6	0.6	0.5	0.2	0.1
	Total Insoluble Matter (mg)	mg	11	13	10	4	2
08/10/2024	Ash Content	g/m².month	0.5	0.6	0.6	0.7	0.2
	Ash Content (mg)	mg	10	13	12	13	4
	Combustible Matter	g/m².month	0.3	0.2	0.5	0.2	0.2
	Combustible Matter (mg)	mg	5	4	11	5	3
	Total Insoluble Matter	g/m².month	0.8	0.8	1.1	0.9	0.4
	Total Insoluble Matter (mg)	mg	15	17	23	18	7
08/11/2024	Ash Content	g/m².month	0.4	0.6	0.1	0.6	0.4
	Ash Content (mg)	mg	7	12	3	11	8
	Combustible Matter	g/m².month	0.2	0.2	0.1	0.2	0.2
	Combustible Matter (mg)	mg	5	5	2	5	3
	Total Insoluble Matter	g/m².month	0.6	8.0	0.2	0.8	0.6
	Total Insoluble Matter (mg)	mg	12	17	5	16	11

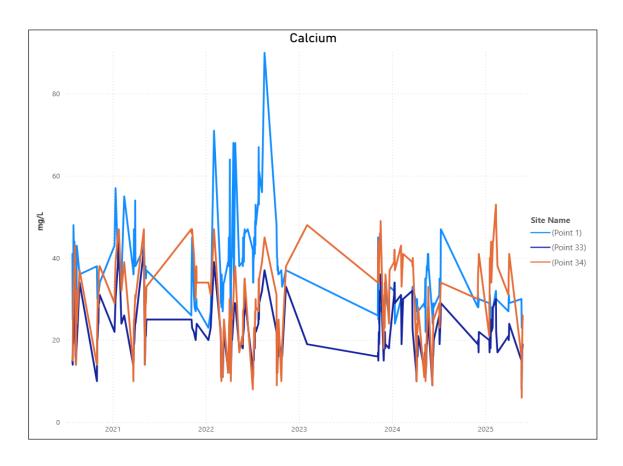
	Ste Name		DDG1	DDG2	DDG3	DDG4	DDG5
Sample Date	Chemical Name	Units					
05/12/2024	Ash Content	g/m².month	0.5	0.5	0.4	0.2	0.3
	Ash Content (mg)	mg	9	8	7	3	4
	Combustible Matter	g/m².month	0.6	0.7	1.3	<0.1	0.1
	Combustible Matter (mg)	mg	10	13	22	<2	2
	Total Insoluble Matter	g/m².month	1.1	1.2	1.7	0.2	0.4
	Total Insoluble Matter (mg)	mg	19	21	29	4	6
06/01/2025	Ash Content	g/m².month	1.0	1.0	0.4	0.3	4.9
	Ash Content (mg)	mg	19	20	9	6	92
	Combustible Matter	g/m².month	0.6	2.0	2.0	0.2	1.3
	Combustible Matter (mg)	mg	12	43	40	4	24
	Total Insoluble Matter	g/m².month	1.6	3.0	2.4	0.5	6.2
	Total Insoluble Matter (mg)	mg	31	63	49	10	116
06/02/2025	Ash Content	g/m².month	0.2	0.5	0.2	0.3	0.4
	Ash Content (mg)	mg	3	11	4	5	8
	Combustible Matter	g/m².month	0.3	0.3	0.2	0.3	2.4
	Combustible Matter (mg)	mg	7	5	5	6	43
	Total Insoluble Matter	g/m².month	0.5	8.0	0.4	0.6	2.8
	Total Insoluble Matter (mg)	mg	10	16	9	11	51
04/03/2025	Ash Content	g/m².month	0.5	0.9	0.2	0.3	0.7
	Ash Content (mg)	mg	8	15	3	4	10
	Combustible Matter	g/m².month	0.1	0.3	0.6	1.0	0.3
	Combustible Matter (mg)	mg	<2	5	10	16	6
	Total Insoluble Matter	g/m².month	0.6	1.2	0.8	1.3	1.0
	Total Insoluble Matter (mg)	mg	9	20	13	20	16
04/04/2025	Ash Content	g/m².month	1.2	0.6	0.3	0.5	1.5
	Ash Content (mg)	mg	23	13	7	9	28
	Combustible Matter	g/m².month	0.7	0.5	0.1	0.2	2.4
	Combustible Matter (mg)	mg	13	9	2	4	44
	Total Insoluble Matter	g/m².month	1.9	1.1	0.4	0.7	3.9
	Total Insoluble Matter (mg)	mg	36	22	9	13	72
05/05/2025	Ash Content	g/m².month	0.6	0.3	0.9	0.3	0.3
	Ash Content (mg)	mg	12	6	19	5	5
	Combustible Matter	g/m².month	0.5	0.1	1.1	0.3	0.4
	Combustible Matter (mg)	mg	8	3	22	7	8
	Total Insoluble Matter	g/m².month	1.1	0.4	2.0	0.6	0.7
	Total Insoluble Matter (mg)	mg	20	9	41	12	13

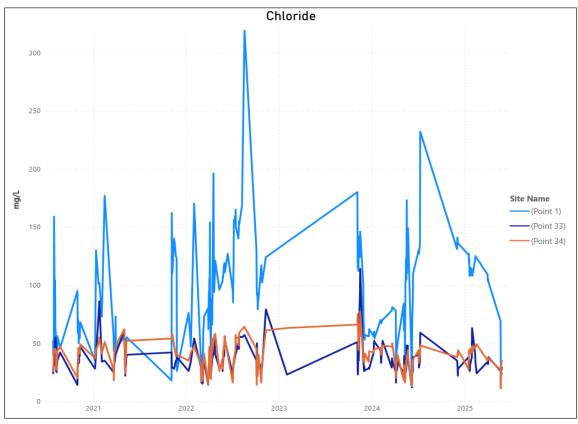
Appendix C

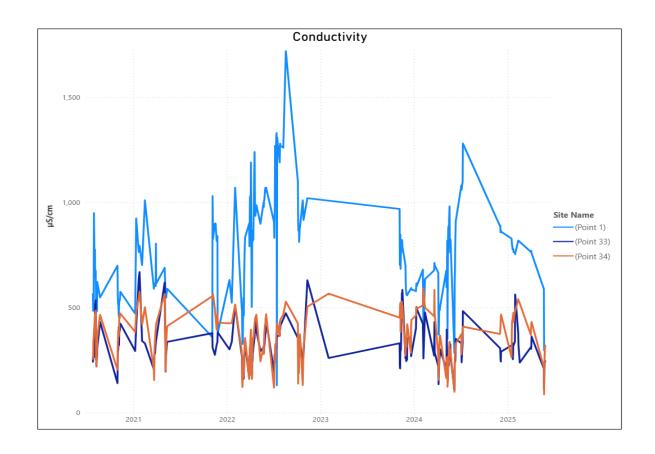
Surface Water Results 2024/25 Reporting Period

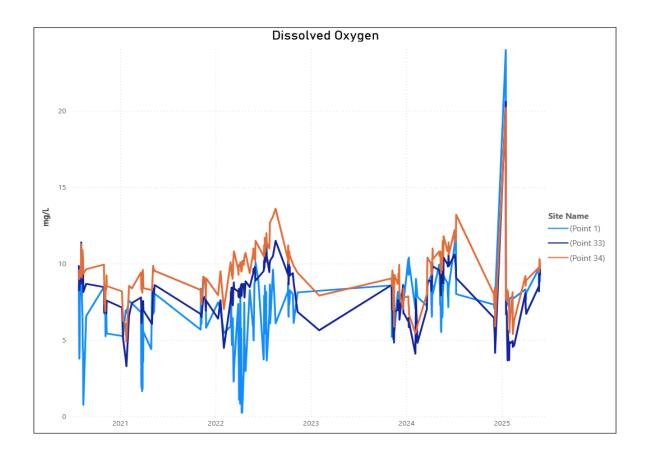


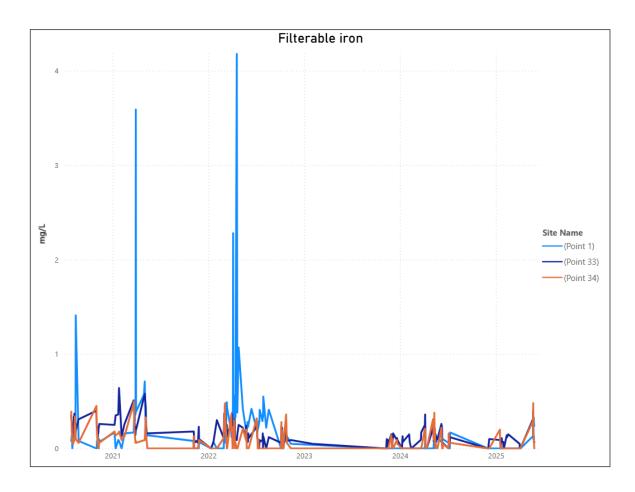


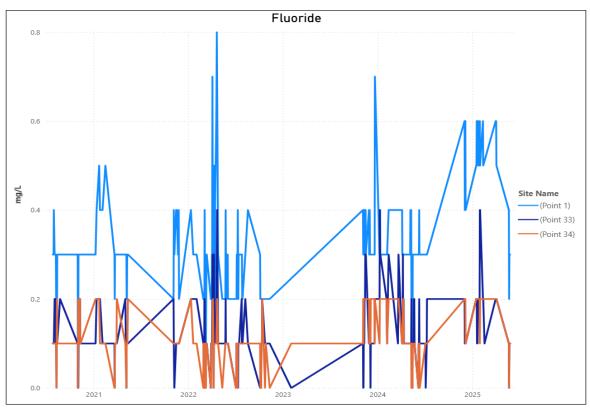


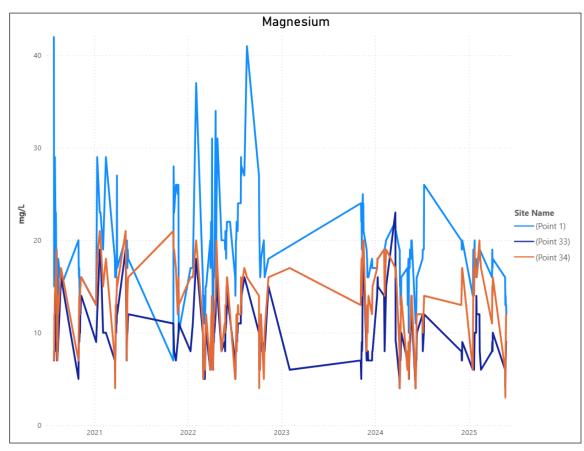


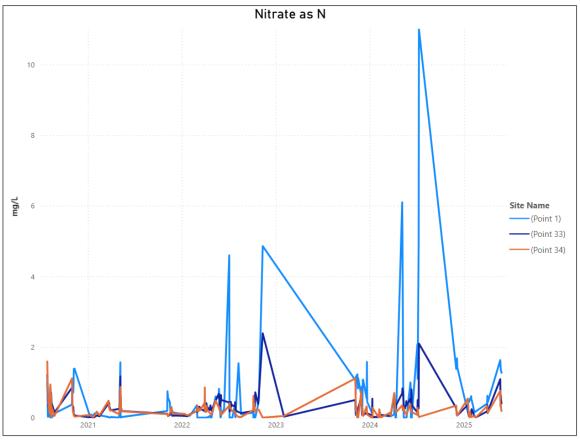


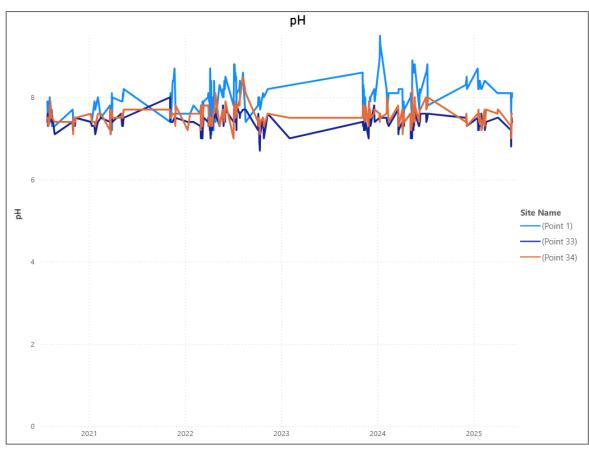


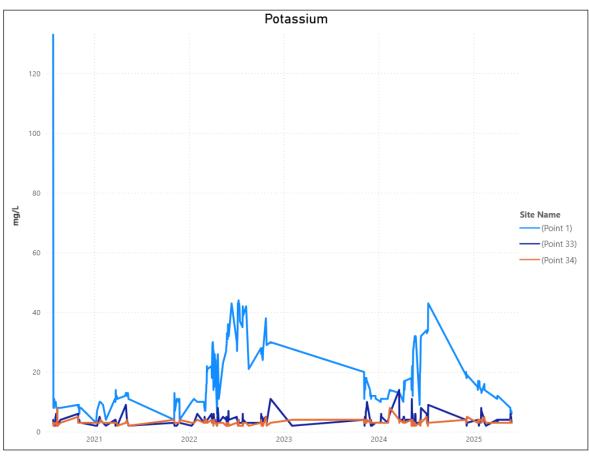


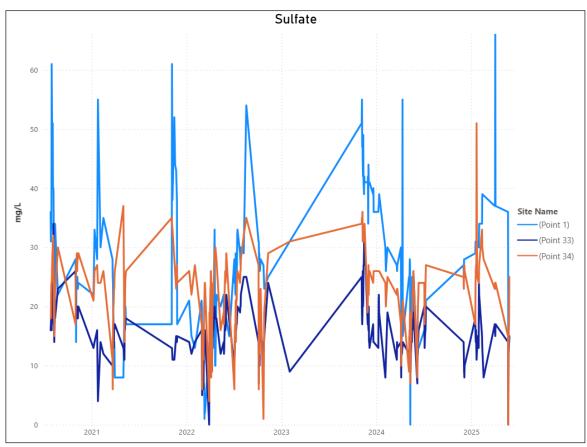


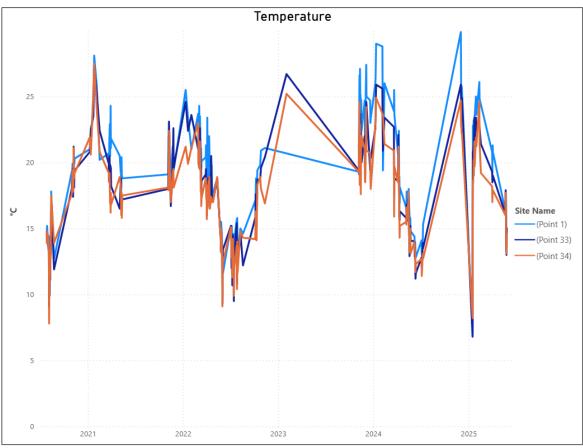


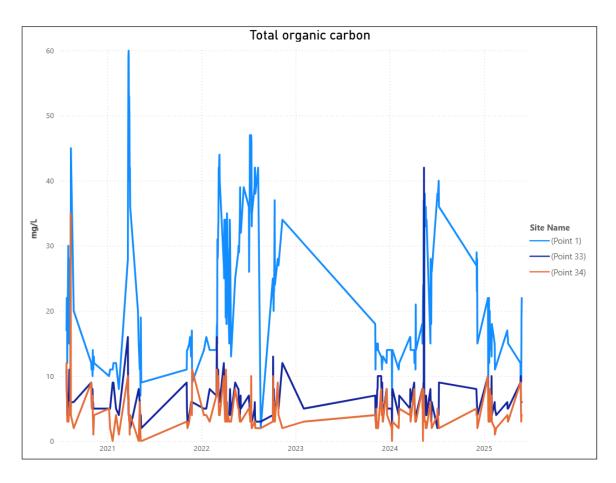


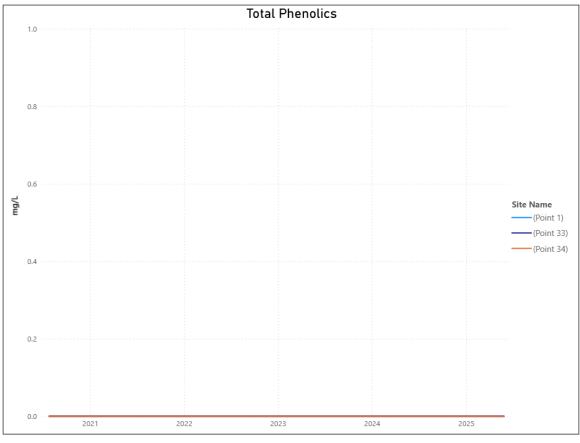


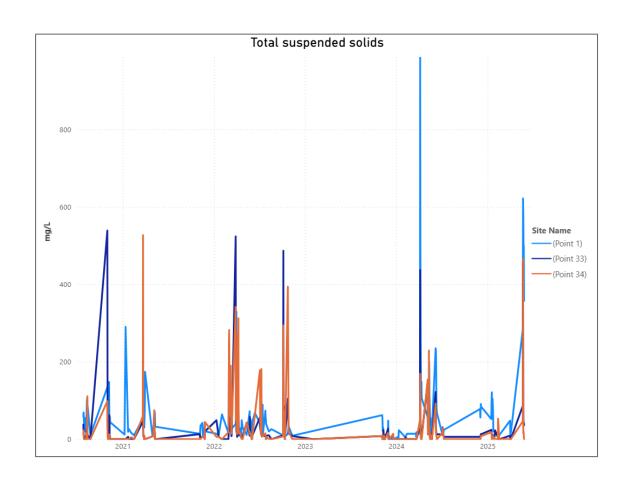




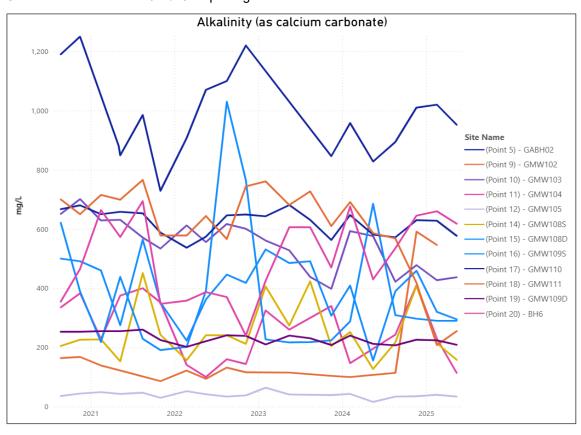


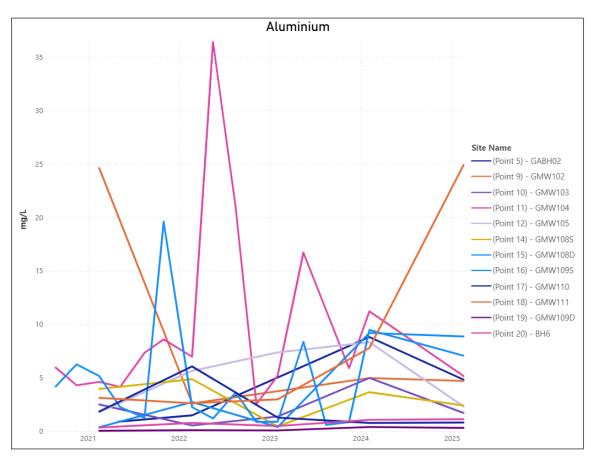


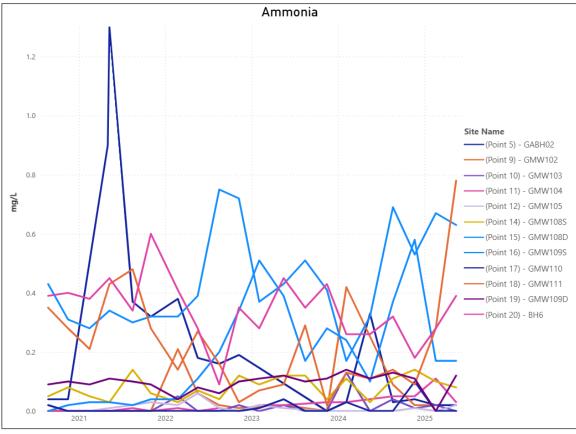


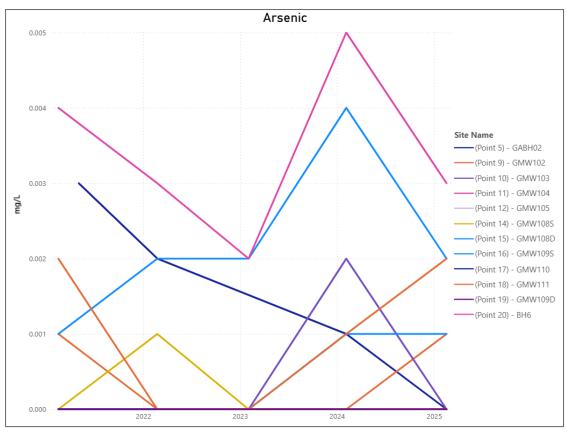


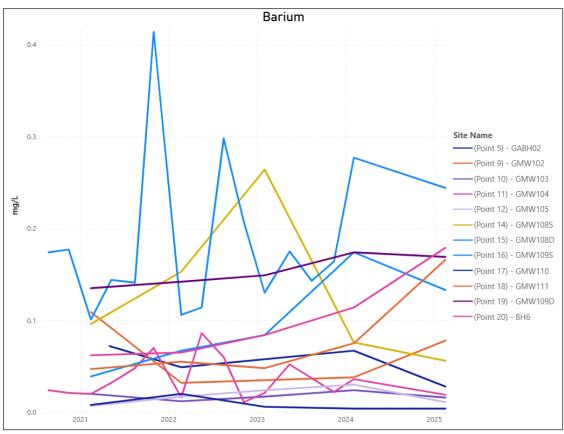
Ground Water Results 2024/25 Reporting Period

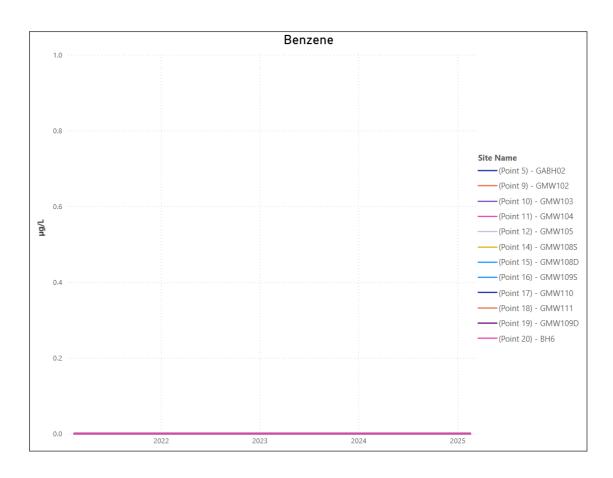


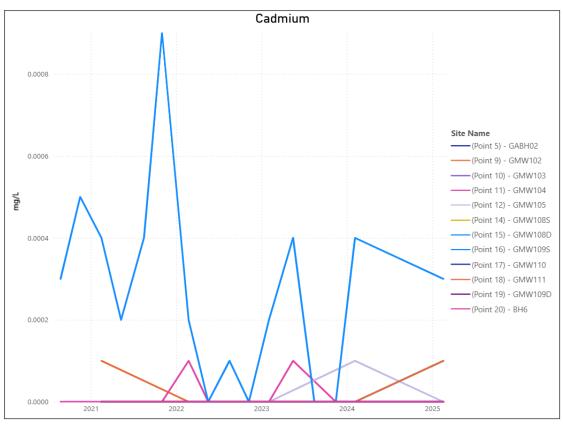


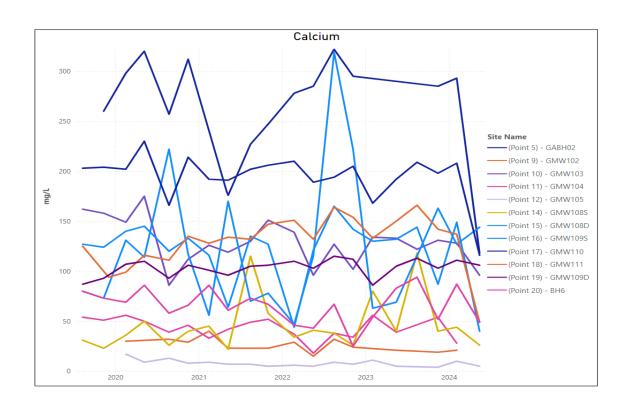


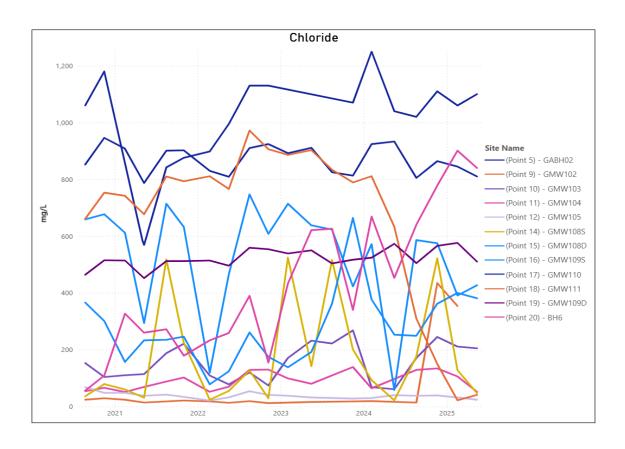


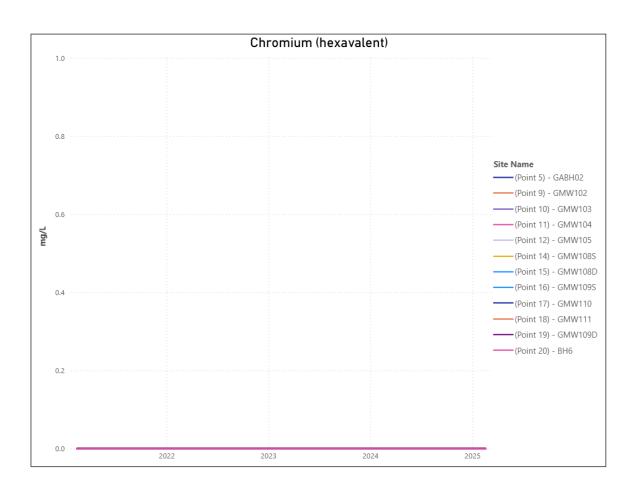


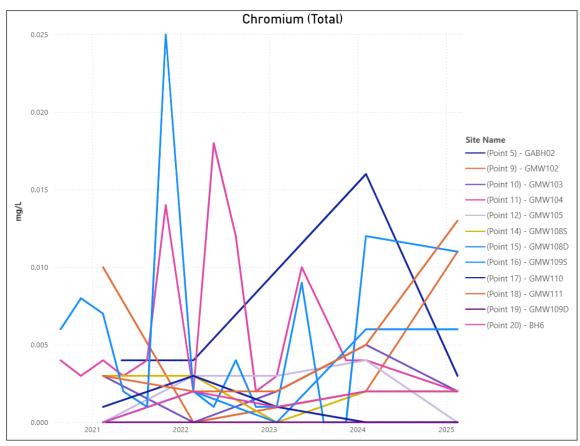


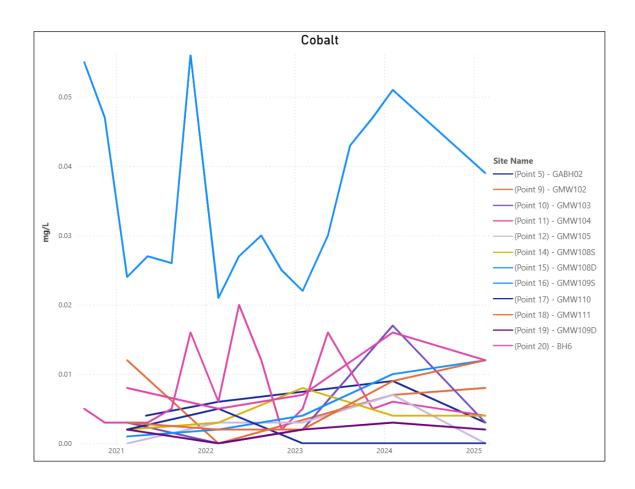


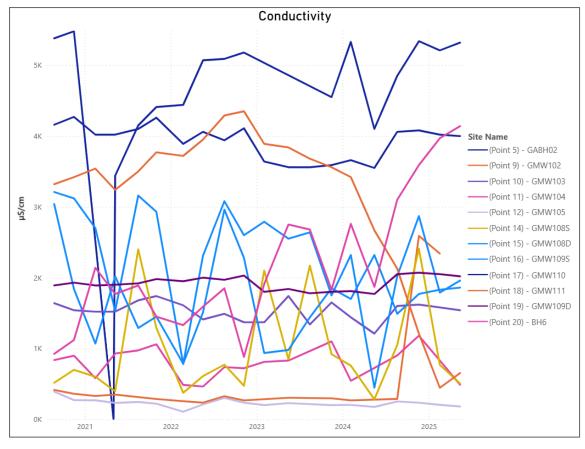


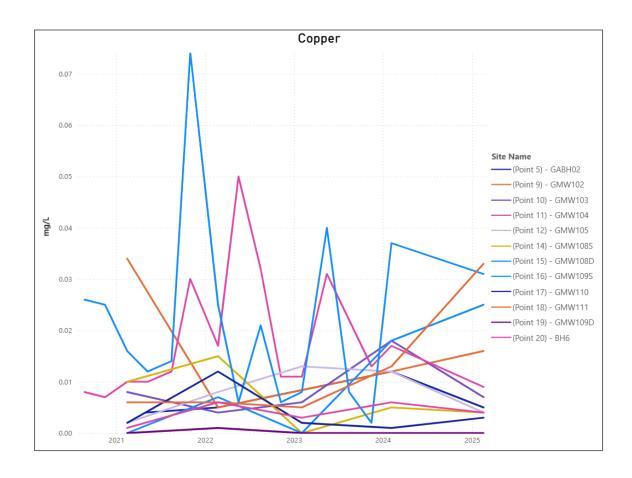


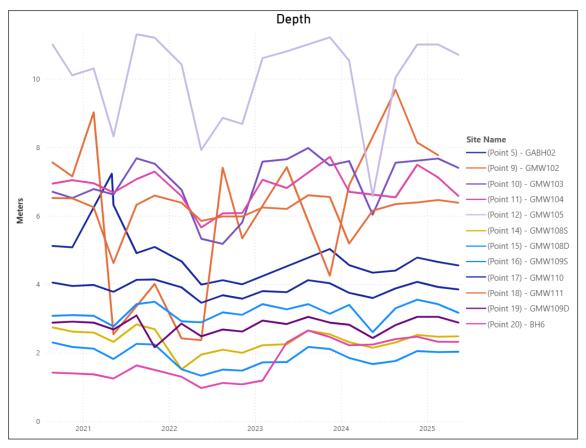


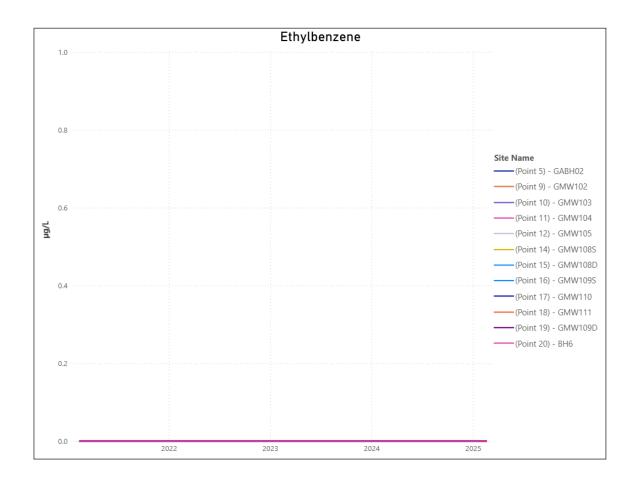


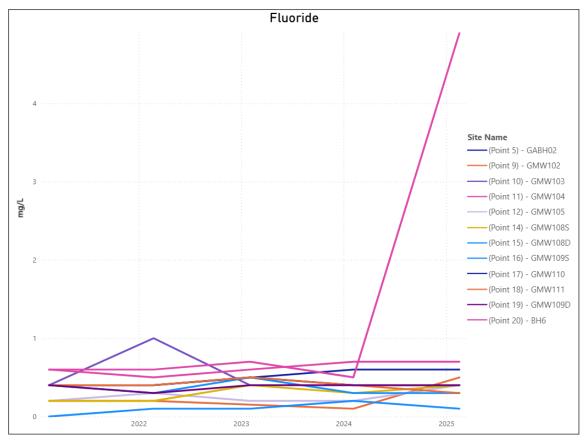


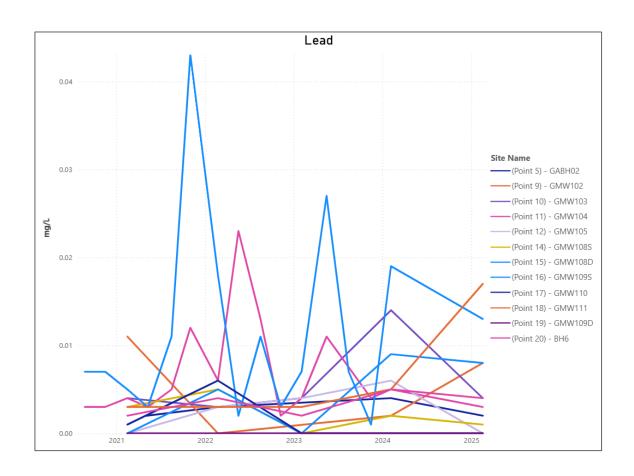


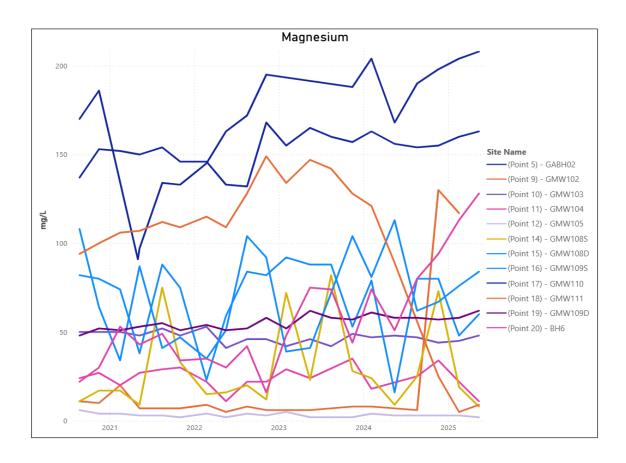


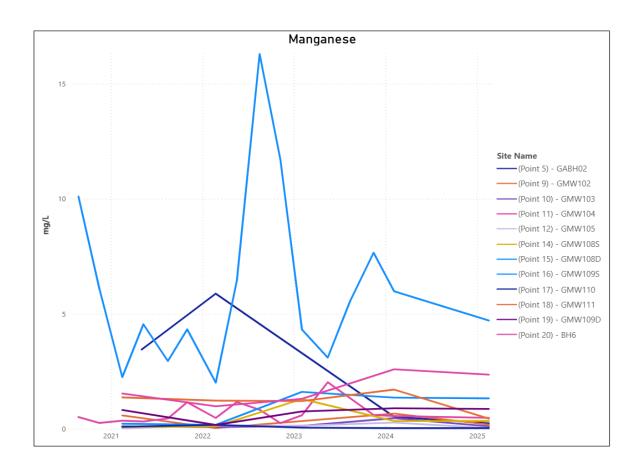


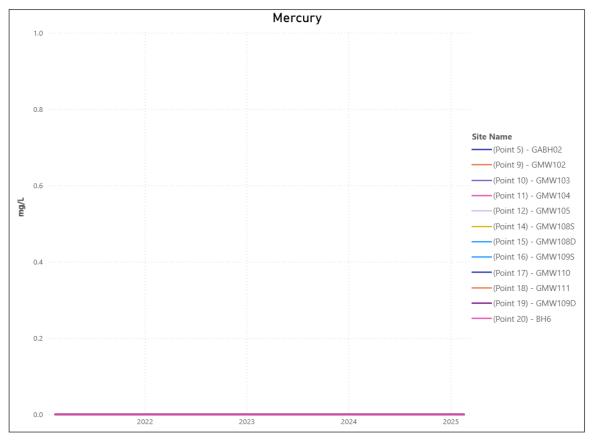


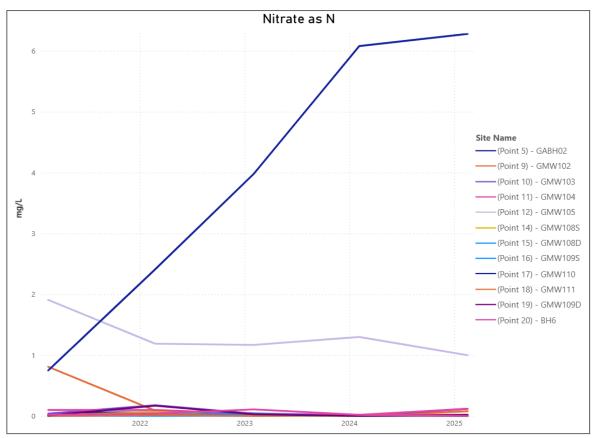


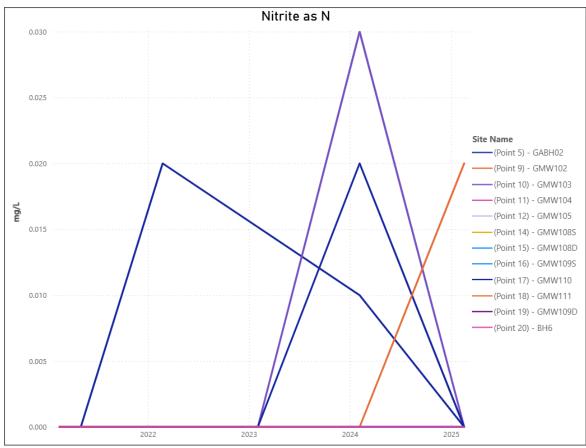


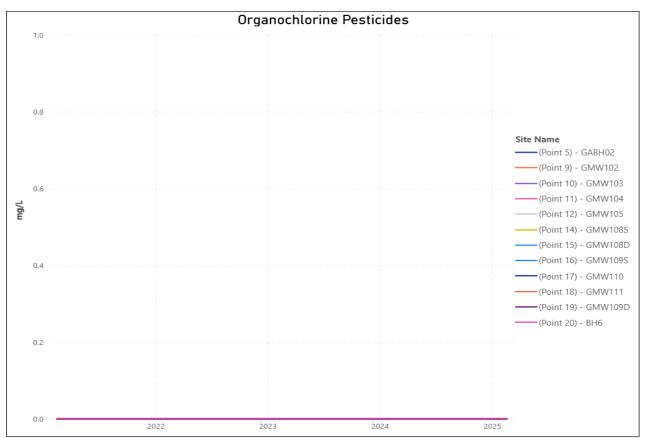


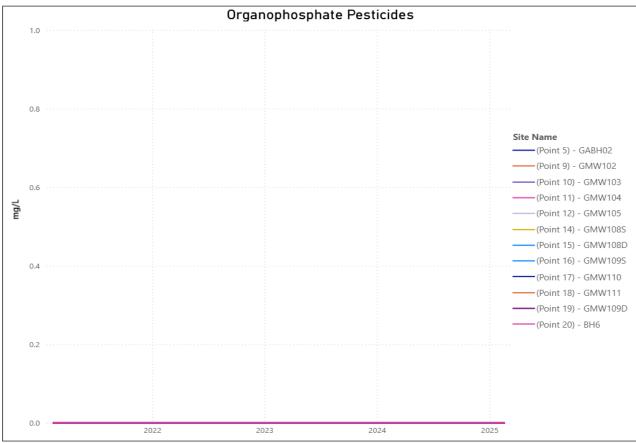


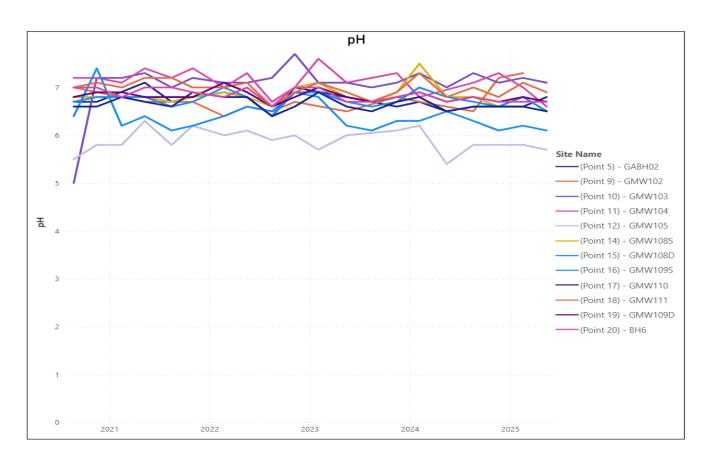


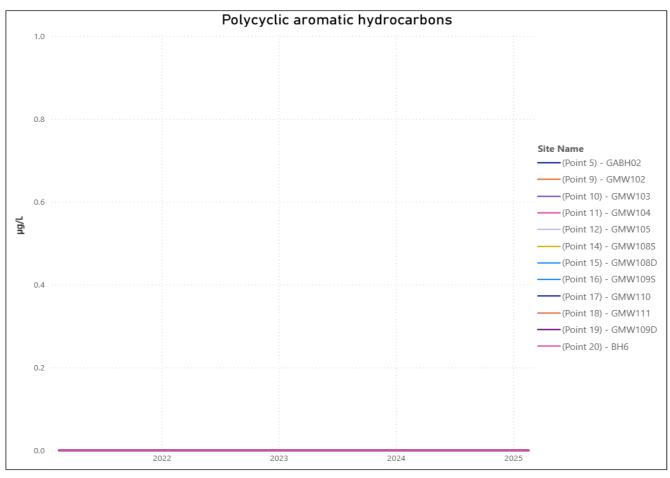


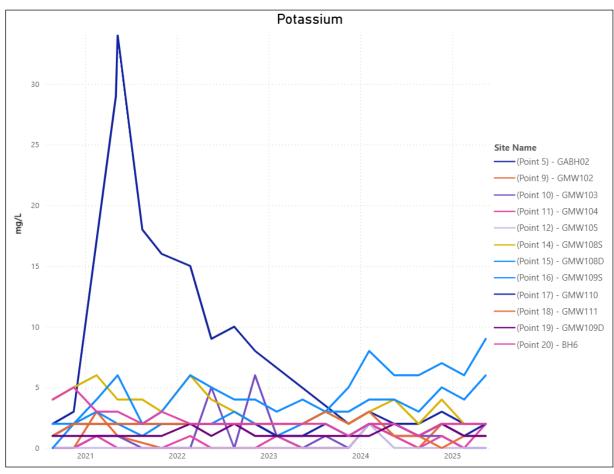


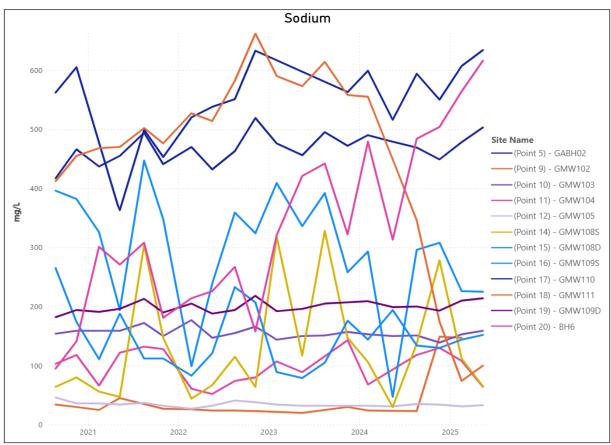


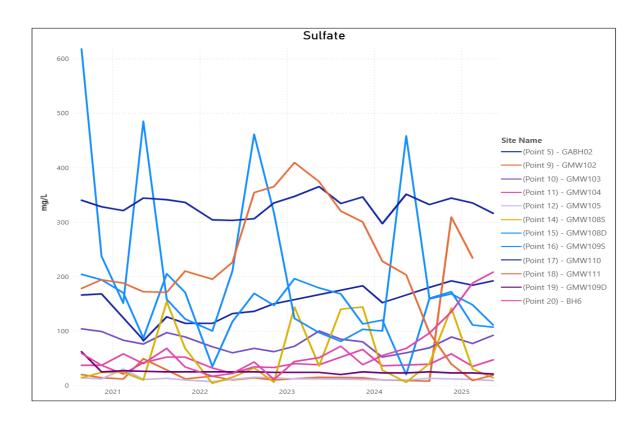


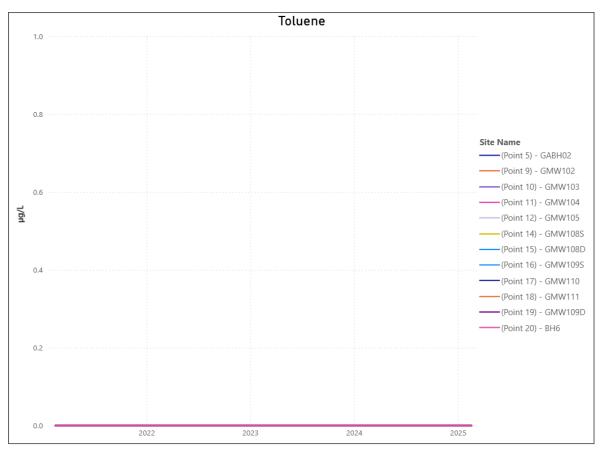


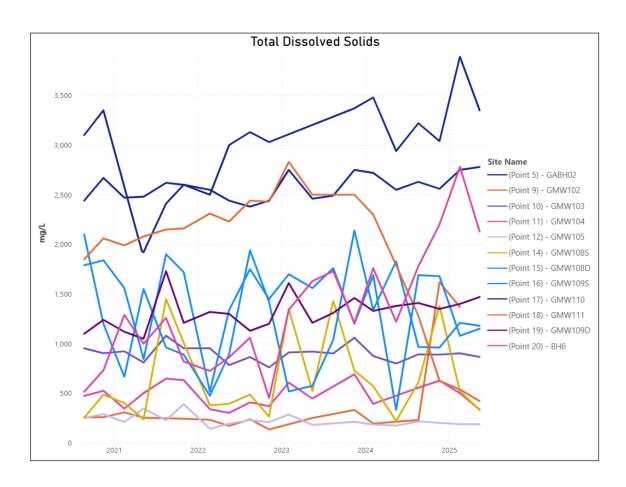


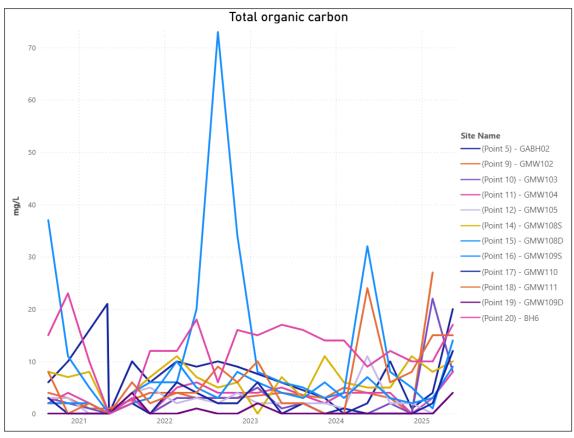


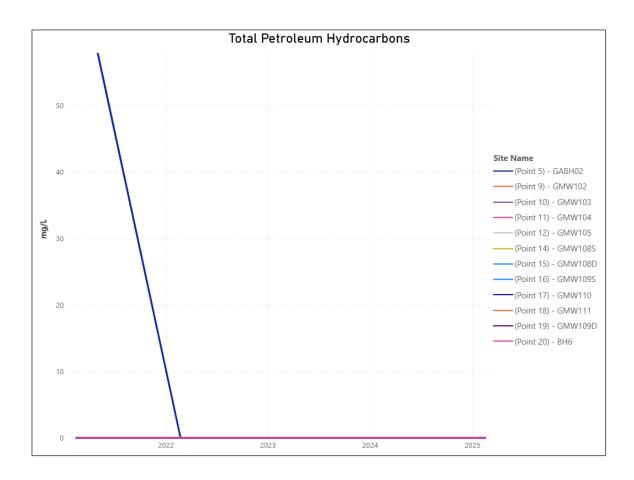


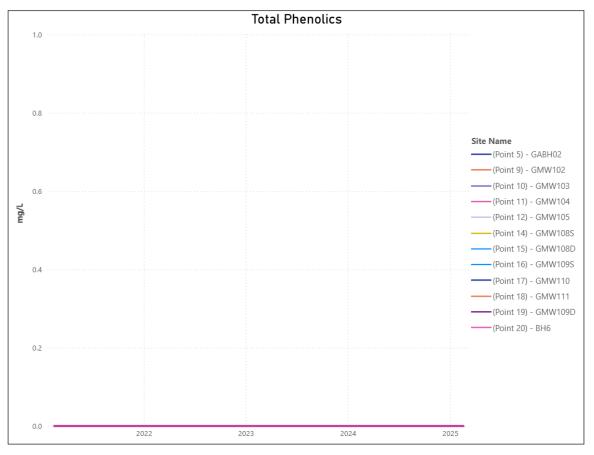


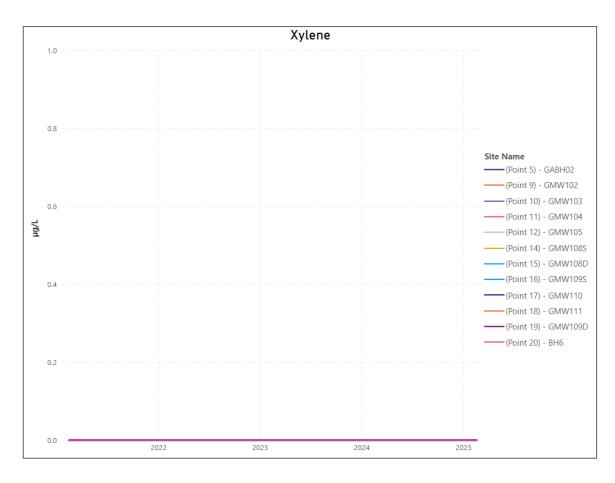


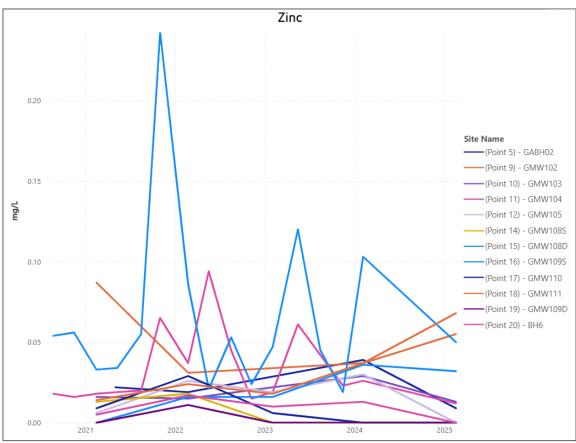




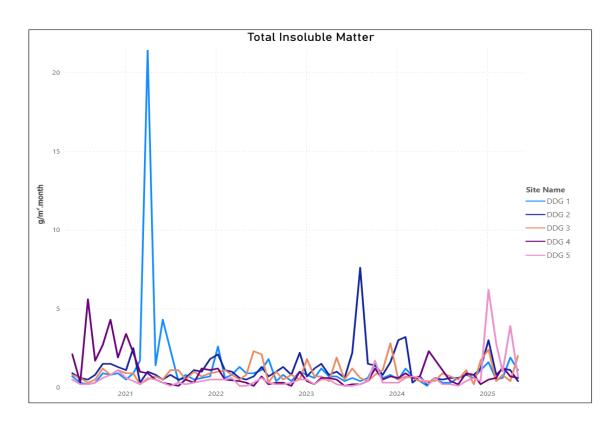


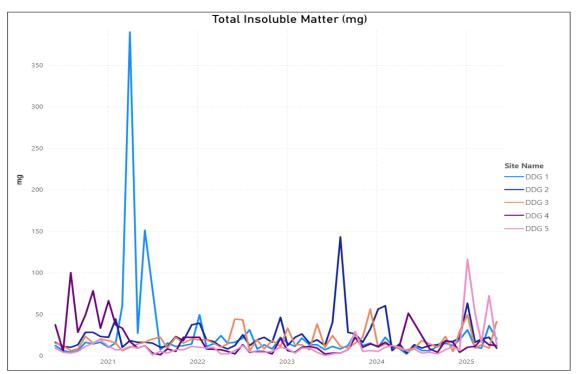


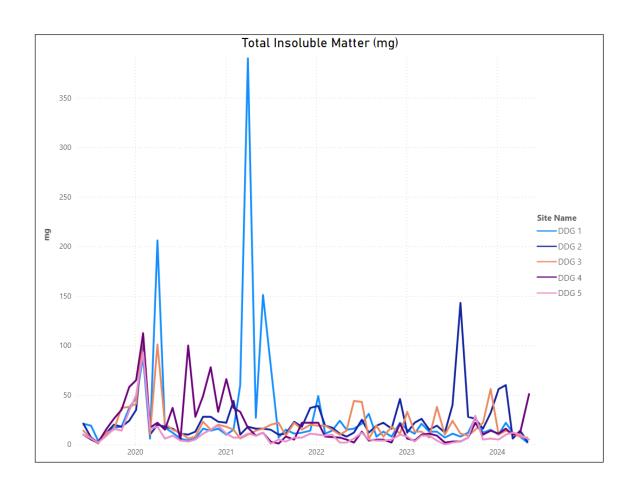


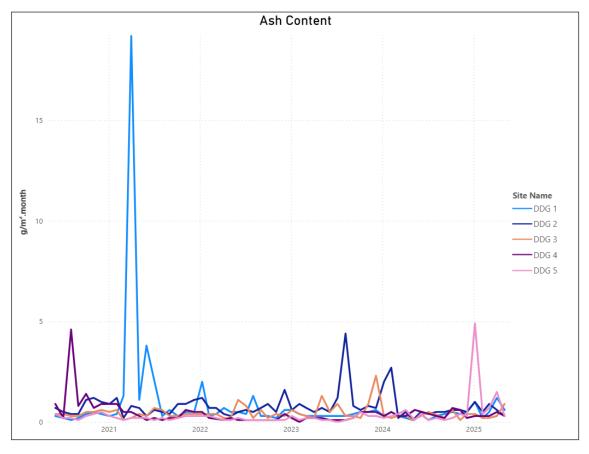


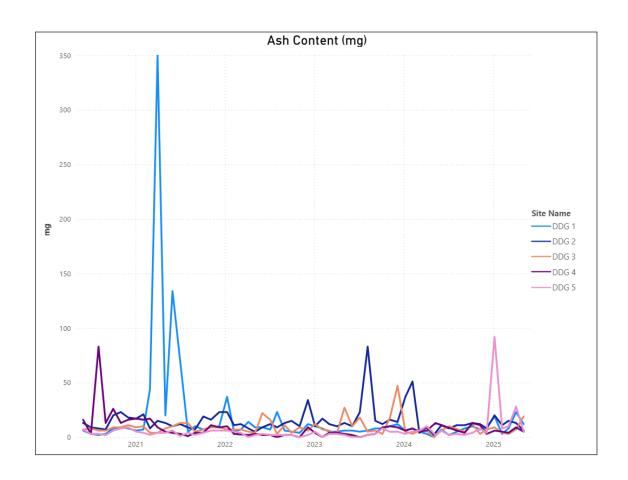
Deposited Dust Results 2024/25 Reporting Period

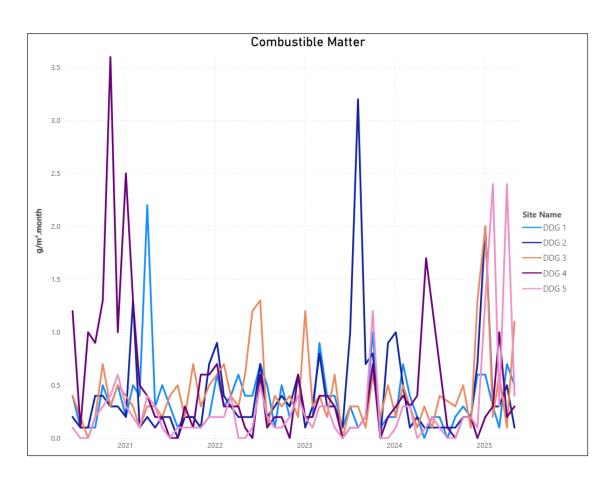












High Volume Dust Monitoring Results 2024/25 Reporting Period

