

Blaenau Gwent County Borough Council

Silent Valley Landfill

2025 Second Quarter Monitoring Report

Reference: 4-50

Issue 01 | 31 July 2025



This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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1. Introduction

This 2025 Second Quarter Monitoring Report presents the surface water, groundwater, landfill gas and leachate results for the monitoring undertaken in the period April to June 2025 in accordance with Silent Valley Environmental Permit ^[1] (Permit no. MP3835SV) and the Aftercare Phase Environmental and Infrastructure Monitoring Program ^[5].

The data has been collected as referenced in Schedule 3 of the Consolidated Permit ^[1]. This report refers to the 2025 First Quarter Monitoring Report ^[3].

1.1 Monitoring Regime

The monitoring regime is undertaken in accordance with the Aftercare Phase Environmental and Infrastructure Monitoring Program ^[5] and in line with the Consolidated Permit ^[1], which is fully detailed within the 2019 Annual Report ^[2].

2. Discussion of Monitoring Results

2.1 Rainfall

Measured rainfall data is illustrated in **Appendix A, Figures A1 and A2**.

Based on the available data, the following summary has been provided:

- June recorded the highest rainfall for the quarter, with 59mm, which is slightly below the average for this time of year (68mm). 3rd June recorded the highest daily rainfall of the quarter, with 18.8mm.
- May was the driest month of the quarter, recording 31mm. This was the driest May since recording began in 2008.
- The most consecutive days without rainfall occurred from 28th April to 10th May. In addition, May recorded a total of 20 days within the month without any precipitation.

2.2 Leachate

2.2.1 Leachate Quality Monitoring

Leachate quality monitoring results from within the waste body and from leachate standpipes are presented in **Appendix B, Table B1**.

To assess compliance, the Allowable Maximum Concentrations (AMC) are compared with the overall average concentrations from all combined wells. If AMC levels are exceeded, contingency actions are triggered.

No quarterly average leachate levels exceeded the AMC therefore these wells are compliant with the permit.

2.2.2 Leachate Level Monitoring

Leachate head level monitoring results are presented in **Appendix A, Figure A2** and **Appendix B, Table B2**. There were no significant changes in leachate head from the last quarter and the monthly average level for all the wells remains below the required 3.0m, as per the Permit ^[1].

2.2.3 BSC Pipe

Leachate head measurements are undertaken in BH1 to BH4 which are located along the alignment of the BSC pipe. Leachate levels have remained relatively consistent indicating no rise in leachate levels therefore the pipe is working as required. Results are included **Appendix A Figure A7** and **Appendix B Table B6**.

2.3 Surface Water

The surface water quality monitoring results are presented in **Appendix B, Table B3**, and graphically in **Appendix A, Figure A3**.

Commentaries are provided for upstream and downstream monitoring points in the Nant Merddog as discussed below.

2.3.1 Upstream Surface Water

Surface water monitoring locations, SWU, SW2A1, SWW4, SWW1 and SWW2 are located downstream of the landfill and monitored on a six-monthly basis in accordance with the Permit requirements.

These locations were monitored this quarter.

It is noted that both SW2AI and SWW4 were not sampled during this quarter as there was insufficient water within the surface water body to collect a sufficient sample. The consecutive lack of rainfall prior to the scheduled sampling date may have contributed to the absence of surface water within the water body.

The remaining upstream monitoring locations SWW1, SWW2 and SWU) remain compliant this quarter.

2.3.2 Downstream Surface Water

SWD and SWD1

Results show both SWD and SWD1 are compliant this quarter.

2.4 Groundwater

2.4.1 Groundwater Quality Monitoring

Groundwater quality monitoring results are presented in **Appendix A, Figures A4 and A5** and in **Appendix B, Table B4**.

Any non-compliances are discussed in the following sections.

During the previous quarter, sulphate and calcium concentrations in all groundwater monitoring wells were reported below detection limits which is unusual for these determinants. Although the laboratory confirmed no reporting errors, historical site data and past concentration trends suggested these figures were likely due to laboratory reporting discrepancies rather than actual changes in groundwater chemistry. In the current quarter, concentrations have reverted to expected levels, supporting the assumption that prior readings were erroneous.

2.4.1.1 Upstream Groundwater Wells

The monitoring of upstream wells is undertaken to understand the groundwater quality upstream of the landfill. These wells provide insight to any potential contaminants that may originate from off-site sources, which may impact groundwater quality.

Wells GW3A and GW4

GW3A and GW4 monitor the sandstone strata classified as S3-East.

GW3A is compliant this quarter.

GW4 remains elevated above the assessment level of 1.0mg/l for manganese (1.6mg/l) but the concentration has decreased from last quarter (1.71mg/l). Considering GW3 and GW4 are upstream, these groundwater wells are monitoring background concentrations.

2.4.1.2 Downstream Groundwater Wells

The results from the downstream groundwater monitoring wells indicate that generally the pumping system at the toe of the landfill is continuing to successfully control the potential egress of leachate from the landfill. No issues associated with pump failure within the cut-off system have been recorded during 2024 and 2025.

Wells GW6 and GW7

GW6 and GW7 have been installed in the centre of the valley in the sandstone strata classified as S1 and are compliant this quarter.

Well GW9

GW9 is installed in the sandstone strata classified as S2-East and is compliant this quarter.

Well GW10

GW10 has been installed in the sandstone strata classified as S3-East.

GW10 has continued to exceed the assessment level of 1.0mg/l for manganese (5.4mg/l). The concentrations of manganese have continued to fluctuate in this well throughout 2023 and 2024.

Well GW12

GW12 has been installed in the sandstone strata classified as S2-West and has remained compliant this quarter.

2.4.2 Groundwater Levels Monitoring

Groundwater levels are monitored on a quarterly basis in the compliance and upstream wells. The monitoring results are illustrated graphically in **Appendix A, Figure A6**. Water levels have remained relatively consistent this quarter with no significant differences from the 2024 readings ^[3].

2.5 Landfill Gas

2.5.1 Methane

The landfill gas monitoring results are presented in **Appendix B, Table B5**.

Methane concentrations continue to be recorded below the respective control and trigger levels (where available) in all monitoring locations this quarter.

2.5.2 Carbon Dioxide

All monitoring wells remained compliant this quarter with exception of GMW2, GMW3 and GMW13.

The exceedances throughout this quarter of both control and trigger levels include:

- GMW2 red valve: singular exceedance of the control level 1.0%v/v in June (1.4%v/v). This is the first exceedance at GMW2 this year.
- GMW3 yellow valve: singular exceedance of the trigger level 2.67%v/v in June (3.8%v/v). This is the first exceedance at this valve this year.
- GMW13 yellow valve: concentrations have decreased from the previous quarter but remain above control level of 5.5%v/v in April (5.6%v/v), May (5.6%v/v) and June (5.4%v/v). A technical will be issued separately to this report discussing the ongoing exceedances.

3. Conclusion

The monitoring data and interpretation produced in this report has not identified any significant issues relating to contaminant levels recorded above the screening criteria within the leachate and groundwater. Where limited minor exceedances have been identified, there is no evidence to suggest they are having a discernible impact on the surrounding environment and the landfill continues to comply with the requirements of the permit.

The second quarterly report of 2025 has noted the following:

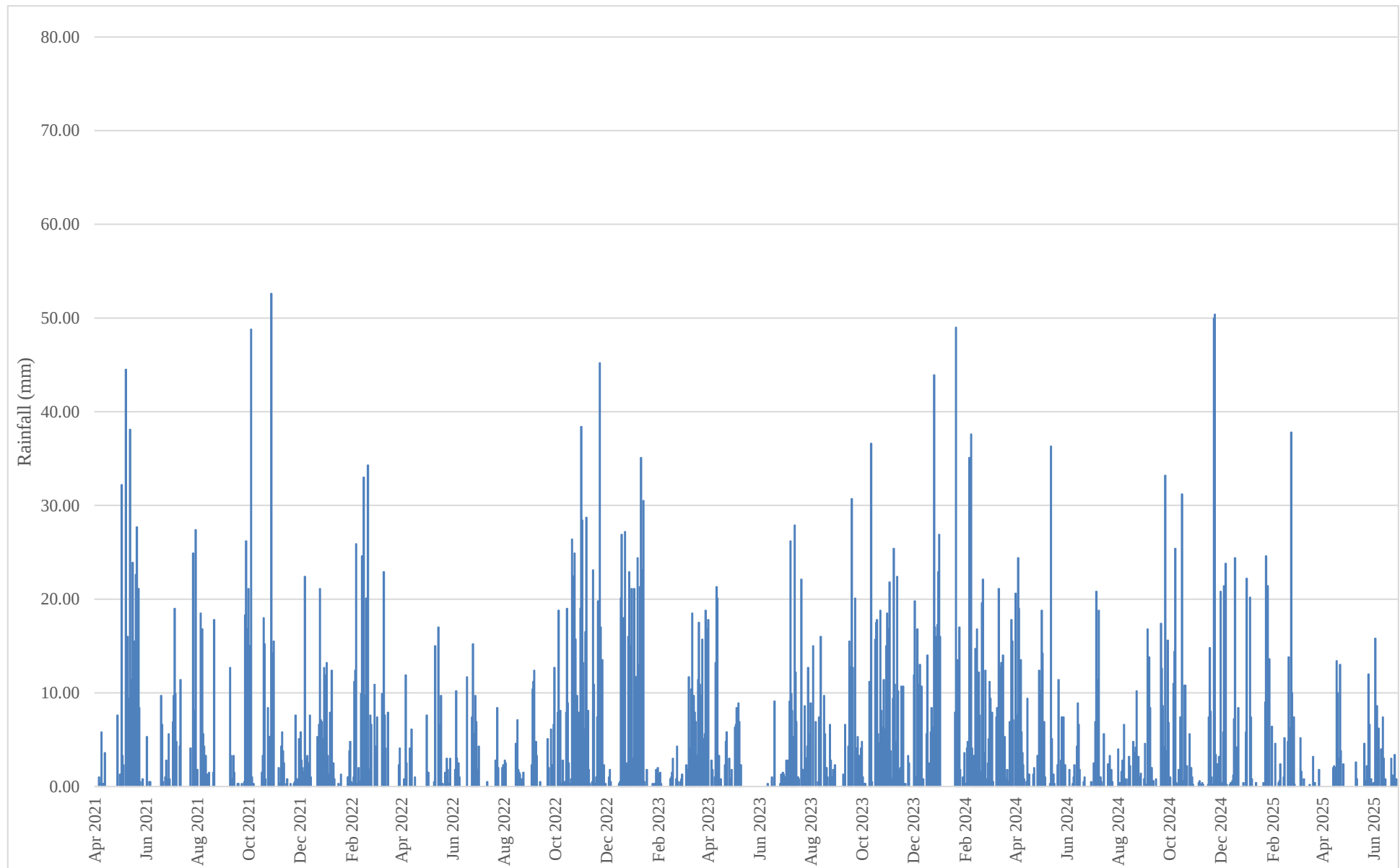
- Downstream groundwater well GW10 is recording elevated manganese concentrations above the assessment level of 1.0mg/l. The leachate results within the landfill remain consistent with the 2024 results, showing no change in manganese concentrations. The upstream groundwater well GW4 also recorded elevated manganese concentrations this quarter which are likely sourced from the steel works waste deposited to the north of the landfill and old mine workings in the area, it is assumed this is the source of the manganese in the downstream wells within the sandstone strata. In summary, the results indicate a potential off-site issue impacting the downstream groundwater, unrelated to the landfill.
- Singular exceedances of carbon dioxide in GMW2 and GMW3 have been recorded in June this quarter. While singular exceedances do not need to be actioned, these will be closely monitored into the next quarter.
- GMW13 carbon dioxide concentrations have decreased this quarter but remain above assessment level. A technical note will be issued separately to this report discussing the ongoing exceedances.

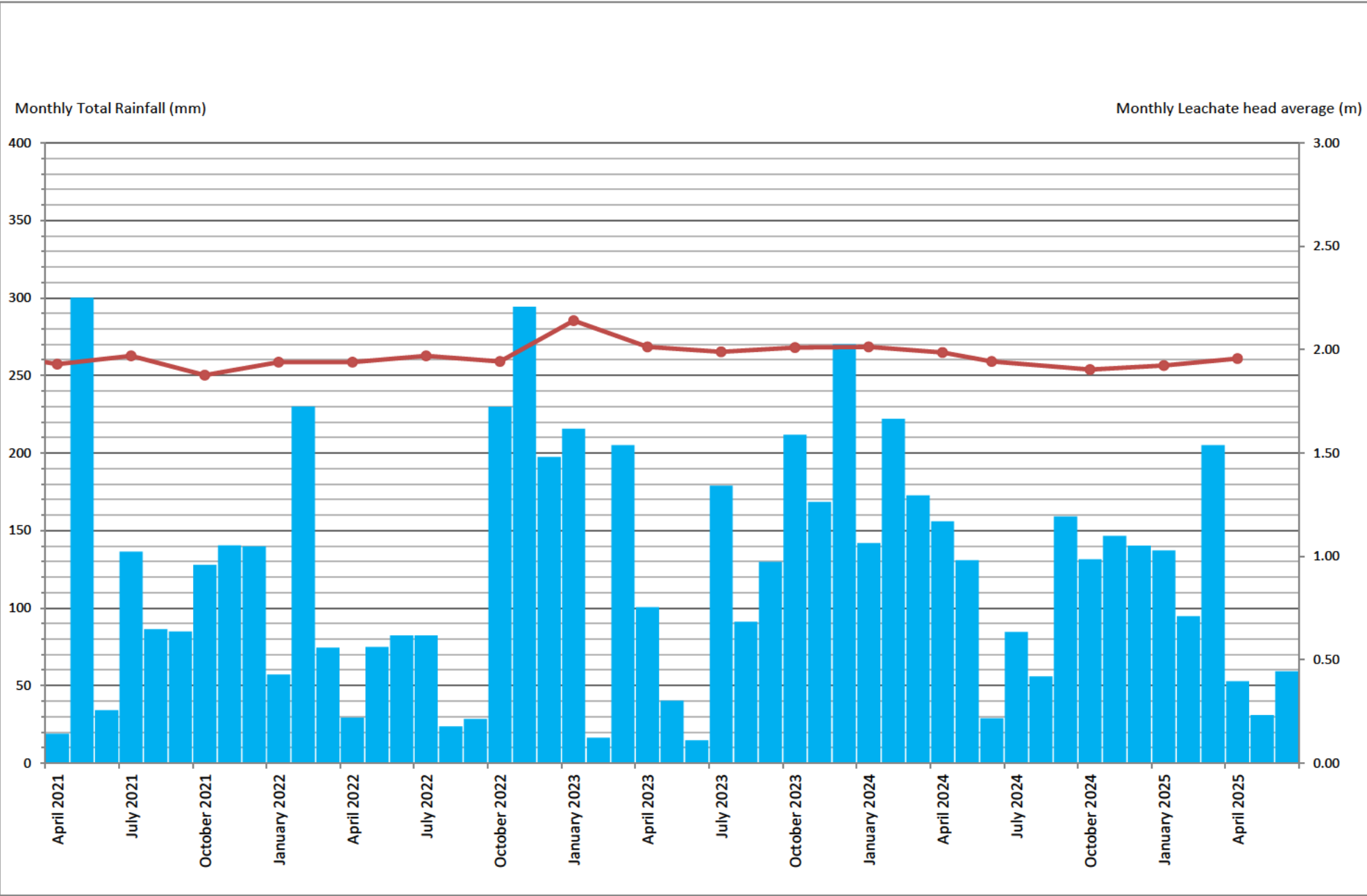
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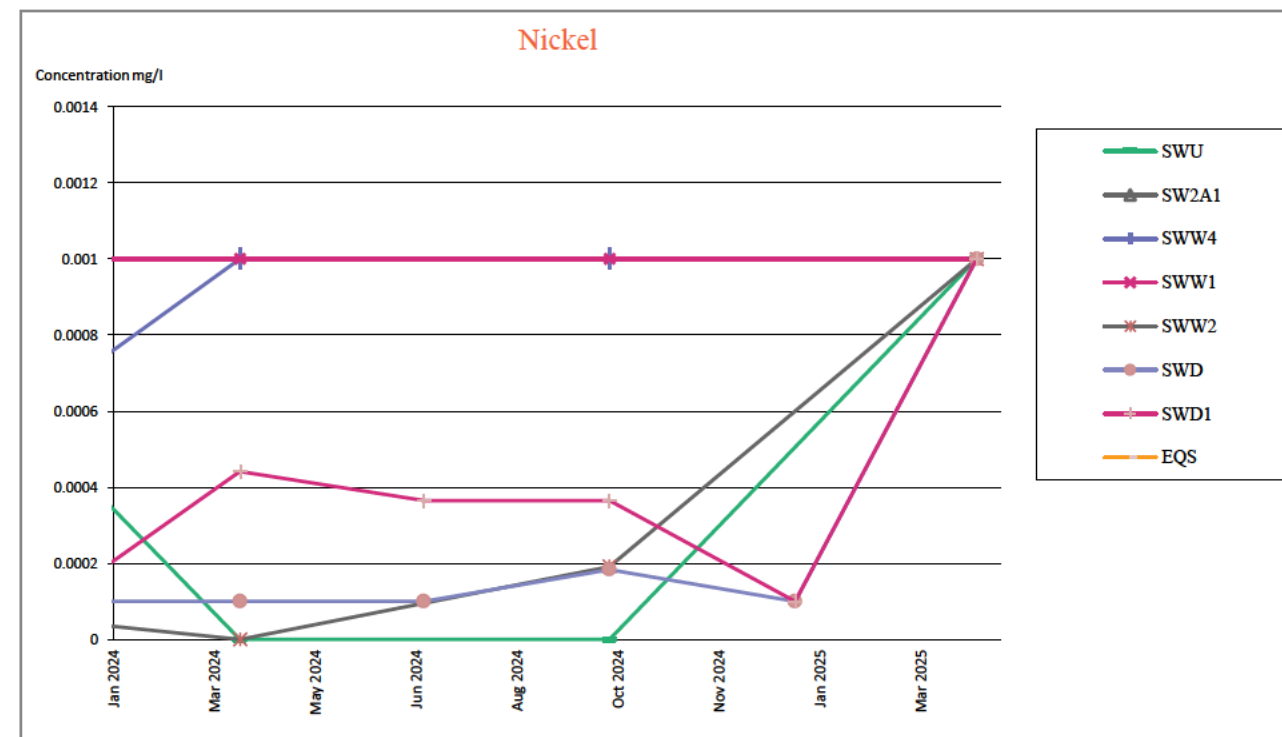
- [1] Environment Agency, Silent Valley Landfill Site, Pollution Prevention and Control (England and Wales) Regulations 2000, Landfill (England and Wales) Regulations 2002, Permit number MP3835SV, November 2005, Permit amended as of 04/03/16.
- [2] Arup, Silent Valley Landfill, 2019 Annual Monitoring Report, 31st January 2020.
- [3] Arup, Silent Valley Landfill, 2025 First Quarter Monitoring Report, 30th April 2025.
- [4] Arup, Silent Valley Landfill, Interim GW9 and Nant Merddog W, Issue May 2015.
- [5] Arup, Silent Valley Landfill, Aftercare Phase Environmental and Infrastructure Monitoring Program, Issue June 2013.
- [6] Arup, Silent Valley Landfill, Hydrogeological Risk Assessment, document reference 04/6363, November 2004.
- [7] Arup, Silent Valley Landfill, Investigation into the Western Flank of the Cut-off System. Compliance Well GW9 and GW10, document reference 115825, August 2011.
- [8] Environment Agency, Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water, report reference LFTGN02, June 2014.
- [9] Arup, Silent Valley Landfill, Hydrogeological Risk Assessment (Supplementary Revision May 2009), document reference 09/7543, June 2009.
- [10] Environment Agency, Guidance on the management of landfill gas, document reference LFTGN03, June 2014.
- [11] The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015.
- [12] Water Framework Directive - United Kingdom Technical Advisory Group (WFD-UKTAG), “Metal Bioavailability Assessment Tool (M-BAT),” 2014.
- [13] Arup, Silent Valley Landfill, Hydrogeological Risk assessment, document reference 2019/9559, July 2019.
- [14] Golder Associates, Establishment of Trigger Levels at Silent Valley landfill site, letter report dated 21 December 2006.
- [15] Arup (2011) Silent Valley landfill Investigation into the Western Flank of the Cut-off System. Compliance Wells GW9 and GW10.

Appendix A: Monitoring Results - Graphs

Daily rainfall totals (April 2021- June 2025)







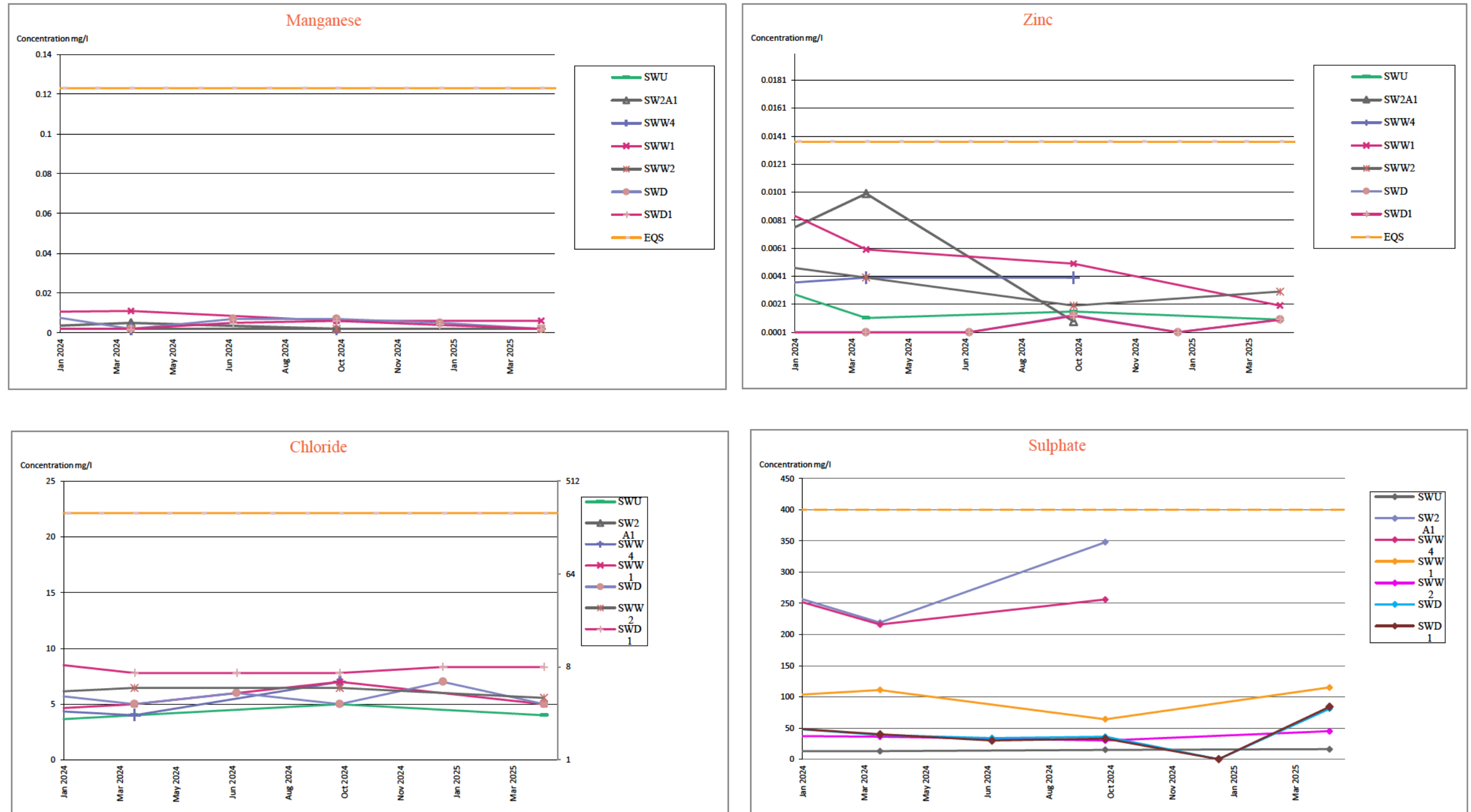
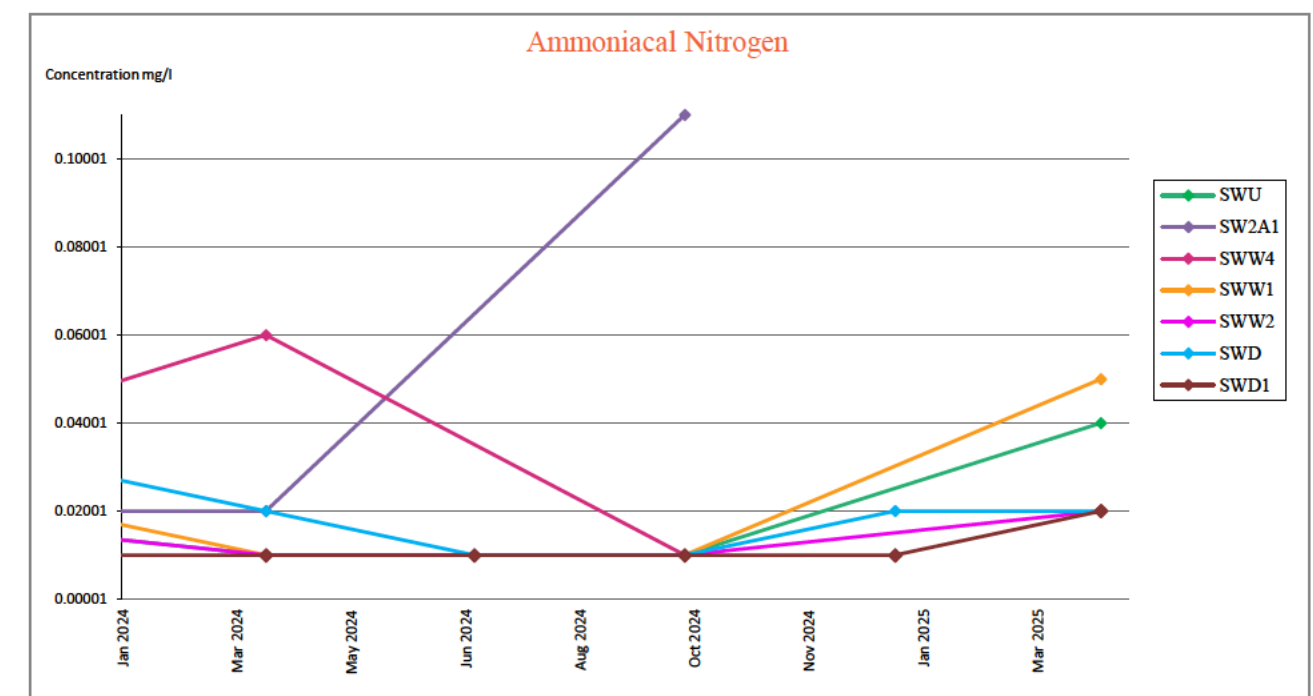
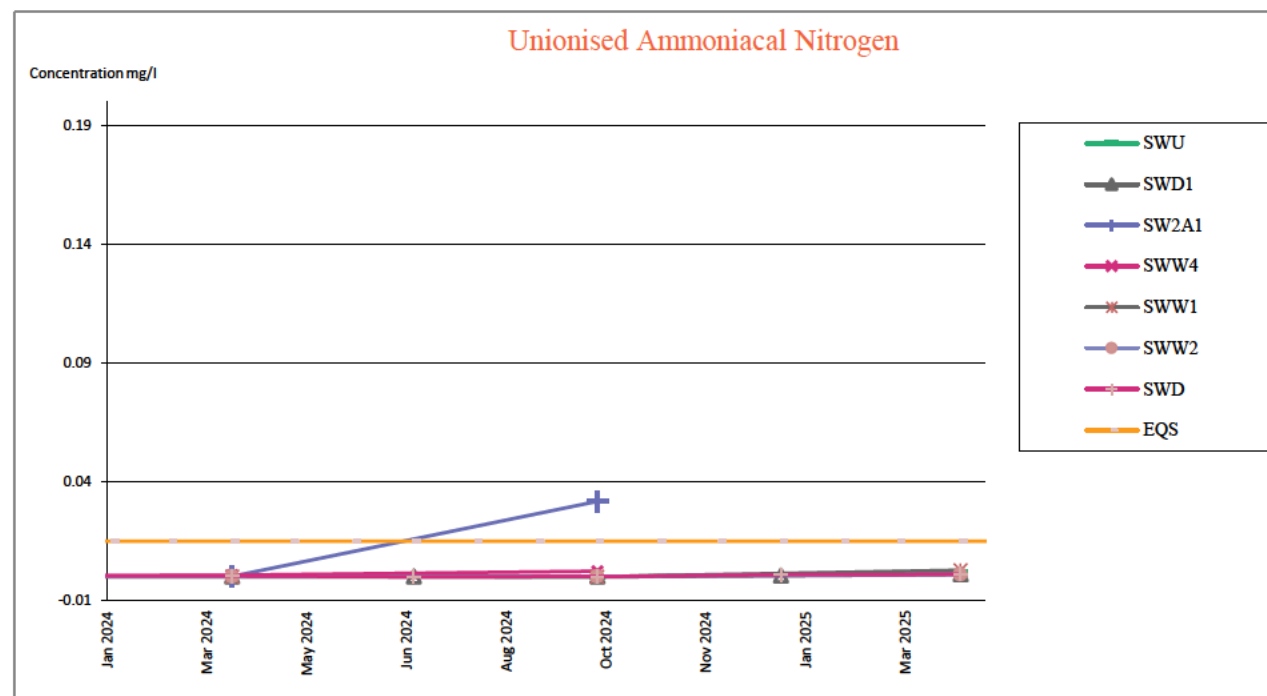


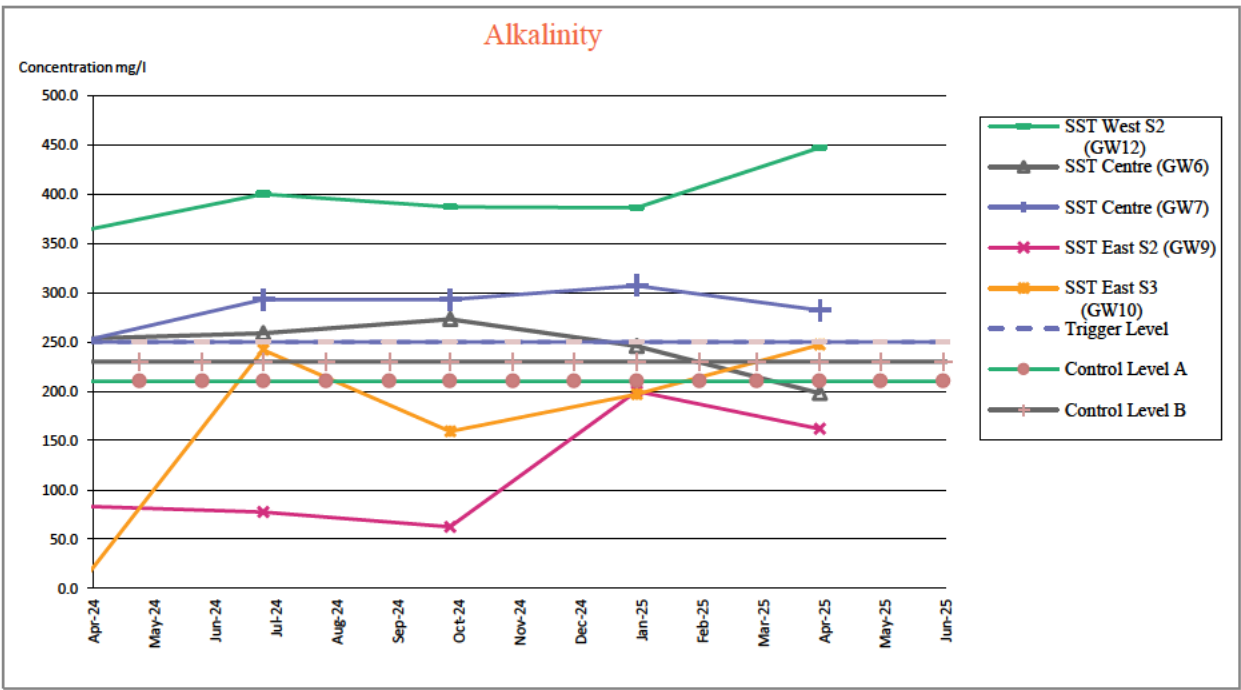
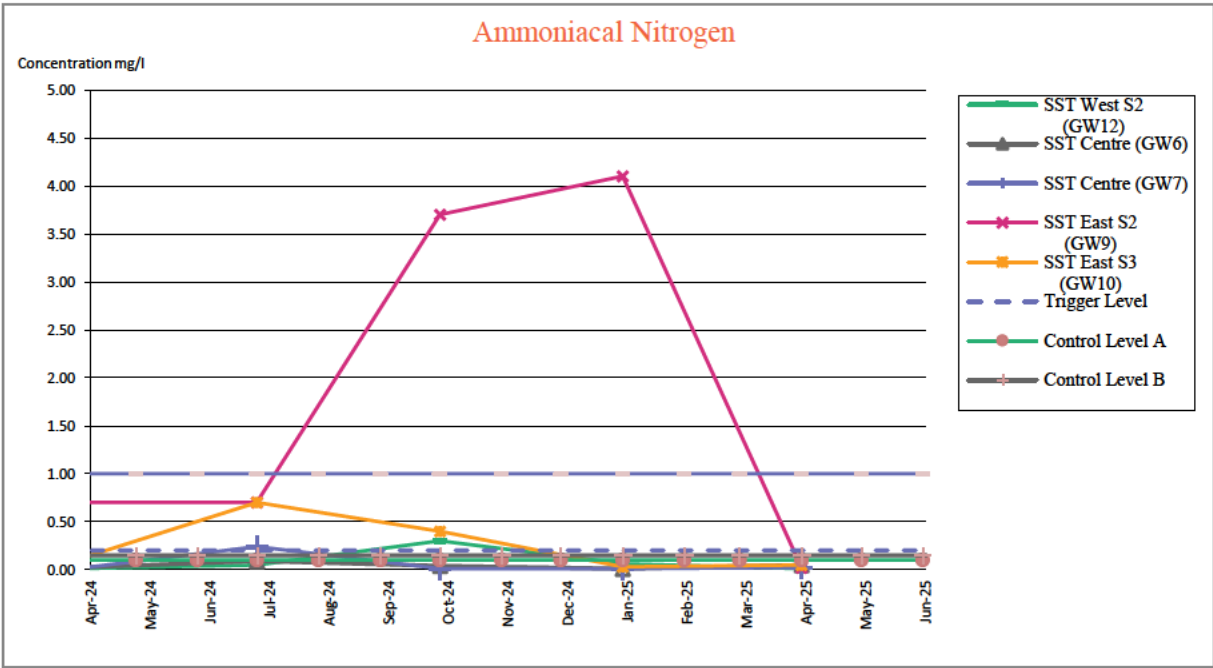
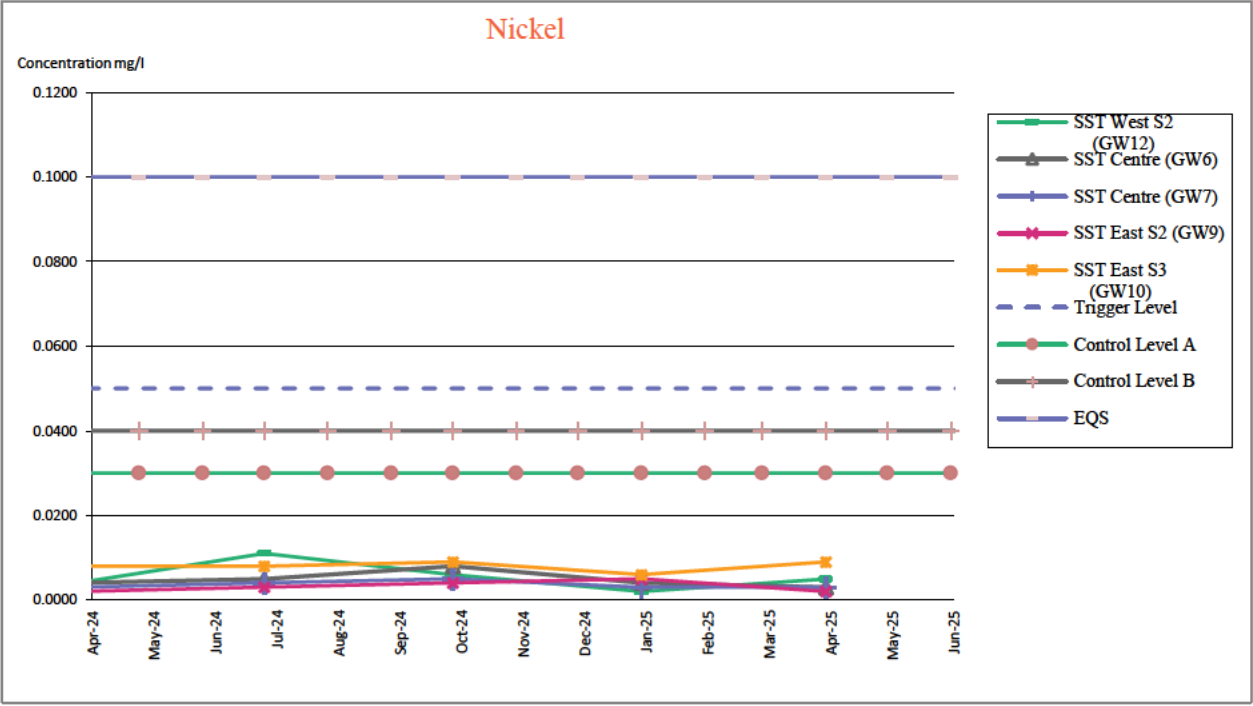
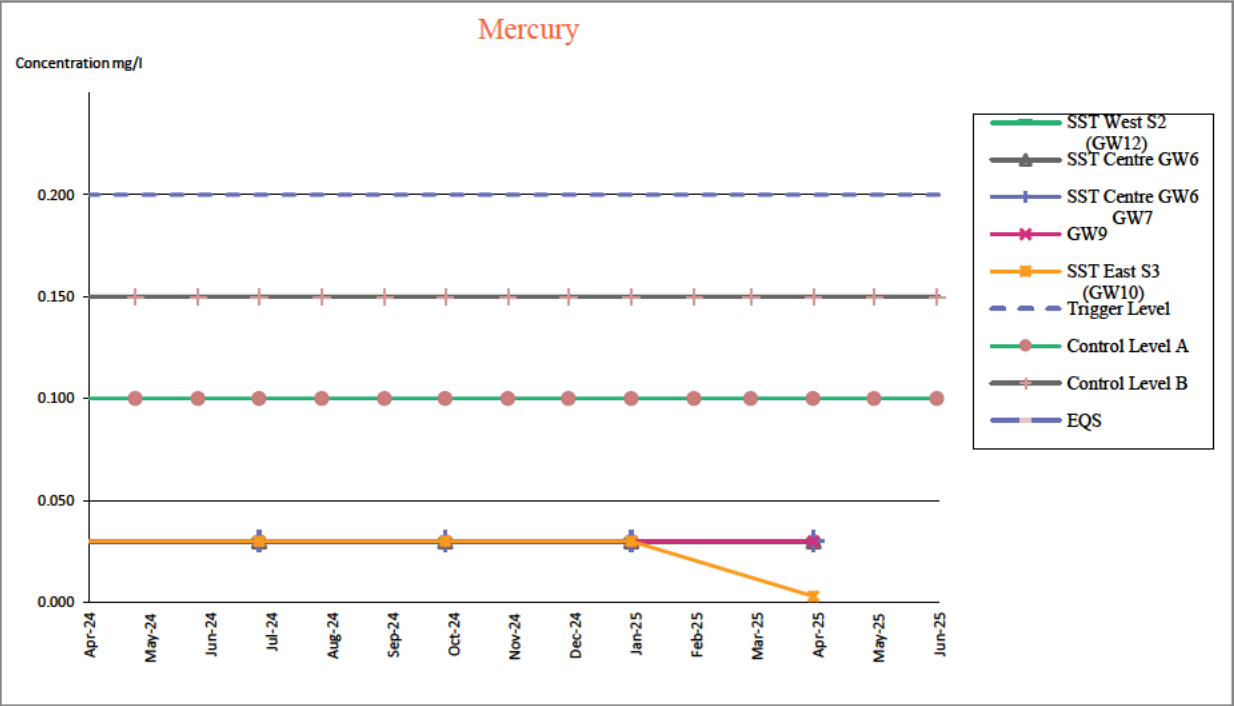
Figure A3

Surface water monitoring graphs



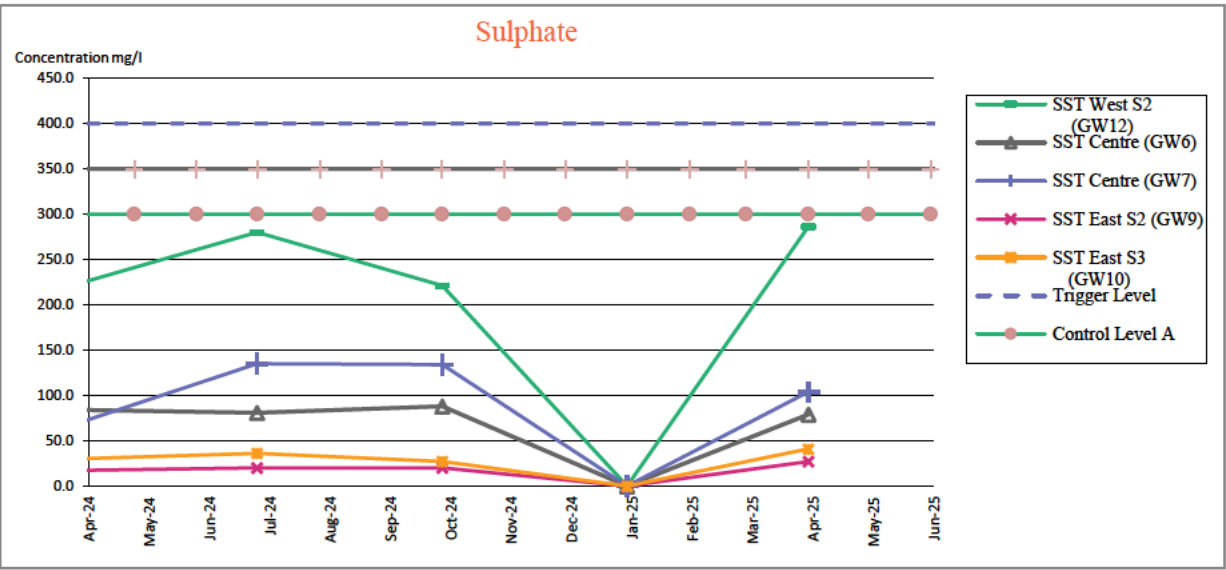
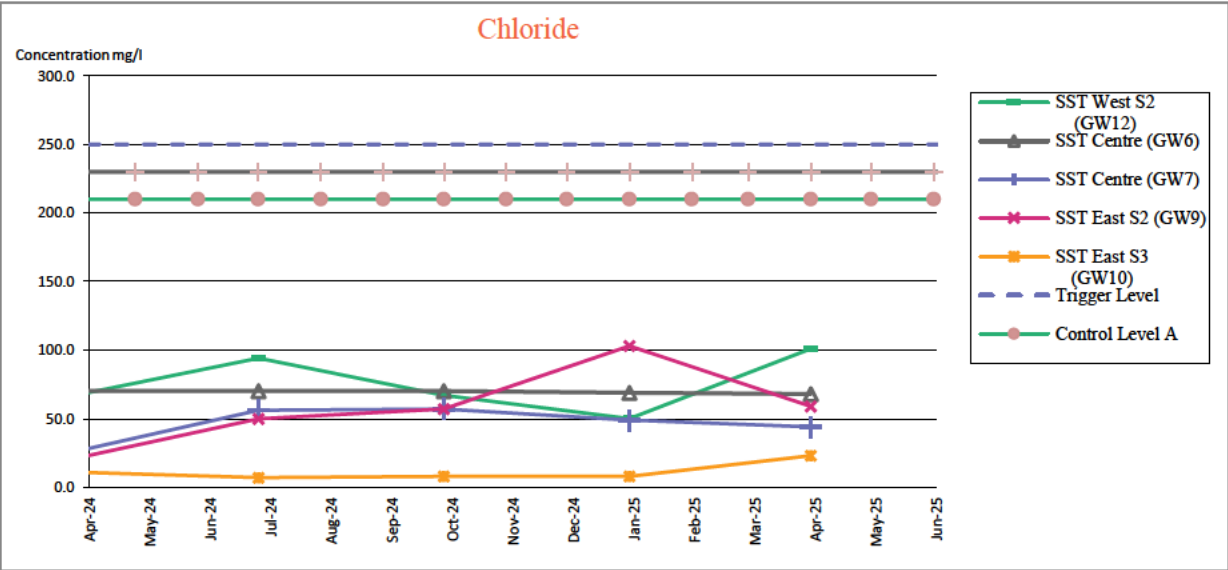
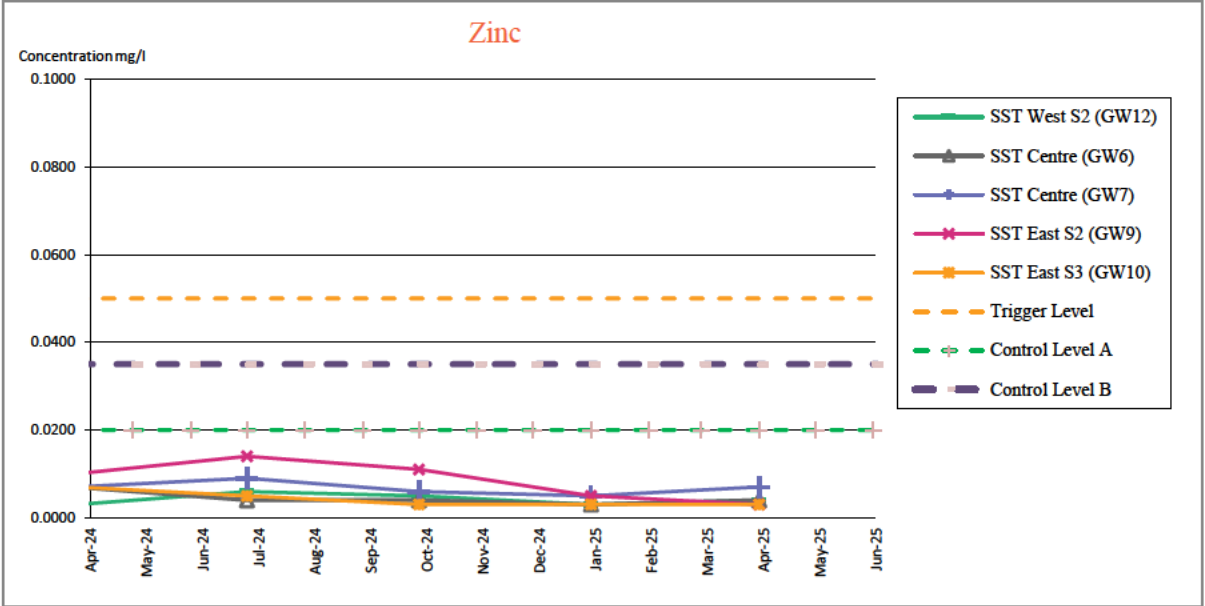
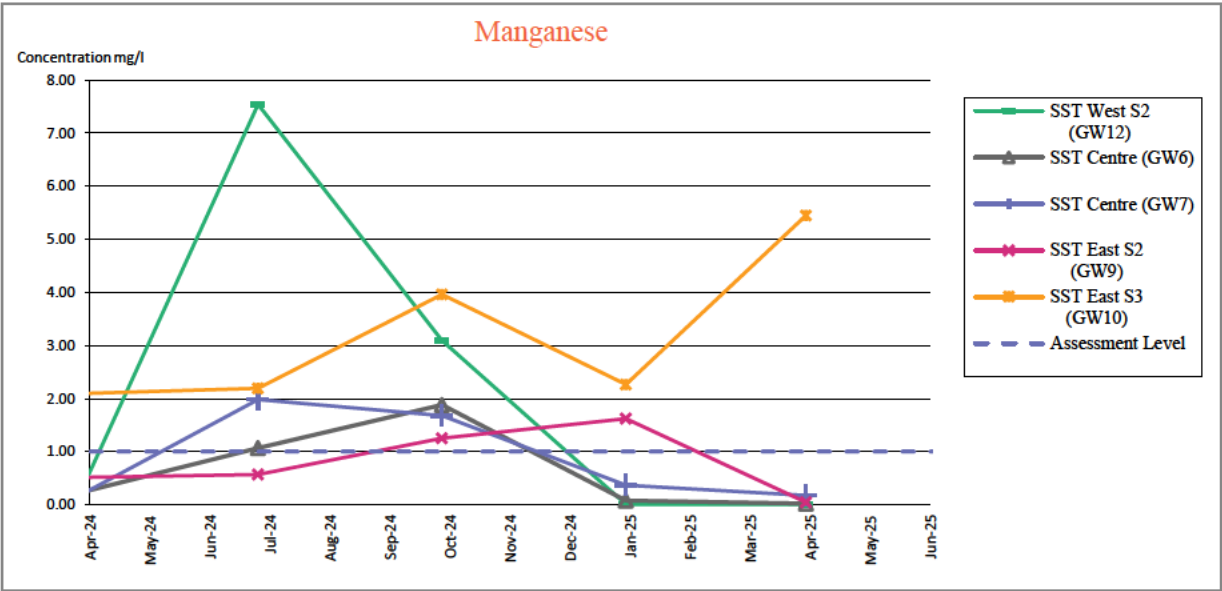
Groundwater quality monitoring results - Compliance wells graphs

Compliance wells graphs



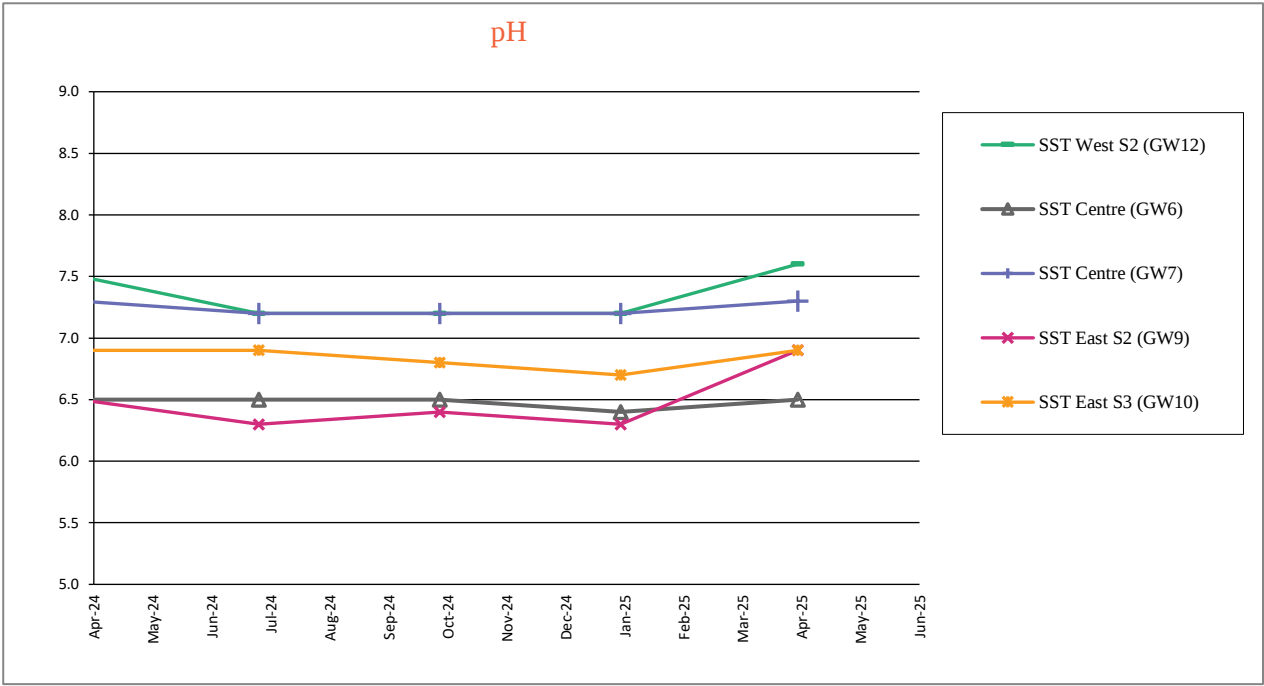
Groundwater quality monitoring results - Compliance wells graphs

Compliance wells graphs

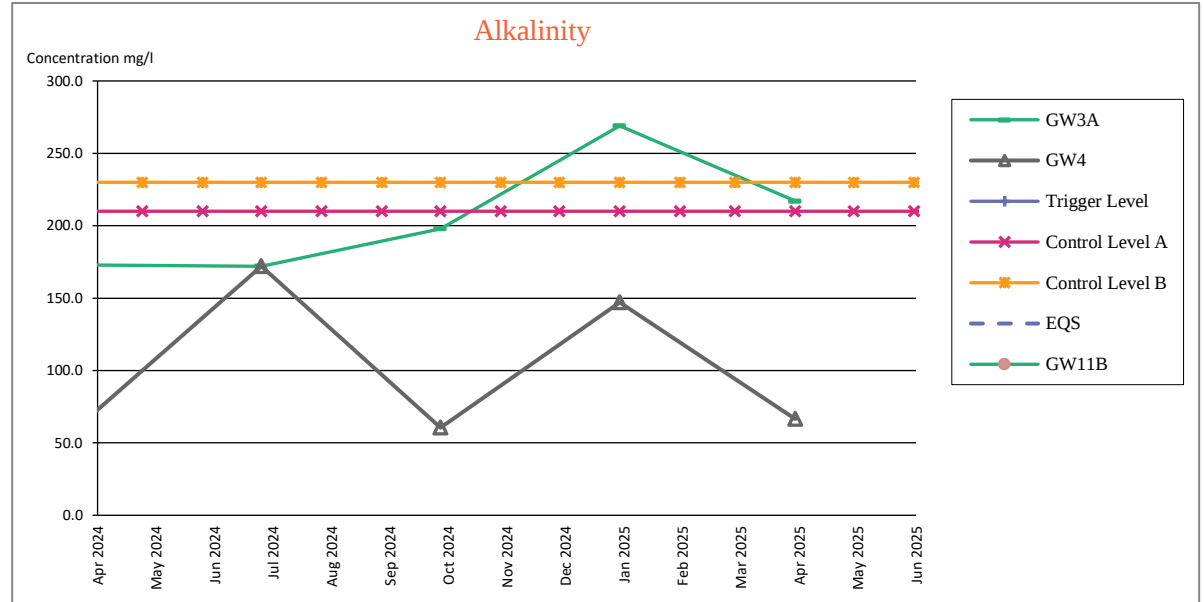
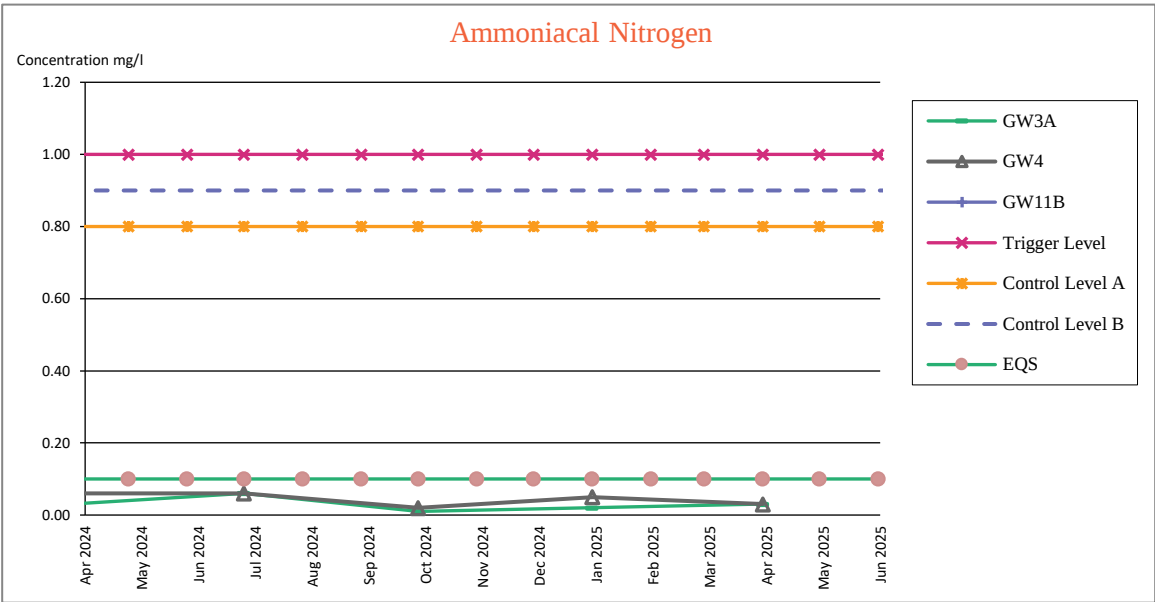
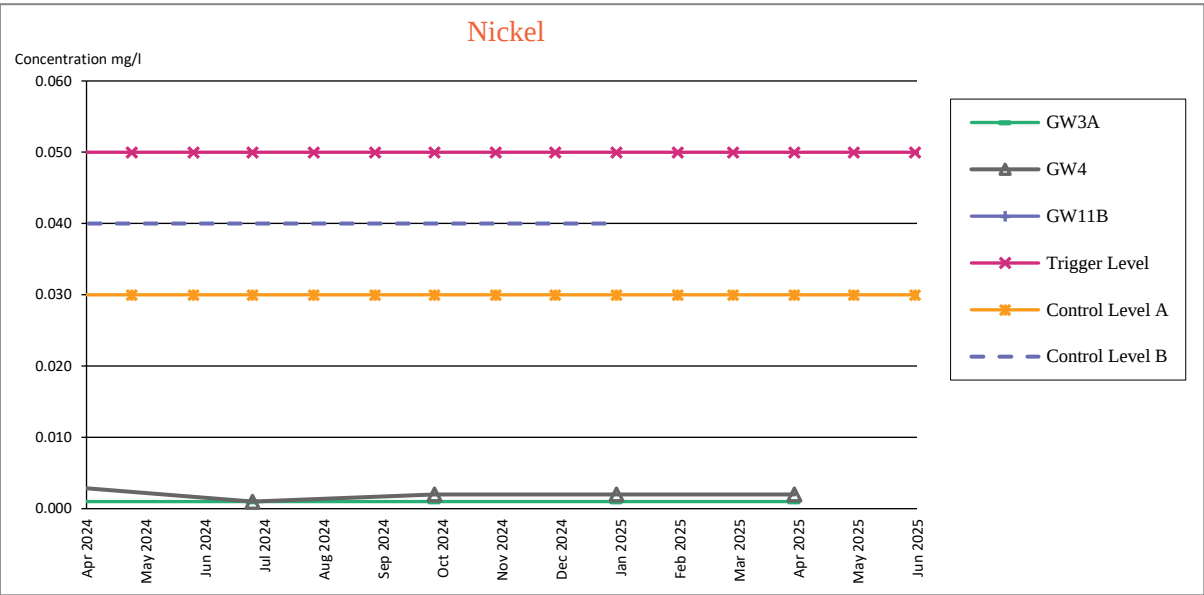
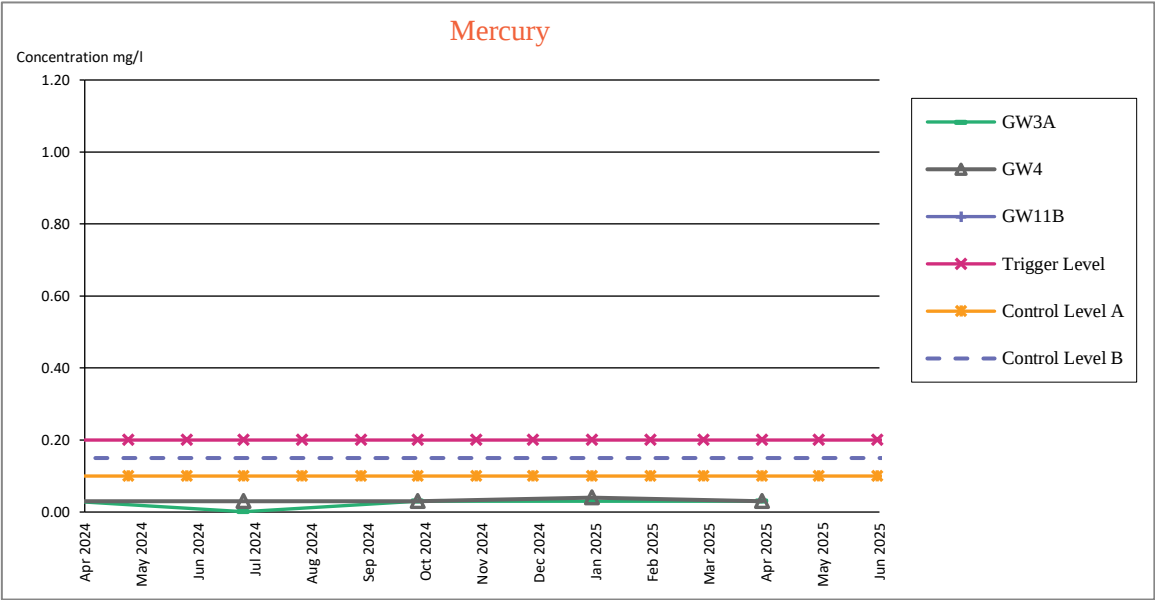


Groundwater quality monitoring results - Compliance wells graphs

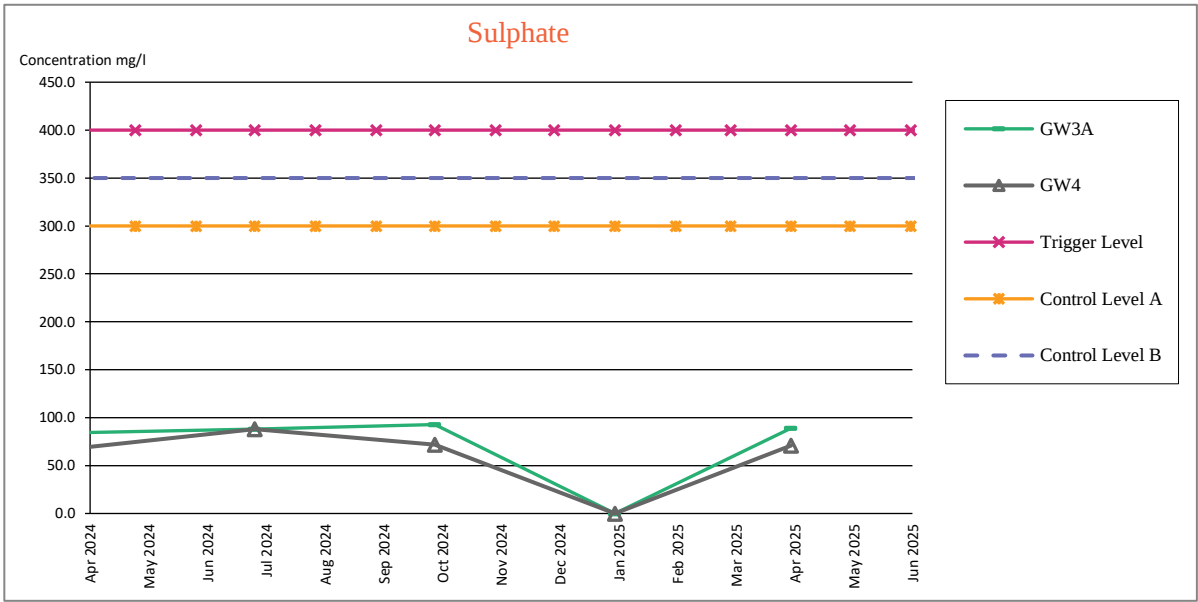
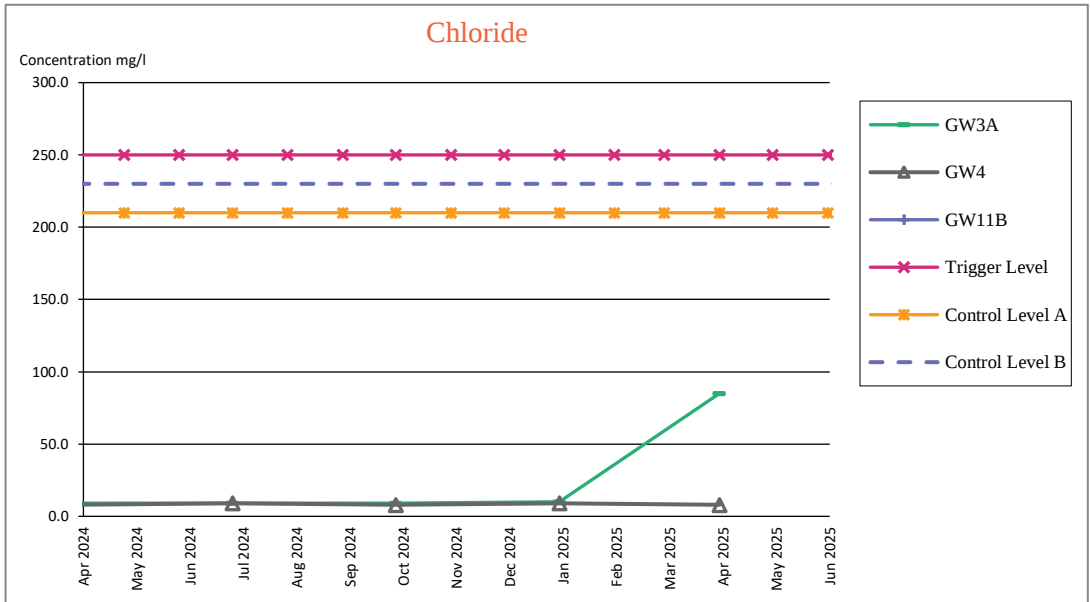
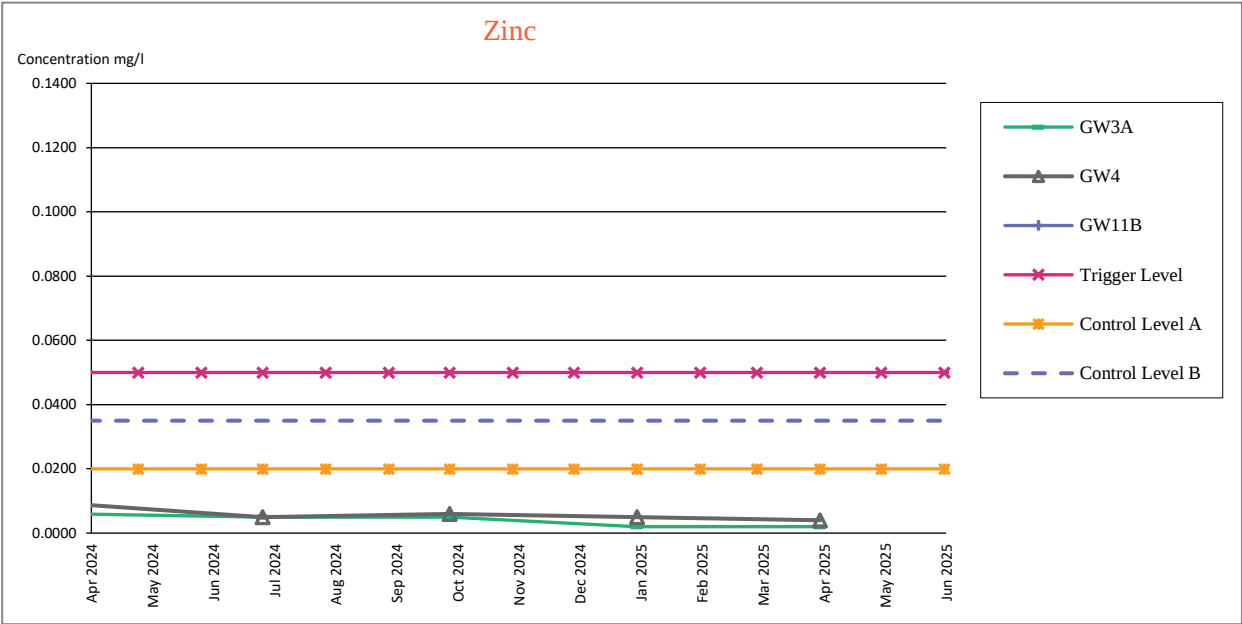
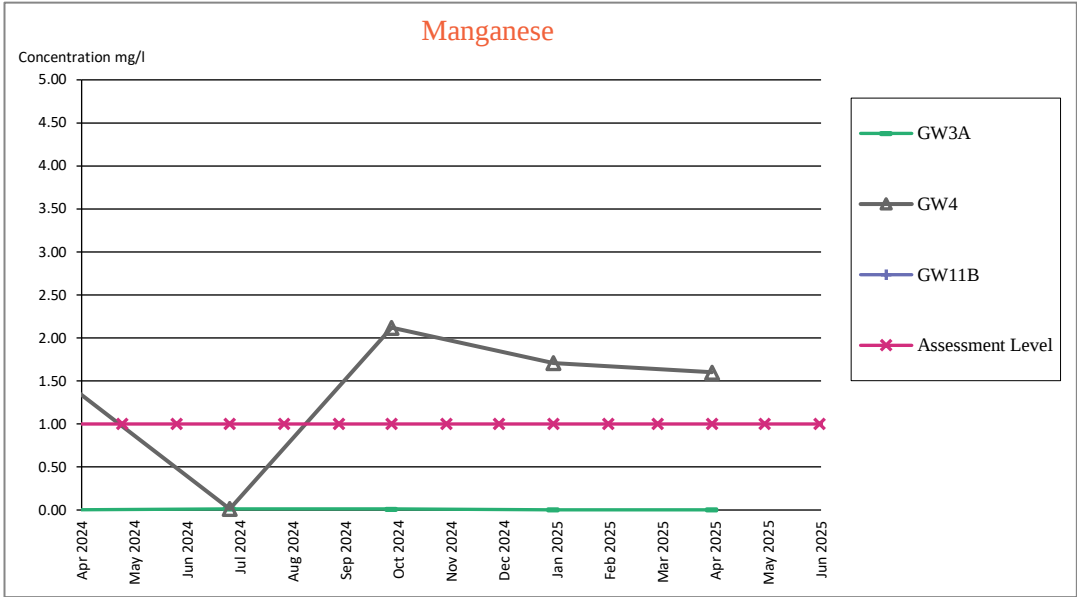
Compliance wells graphs



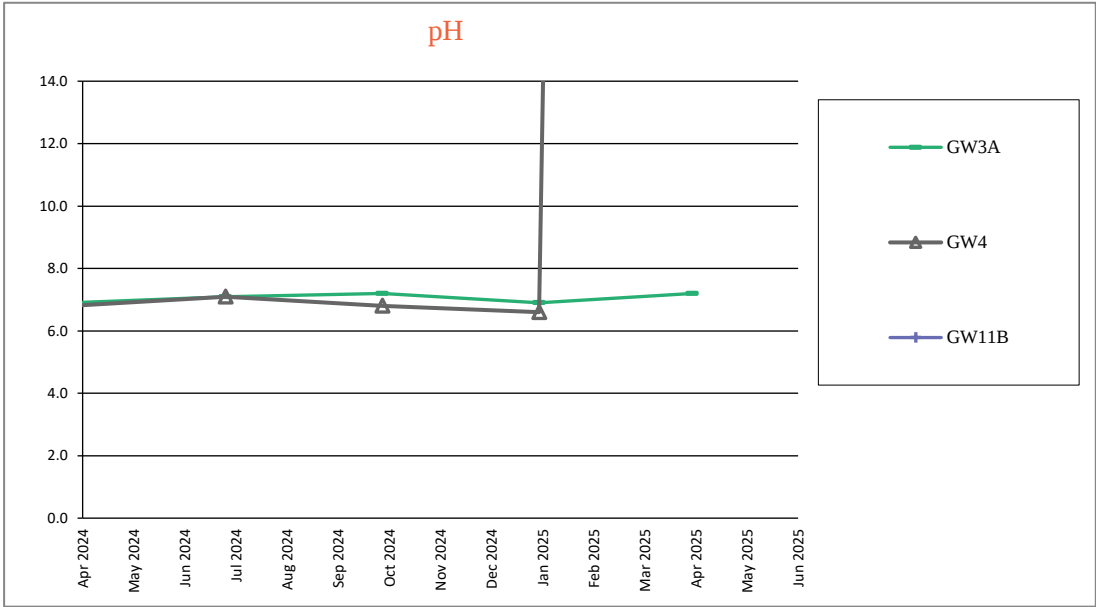
Groundwater quality monitoring results - Upstream wells graphs

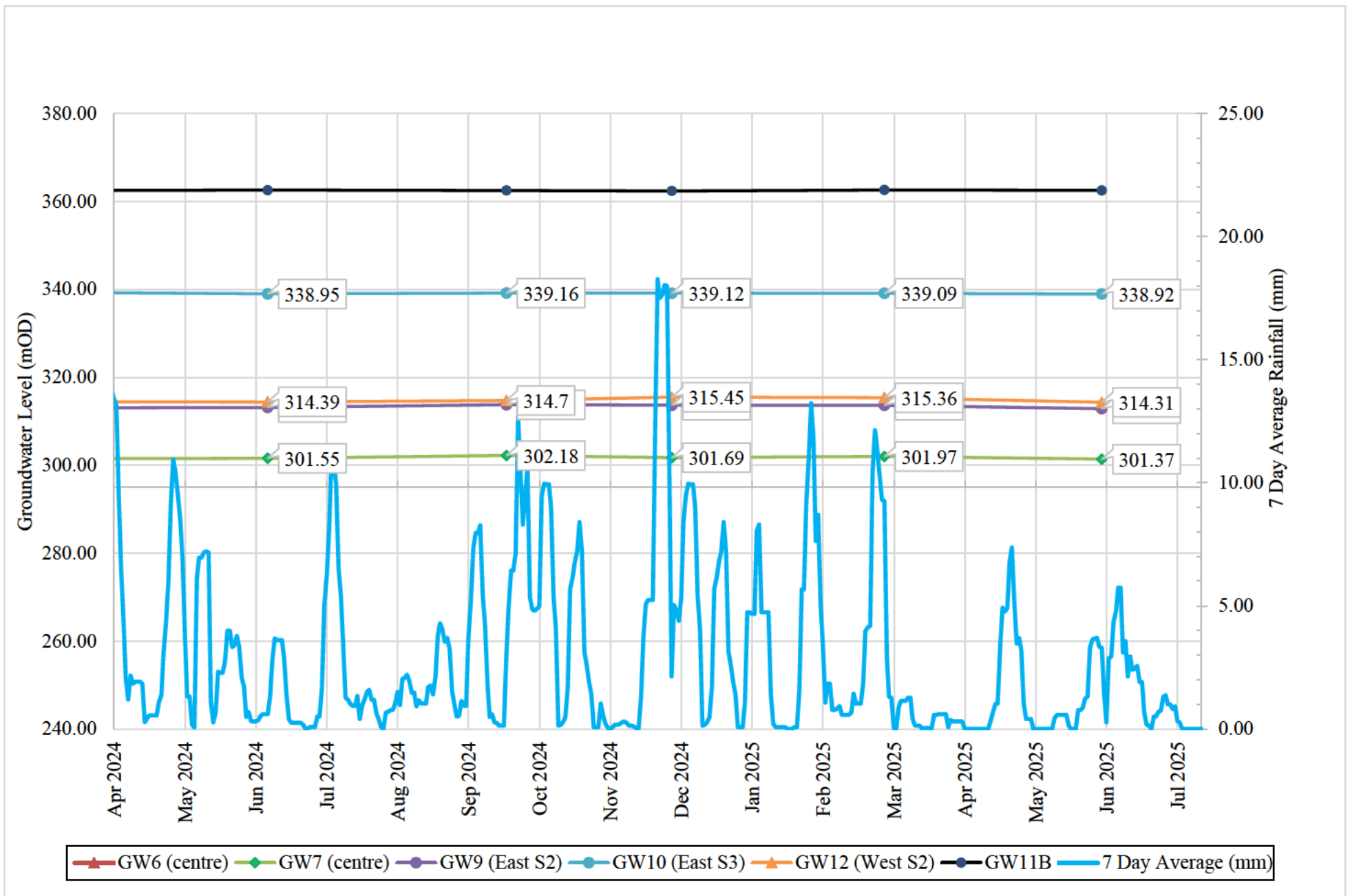


Groundwater quality monitoring results - Upstream wells graphs

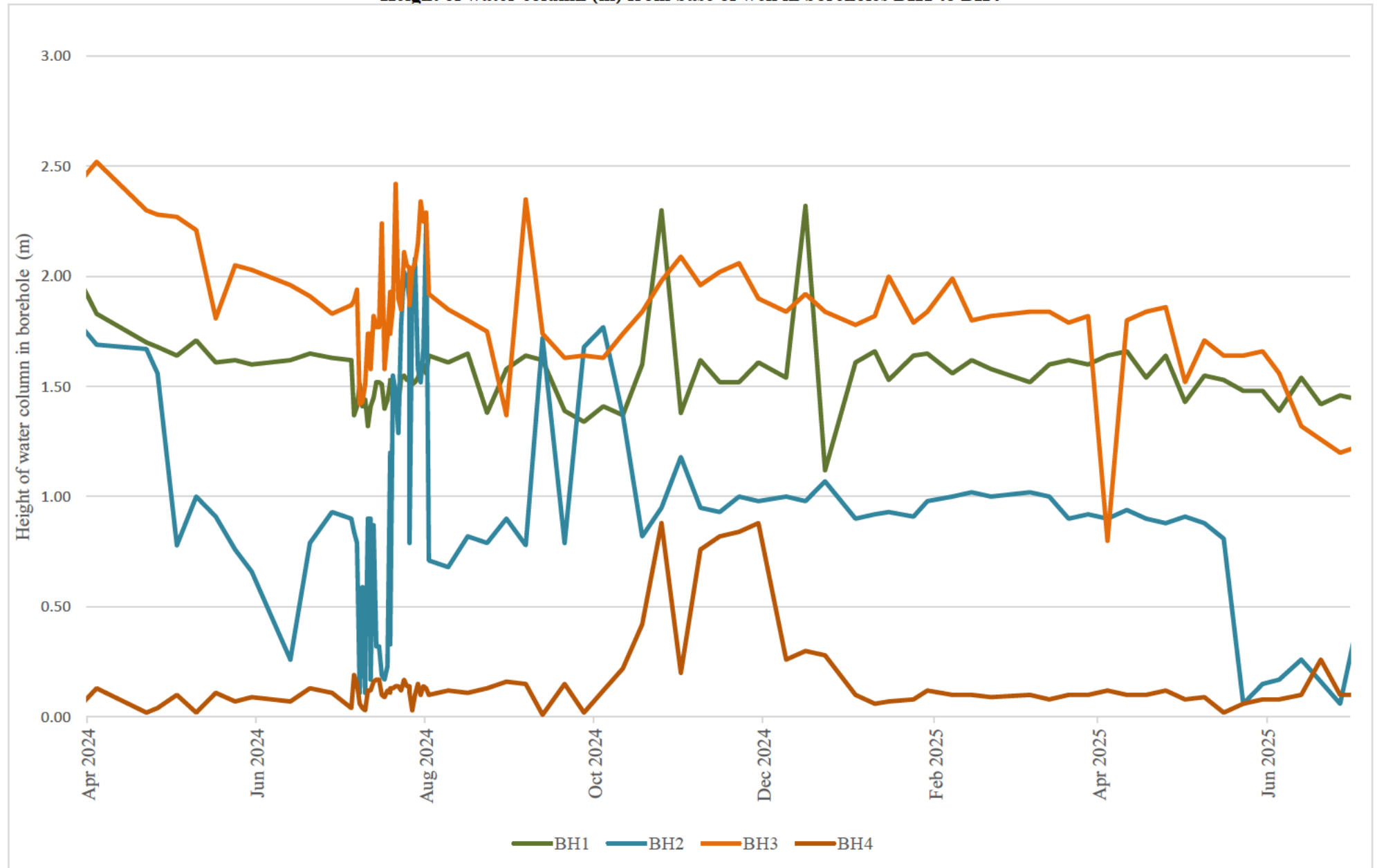


Groundwater quality monitoring results - Upstream wells graphs





Height of water column (m) from base of well in boreholes BH1 to BH4



Appendix B: Monitoring Results - Table

Leachate Monitoring Results

LOCATION	Units	L1A	L1B	LC1A	LC2A	LC4A	LC5B	Maximum concentration (mg/l)	Monthly Average (mg/l)	Acceptable Maximum Concentration (AMC) (mg/l)	LP3A	LP4
Date Sampled	13/05/2025							-	-	-		
pH	pH Units	N/S	7.5		8.2	7.2	8	8.2	7.73	--	8.2	8
Conductivity- Electrical 20C	uS/cm		1790		11400	3890	8210	11400	6323	--	1680	1770
Redox Potential ^(see note 4)	mV		228		7	-92	62	228	51	--	191	186
Dissolved Oxygen, Fixed*	mg/l		10.9		2.6	3.3	6.3	10.9	5.78	--	11.9	10.4
Alkalinity as CaCO3	mg/l		501		4420	1920	3330	4420	2543	--	438	652
Total Suspended Solids	mg/l		20		407	283	148	407	215	--	<5	<5
Solids, Total Dissolved 180 deg C	mg/l		1320		5000	1740	3410	5000	2868	--	1180	1160
TOC (filtered)	mg/l		11.4		249	43.8	224	249	132	--	10.2	12.3
Ammoniacal Nitrogen as N	mg/l		0.05		780	230	555	780	391	526	0.03	10
Chloride as Cl	mg/l		106		829	147	576	829	415	1408	117	115
Manganese in filtrate as Mn	mg/l		0.605		0.124	0.779	0.333	0.779	0.46	--	0.004	0.084
Mercury, filt trace as Hg	mg/l		< 0.00003		< 0.0003	< 0.0003	< 0.0003	0.00030	0.0002	0.00056	< 0.00003	< 0.00003
Nickel in filtrate as Ni	mg/l		0.005		0.09	<0.010	0.055	0.09	0.05	0.0681	0.006	0.005
Sulphate as SO4	mg/l		309		524	10	42	524	221	999	241	168
Zinc, ultra-low filtered as Zn	mg/l		0.008		0.047	<0.020	0.02	0.047	0.03	1.38	0.004	0.006

- Notes
- 1. < denotes 'less than'.
 - 2. L1A,L1B, LC1A, LC2A,LC4A, LC5B: Wells in Waste.
 - 3. -- denotes 'no acceptable maximum concentration available'.
 - 4. The redox potential was not measured on site and there is a possibility that it has changed between sampling and analysis
 - 5. LC5B is a replacement for LC5A well.
 - 6. N/S denotes 'not sampled'.

Exceedance of AMC (per well)

Exceedance of AMC (monthly average)

Leachate Head Levels

		Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
LC1A	Elevation of base of landfill mAOD	357.62			357.62								
	Elevation at top of casing mAOD	398.85			398.85								
	Depth to leachate from top of casing (m)	40.36			40.38								
	Leachate elevation (mAOD)	358.49			358.47								
	Calculated leachate head (m)	0.87			0.85								
LC2A	Elevation of base of landfill mAOD	362.49			362.49								
	Elevation at top of casing mAOD	401.12			401.12								
	Depth to leachate from top of casing (m)	35.80			35.68								
	Leachate elevation (mAOD)	365.32			365.44								
	Calculated leachate head (m)	2.83			2.95								
LC4A	Elevation of base of landfill mAOD	372.27			372.27								
	Elevation at top of casing mAOD	401.14			401.14								
	Depth to leachate from top of casing (m)	26.80			26.80								
	Leachate elevation (mAOD)	374.34			374.34								
	Calculated leachate head (m)	2.07			2.07								
LC5B	Elevation of base of landfill mAOD	349.79			349.79								
	Elevation at top of casing mAOD	380.75			380.75								
	Depth to leachate from top of casing (m)	29.90			29.90								
	Leachate elevation (mAOD)	350.85			350.88								
	Calculated leachate head (m)	1.06			1.09								
L1	Casing height (mAOD)	357.00			357.00								
	Leachate (mbgl)	DRY			DRY								
	Leachate (m AOD)	-			-								
	Base of landfill (m AOD)	336.80			336.80								
	Depth of well from top of casing (m)												
	Base of well (m AOD)												
L1A*	Calculated leachate head (m)												
	Casing height (mAOD)	355.79			355.79								
	Leachate (mbgl)	DRY			DRY								
	Leachate (m AOD)	-			-								
	Base of landfill (m AOD)	316.64			316.64								
	Depth of well from top of casing (m)	20.95			20.91								
L1B*	Base of well (m AOD)	334.84			334.88								
	Calculated leachate head (m)												
	Casing height (mAOD)	354.80			354.80								
	Leachate (mbgl)	25.43			25.50								
	Leachate (m AOD)	329.37			329.30								
	Base of landfill (m AOD)	319.60			319.60								
	Depth of well from top of casing (m)	34.40			34.80								
	Base of well (m AOD)	320.40			320.00								
	Calculated leachate head (m)	9.77			9.70								

2025	Quarterly Leachate Head Averages (m)
January	1.92
February	
March	
April	1.96
May	
June	
July	
August	
September	
October	
November	
December	

Minimum monthly leachate head average

Maximum monthly leachate head average

- Notes:
- Top of casings were re-surveyed in August 2019
1. LC1A top of casing is 1710mm above ground level.
2. LC2A top of casing is 820mm above GL.
3. LC4A top of casing is 1040mm above GL.

* Well not included in monthly average.

** NS - Not Sampled

Note: L1 is generally dry or with very little water in it.

Surface Water Monitoring Results

Month	Location	Date	Mercury, ultra-low total as Hg	Manganese in filtrate as Mn	Nickel in filtrate as Ni	Bioavailable Ni	Zinc, ultra-low total as Zn	Bioavailable Zn	pH	Conductivity-Electrical 20C	Ammoniacal Nitrogen as N	*Unionised Ammoniacal Nitrogen based on measured Temperature	Measured surface water temperature	Chloride as Cl	Sulphate as SO4	Total Suspended Solids	Dissolved Oxygen, fixed	TOC, filtered	Redox Potential	Alkalinity as CaCO3	Calcium						
Freshwater EQS**			ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		uS/cm	mg/l	mg/l	°C	mg/l	mg/l	mg/l	mg/l	mg/l	mV	mg/l	mg/l						
J a n u a r y	Upstream of Landfill	SWU SW2AI SWW4	Six-monthly	Not sampled this quarter																							
	NW Ditch System	SWW1 SWW2	Six-monthly	Not sampled this quarter																							
	Downstream of Landfill	SWD SWD1	Quarterly	< 0.03	0.0050	< 0.0010	< 0.0001	0.005	< 0.0001	7.6	194	0.02	0.0009	7.3	7.00	<3	7.00	13	0.9	305.00	61	<1					
				0.00	0.0040	< 0.0010	< 0.0001	0.005	< 0.0001	7.6	188	< 0.01	0.0004	6.8	8.00	<3	<5	14	1.2	292.00	67	<1					
A p r i l	Upstream of Landfill	SWU SW2AI SWW4	Six-monthly	< 0.03	< 0.002	0.002	< 0.0001	0.008	0.0016	7.3	<100	< 0.01	0.00003	8.90	5.00	15.0	28.00	13	0.6	240.00	13	6					
				Not enough water for sample																							
				Not enough water for sample																							
	NW Ditch System	SWW1 SWW2	Six-monthly	< 0.03	< 0.006	0.001	< 0.0010	0.002	< 0.0010	8.0	429.0	0.05	0.00276	10.7	5.00	115.0	<5	13	1.0	255.00	96	44					
			< 0.03	< 0.002	< 0.001	< 0.0010	0.003	< 0.0010	7.8	201.0	0.02	0.00098	10.0	4.00	45.0	<5	12	<0.40	264.00	50	19						
J u l y	Downstream of Landfill	SWD SWD1	Quarterly	< 0.03	< 0.0020	< 0.0010	< 0.0010	0.005	< 0.0010	7.9	337	0.02	0.00110	13.4	5.00	81.0	6.00	13	1.0	231.00	92	40					
			Quarterly	< 0.03	< 0.0020	0.0010	< 0.0010	0.003	< 0.0010	7.8	345	0.02	0.00102	12.4	8.00	84.0	<5	11	1.1	238.00	83	39					
	Upstream of Landfill	SWU SW2AI SWW4	Six-monthly	Not sampled this quarter																							
	NW Ditch System	SWW1 SWW2	Six-monthly	Not sampled this quarter																							
O c t o b e r	Downstream of Landfill	SWD SWD1	Quarterly																								
	Upstream of Landfill	SWU SW2AI SWW4	Six-monthly																								
	NW Ditch System	SWW1 SWW2	Six-monthly																								
O c t o b e r	Downstream of Landfill	SWD SWD1	Quarterly																								
Minimum				<	0.0020	<	0.0010	<	0.0001	<	0.0020	<	0.0001	7.3	188	<	<	0.0000	6.8	4.0	15.0	6.0	11.3	0.6	231.0	13.1000	6.0000
Maximum				<	0.0060	<	0.0020	<	0.0010	<	0.0080	<	0.0016	8.0	429	<	<	0.0028	13.4	8	115	28	13.8	1	305	96	44
Count					7		7		7		7		7	6				7	7	5	3	7	6	7	7	5	

- Notes
- The redox potential was not measured on site and there is a possibility that it has changed between sampling and analysis
 - N/S - Not analysed
 - Unionised ammoniacal nitrogen based on measured
 - Environmental Quality Standard EQS 1 for freshwater is derived to protect the most sensitive aquatic life.
 - NW Ditch - North Western (ditch system)

Exceedance of EQS

Upstream of Nant Merddog

Downstream of Nant Merddog

Table B4
Groundwater monitoring results

Location	Month	Date	Test reference number	Redox Potential	Mercury, filtrate as Hg	Manganese in filtrate as Mn	Nickel in filtrate as Ni	Zinc, ultra-low filtered as Zn	pH	Electrical Conductivity 20C	Alkalinity as CaCO3	Ammoniacal Nitrogen as N	Unionised Ammoniacal Nitrogen ***	Measure water temperature	Chloride as Cl	Sulphate as SO4	Calcium	D.O. concentration	TOC (Filtered)					
				mV	ug/l	mg/l	mg/l	mg/l	pH units	uS/cm	mg/l	mg/l	mg/l	°C	mg/l	mg/l	mg/l	mg/l	mg/l					
	Trigger Level				(0.2*)		0.05	(0.05*)	--	--	--	1	--	--	250	400	--	--	--					
	Control Level A				(0.1*)	--	0.03	(0.02*)	--	--	--	0.8	--	--	210	300	--	--	--					
	Control Level B				(0.15**)	--	0.04	(0.035**)	--	--	--	0.9	--	--	230	350	--	--	--					
	Assessment Level				--	(1.0*)	--	--	--	--	--	--	--	--	--	--	--	--	--					
UPSTREAM WELLS																								
SST East S3	GW3A	Jan-24	05/02/24	24020781-007	240	<	0.03	0.13	<	0.00	0.01	6.9	528	171.0	<	0.01	0.00002	13.0	8.0	95.0	72.0	10.6	11.7	
		Feb-24	Quarterly																					
		Mar-24																						
		Apr-24	12/06/24	24052866-007	261.4	<	0.03	<	0.00	<	0.00	0.01	6.9	507	173.0	0.03	0.00006	13.6	9.0	84.0	61.0	6.5	6.5	
		May-24	Quarterly																					
		Jun-24																						
		Jul-24	17/10/24	24102838-007	133	<	0.00	0.01	<	0.00	0.01	7.1	511	172.0	0.06	0.00018	13.3	9.0	88.0	66.0	10.9	1.5		
		Aug-24	Quarterly																					
		Sep-24																						
		Oct-24	27/11/24	24114228-007	260	<	0.03	0.01	<	0.00	0.01	7.2	580	198.0	<	0.01	0.00004	13.4	9.0	93.0	81.0	10.9	1.2	
		Nov-24	Quarterly																					
		Dec-24																						
	GW3A	Jan-25	20/02/25	25020081-007	144	<	0.03	<	0.00	<	0.00	<	0.00	6.9	575	269.0	0.02	0.00004	13.0	10.0	<3	<1	12.8	0.9
		Feb-25	Quarterly																					
		Mar-25																						
		Apr-25	13/05/25	25052696-007	160	<	0.03	0.00	<	0.00	0.00	7.2	584	217.0	0.03	0.00013	14.8	85.0	89.0	85.0	1.1	1.2		
		May-25	Quarterly																					
		Jun-25																						
		Jul-25																						
		Aug-25																						
		Sep-25																						
		Oct-25																						
		Nov-25																						
		Dec-25																						
GW4	GW4	Jan-24	05/02/24	24020781-008	331	<	0.03	1.88	0.00	0.01	6.7	296	60.5	0.04	0.00004	9.3	8.0	77.0	18.0	8.1	6.7	6.7		
		Feb-24	Quarterly																					
		Mar-24																						
		Apr-24	12/06/24	24052866-008	331.3	<	0.03	1.45	0.00	0.01	6.8	295	64.5	0.06	0.00007	10.1	8.0	68.0	15.0	8.7	4.7	4.7		
		May-24	Quarterly																					
		Jun-24																						
		Jul-24	17/10/24	24102838-008	133	<	0.03	0.01	<	0.00	0.01	7.1	511	172.0	0.06	0.00014	10.1	9.0	88.0	66.0	10.9	1.5		
		Aug-24	Quarterly																					
		Sep-24																						
		Oct-24	26/11/24	24114228-008	267	<	0.03	2.12	0.00	0.01	6.8	295	60.5	0.02	0.00002	9.2	8.0	72.0	17.0	10.1	<	0.4		
		Nov-24	Quarterly																					
		Dec-24																						
	GW4	Jan-25	20/02/25	25020081-008	269		0.04	1.71	0.00	0.01	6.6	290	147.0	0.05	0.00004	9.4	9.0	<3	<1	10.8	2.9	2.9		
		Feb-25	Quarterly																					
		Mar-25																						
		Apr-25	13/05/25	25052696-008	206	<	0.03	1.60	0.00	0.00	293.0	293	66.6	0.03	0.03000	10.5	8.0	71.0	17.0	10.4	<	0.4		
		May-25	Quarterly																					
		Jun-25																						
		Jul-25																						
		Aug-25																						
		Sep-25																						
		Oct-25																						
		Nov-25																						
		Dec-25																						

Groundwater monitoring results

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Table B4
Groundwater monitoring results

Location	Month	Date	Test reference number	Redox Potential	Mercury, filtrate as Hg	Manganese in filtrate as Mn	Nickel in filtrate as Ni	Zinc, ultra-low filtered as Zn	pH	Electrical Conductivity 20C	Alkalinity as CaCO3	Ammoniacal Nitrogen as N	Unionised Ammoniacal Nitrogen ***	Measure water temperature	Chloride as Cl	Sulphate as SO4	Calcium	D.O. concentration	TOC (Filtered)			
				mV	ug/l	mg/l	mg/l	mg/l	pH units	uS/cm	mg/l	mg/l	mg/l	°C	mg/l	mg/l	mg/l	mg/l	mg/l			
Trigger Level					(0.2 ^a)		0.05	(0.05 ^a)	--	--	--	1	--	--	250	400	--	--	--			
Control Level A					(0.1 ^{ab})	--	0.03	(0.02 ^{ab})	--	--	--	0.8	--	--	210	300	--	--	--			
Control Level B					(0.15 ^{ab})	--	0.04	(0.035 ^{ab})	--	--	--	0.9	--	--	230	350	--	--	--			
Assessment Level					--	(1.0 ^a)	--	--	--	--	--	--	--	--	--	--	--	--	--			
SST East S2	GW9	Jan-24	05/02/24	24020781-011	328	<	0.03	0.78	0.00	0.01	6.6	868	173.0	4.70	0.00391	11.6	63.0	24.0	48.0	10.8		
		Feb-24	Quarterly																			
		Mar-24																				
		Apr-24	12/06/24	24052866-011	340.1	<	0.03	0.52	0.00	0.01	6.5	405	83.6	0.7	0.00048	12.2	21	17	27	2.9	7.02	
		May-24	Quarterly																			
		Jun-24																				
		Jul-24	17/10/24	24102838-011	228	<	0.03	0.57	0.00	0.01	6.3	740	77.4	0.70	0.00029	11.7	50.0	20.0	41.0	11.1	4.9	
		Aug-24	Quarterly																			
		Sep-24																				
		Oct-24	26/11/24	24114228-011	314	<	0.03	1.25	0.00	0.01	6.4	1060	62.4	3.70	0.00194	11.6	57.0	20.0	50.0	6.2	3.2	
		Nov-24	Quarterly																			
		Dec-24																				
	GW9	Jan-25	20/02/25	25020081-011	345	<	0.03	1.62	0.01	0.01	6.3	1150	200.0	4.10	0.00172	11.7	103.0	<3	<1	8.5	5.6	
		Feb-25	Quarterly																			
		Mar-25																				
		Apr-25	13/05/25	25052696-011	277	<	0.03	0.04	0.00	0.00	6.9	694	162.0	0.02	0.00004	12.5	59	27	54	11.8	3.81	
		May-25	Quarterly																			
		Jun-25																				
		Jul-25																				
		Aug-25																				
		Sep-25																				
		Oct-25																				
		Nov-25																				
		Dec-25																				
SST East S3	GW10	Jan-24	05/02/24	24020781-012	333	<	0.03	2.31	0.01	0.01	6.9	528	194.0	0.12	0.00020	11.4	14.0	37.0	72.0	7.9	47.4	
		Feb-24	Quarterly																			
		Mar-24																				
		Apr-24	12/06/24	24052866-012	377.6	<	0.03	2.09	0.01	0.01	6.9	549	2.4	<	0.1	0.00016	10.8	11	30	75	8.3	9.14
		May-24	Quarterly																			
		Jun-24																				
		Jul-24	17/10/24	24102838-012	215	<	0.03	2.19	0.01	0.01	6.9	578	242.0	0.70	0.00115	11.5	7.0	36.0	83.0	10.2	6.1	
		Aug-24	Quarterly																			
		Sep-24																				
		Oct-24	26/11/24	24114228-012	169	<	0.03	3.96	0.01	0.00	6.8	408	159.0	0.40	0.00054	11.8	8.0	27.0	59.0	6.9	4.5	
		Nov-24	Quarterly																			
		Dec-24																				
	GW10	Jan-25	20/02/25	25020081-012	355	<	0.03	2.26	0.01	0.00	6.7	397	197.0	0.03	0.00003	10.8	8.0	<3	<1	11.9	2.8	
		Feb-25	Quarterly																			
		Mar-25																				
		Apr-25	13/05/25	25052696-012	289	<	0.00	5.45	0.01	0.00	6.9	692	247.0	0.05	0.00008	10.6	23	41	73	10.4	5.48	
		May-25	Quarterly																			
		Jun-25																				
		Jul-25																				
		Aug-25																				
		Sep-25																				
		Oct-25																				
		Nov-25																				
		Dec-25																				

	Exceedance of Control Level
	Exceedance of Trigger Level
	Exceedance of Assessment Level

Notes
* The redox potential was not measured on site and there is a possibility that it has changed between sampling and analysis {*/}
** Unionised ammoniacal nitrogen based on measured Temperature and pH; unionised ammoniacal nitrogen = total ammonia/(1+10^{(10.055-(0.0324*°C)-pH)}), where T°C is measured water temperature.
^ Ammonia result confirmed on duplicate analysis.

Landfill Gas Monitoring Results

		METHANE (% by Volume)												CARBON DIOXIDE (% by Volume)														
Location	Valve	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Comments		
Date monitored		13-Jan	11-Feb	11-Mar	16-Apr	14-May	19-Jun							13-Jan	11-Feb	11-Mar	16-Apr	14-May	19-Jun									
GMW2	Red Valve	0.1	0.1	0.1	0.1	0.1	0							0.5	0.3	0.4	0.8	0.7	1.4							Red Valve, 25.5m depth	GMW2	
	Yellow Valve	0.1	0.1	0.1	0.1	0.1	0							0.1	0.1	0.1	0.2	0.2	0.3							Yellow Valve,14m depth		
	White Valve	0.1	0.1	0.1	0.1	0.1	0							0.1	0.1	8.3	3	0.8	2.2							White Valve, 4m depth		
	Trigger Levels	1																										Trigger Levels
	Control Levels	0.5																										Control Levels
	Trigger Level Red	-												1.5														Trigger Level Red
	Trigger Level Yellow	-												4.3														Trigger Level Yellow
	Trigger Level White	-												12.1														Trigger Level White
	Control Level Red	-												1														Control Level Red
	Control Level Yellow	-												3.8														Control Level Yellow
Control Level White	-												11.6													Control Level White		
GMW3	Red Valve	0.1	0.1	1.6	0.4	0.1	0							0.6	7.1	1.7	3.6	4.1	5.2							Red Valve, 19m depth	GMW3	
	Yellow Valve	0.1	0.1	0.1	0.1	0.1	0							0.1	0.1	0.3	1.6	1.3	3.8							Yellow Valve,9m depth		
	White Valve	0.1	0.1	0.1	0.1	0.1	0							0.5	0.2	15.2	4.3	0.5	0.8							White Valve, 3.5m depth		
	Trigger Levels	1																										Trigger Levels
	Control Levels	0.5																										Control Levels
	Trigger Level Red	-												7.3														Trigger Level Red
	Trigger Level Yellow	-												2.67														Trigger Level Yellow
	Trigger Level White	-												24.02														Trigger Level White
	Control Level Red	-												6.8														Control Level Red
	Control Level Yellow	-												2.17														Control Level Yellow
Control Level White	-												23.5													Control Level White		
GMW4	Red Valve	0.1	0.1	0	0	0.1	0							0.2	0.1	0.1	0.4	0.4	0.9							Red Valve, 30m depth	GMW4	
	Yellow Valve	0.1	0.1	0	0	0.1	0							0.1	0.2	0.2	0.4	0.3	0.7							Yellow Valve,20m depth		
	White Valve	0.1	0.1	0	0	0.1	0							0.1	0.1	0.1	0.3	0.3	0.6							White Valve, 5m depth		
	Trigger Levels	1																										Trigger Levels
	Control Levels	0.5																										Control Levels
	Trigger Level Red	-												1.5														Trigger Level Red
	Trigger Level Yellow	-												4.3														Trigger Level Yellow
	Trigger Level White	-												12.1														Trigger Level White
	Control Level Red	-												1														Control Level Red
	Control Level Yellow	-												3.8														Control Level Yellow
Control Level White	-												11.6													Control Level White		
GMW5	Red Valve	0.1	0	0	0	0	0							2.1	5.4	5.2	4.2	3.8	4.3							Red Valve, 26.3m depth	GMW5	
	Yellow Valve	0.1	0	0	0	0	0							0.4	2.7	1.6	0.9	1.1	0.2							Yellow Valve,15m depth		
	White Valve	0.1	0	0	0	0	0							3.5	3.1	3.2	2.8	2.9	2							White Valve, 5m depth		
	Trigger Levels	1																										Trigger Levels
	Control Levels	0.5																										Control Levels
	Trigger Level Red	-												8.48														Trigger Level Red
	Trigger Level Yellow	-												4.1														Trigger Level Yellow
	Trigger Level White	-												4.8														Trigger Level White
	Control Level Red	-												7.98														Control Level Red
	Control Level Yellow	-												3.6														Control Level Yellow
Control Level White	-												4.3													Control Level White		
GMW6	Red Valve	0.1	0	0	0	0	0							2.1	2	2	2.4	2.4	3							Red Valve, 26.3m depth	GMW6	
	Yellow Valve	0.1	0	0	0	0	0							2.3	3.4	1.8	2.3	2.6	2.3							Yellow Valve,15m depth		
	White Valve	0.1	0	0	0	0	0							1.5	1.4	1.5	1.4	1.4	1.3							White Valve, 5m depth		
	Trigger Levels	1																										Trigger Levels
	Control Levels	0.5																										Control Levels
	Trigger Level Red	-												4.3														Trigger Level Red
	Trigger Level Yellow	-												5														Trigger Level Yellow
	Trigger Level White	-												3.76														Trigger Level White
	Control Level Red	-												3.8														Control Level Red
	Control Level Yellow	-												4.5														Control Level Yellow
Control Level White	-												3.26													Control Level White		

Landfill Gas Monitoring Results

		METHANE (% by Volume)												CARBON DIOXIDE (% by Volume)													
Location	Valve	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Comments	
GMW7	Yellow Valve	0.1	0	0	0.1	0.1	0.1							0.2	0.2	0.2	0.4	0.4	0.7							Yellow Valve,12 depth	GMW7
	White Valve	0.1	tap broke	tap broke	0	0.1	0							0.2	tap broke	tap broke	0.7	0.6	1							White Valve, 5m depth	
	Trigger Levels	1												-												Trigger Levels	
	Control Levels	0.5												-												Control Levels	
	Trigger Level Yellow	-												1.8												Trigger Level Yellow	
	Trigger Level White	-												1.82												Trigger Level White	
	Control Level Yellow	-												1.3												Control Level Yellow	
	Control Level White	-												1.32												Control Level White	
GMW12	Red Valve	0.1	0.1	0	0	0.1	0							0.6	2.3	0.6	1	1.3	1							Red Valve, 26.3m depth	GMW12
	Yellow Valve	0	0.1	0	0	0	0							0.1	0.9	0.7	1	0.9	1.7							Yellow Valve,15m depth	
	White Valve	0.1	0.1	0	0	0.1	0							0.1	1.4	0.1	0.5	0.7	0.6							White Valve, 5m depth	
	Trigger Level Red	1.89												4.5												Trigger Level Red	
	Trigger Level Yellow	1												2.9												Trigger Level Yellow	
	Trigger Level White	1												5.5												Trigger Level White	
	Control Level Red	1.39												4												Control Level Red	
	Control Level Yellow	0.5												2.4												Control Level Yellow	
GMW13	Red Valve	0.1	0.1	1.1	0	0.1	0							1.1	1.1	1.1	1.1	1.1	1.2							Red Valve, 26.3m depth	GMW13
	Yellow Valve	0.1	0.1	0	0	0.1	0							5.3	6.2	6	5.6	5.6	5.4							Yellow Valve,15m depth	
	White Valve	0	0.1	0	0	0	0							0.1	2.4	1.8	0.8	0.8	0							White Valve, 5m depth	
	Trigger Level Red	1.14												7.9												Trigger Level Red	
	Trigger Level Yellow	1.2												6												Trigger Level Yellow	
	Trigger Level White	1												5.82												Trigger Level White	
	Control Level Red	0.64												7.4												Control Level Red	
	Control Level Yellow	0.7												5.5												Control Level Yellow	
GMW14/14A	Red Valve	0.1	0.1	0.3	0	0.1	0							0.6	1.8	20.4	0.5	0.8	0							Red Valve, 26.3m depth	GMW14/14A
	Yellow Valve	0	0.1	3.1	0	0	0							3.6	3.7	16.5	2.2	2.6	0.2							Yellow Valve,15m depth	
	White Valve	0	0.1	0.7	0	0	0							0.4	1.7	19.2	1.4	1.4	2.3							White Valve, 5m depth	
	Trigger Level Red	1												1.5												Trigger Level Red	
	Trigger Level Yellow	1.2												5.9												Trigger Level Yellow	
	Trigger Level White	1.2												5.4												Trigger Level White	
	Control Level Red	0.5												1												Control Level Red	
	Control Level Yellow	0.7												5.4												Control Level Yellow	
GMW1**	Red Valve	0.1	0.1	0.1	0.1	0.1	0							1.8	1.7	0.1	1.2	1.7	1.5							Red Valve, 23.5m depth	GMW1**
	Yellow Valve	1.8	1.5	1	6.8	5.9	15.3							1.6	1.2	1	4.3	3.8	9.1							Yellow Valve,14.7m depth	
	White Valve	0.4	0.1	0.1	0.1	0.2	0							1	0.1	1.1	0.5	0.4	0.1							White Valve, 6.5m depth	
GMW8*	Yellow Valve	9.7	10.6	3.8	4.6	7	0							5.7	6.3	2.4	3	4.3	0.6							Yellow Valve,17.5m depth	GMW8*
	White Valve	0.1	0.1	0	0	0.1	0							4.4	4.4	3.9	3.7	3.9	2.9							White Valve, 5.7m depth	
GMW9*	Red Valve	0.1	0.1	0	0	0.1	0							1.6	1.2	1.5	1.4	1.4	1.4							Red Valve, 27m depth	GMW9*
	Yellow Valve	29.4	27.9	25.8	23.3	25	16.7							9.4	9.7	9.2	10.1	10.1	11.3							Yellow Valve,15m depth	
	White Valve	0.1	0.1	0	0	0.1	0							0.1	0.1	0.1	0.1	0.1	0.1							White Valve, 8.5m depth	
GMW10*	Red Valve	1.6	1.2	1.5	1.4	1.4	1.4							2.8	0.7	2.6	2.1	1.9	1.9							Red Valve, 19.5m depth	GMW10*
	Yellow Valve	9.4	9.7	9.2	10.1	10.1	11.3							4.8	5.3	4.7	4.2	4.5	3.2							Yellow Valve,15m depth	
	White Valve	0.1	0.1	0.1	0.1	0.1	0.1							2.2	4.5	3.3	2.7	2.8	1.9							White Valve, 8m depth	
GMW17**	Red Valve	0.1	0.1	0.1	0.1	0.1	0							6.8	0.1	20.9	2	3	1.3							Red Valve, 26.3m depth	GMW17**
	Yellow Valve	0.1	0	1.4	0	0	0							1.4	1.3	15.3	2.2	2	3.4							Yellow Valve,15m depth	
	White Valve	0	0	pump fail	0	0	0							3.1	0.1	pump fail	0.9	1.2	0							White Valve, 5m depth	
GMW18**	Yellow Valve	0.1	0.1	pump fail	0	0.1	0							1	0.1	pump fail	0.3	0.4	0							Yellow Valve,12 depth	GMW18**
	White Valve	0	0	6.5	0	0	0							6.4	5.2	17.2	5	5.1	3.3							White Valve, 5m depth	

Notes:
1. Water denotes 'water in well' - reading abandoned'.
2. NT denotes 'reading not taken'.
3. NT in GMW14 is due to cattle quarantine paddock around well location.
4. Where the asterisc (*) is present, no trigger levels have been set, as high levels of methane and carbon dioxide gas are recorded. This is likely to be associated with the presence of bog/marshland.
5. Where two asterisks (**) are present, no trigger levels have been set, as not require by the Permit (Reference [2]).
ntc - reading not taken due to cattle presence at location of the well

Exceedance of Trigger
 Exceedance of Control

BSC Pipe Monitoring

Date	BH1		BH2		BH3		BH4		Water column (m)			
	Water level depth (m)	Well depth to base (m)	Water level depth (m)	Well depth to base(m)	Water level depth (m)	Well depth to base (m)	Water level depth (m)	Well depth to base (m)	BH1	BH2	BH3	BH4
04/04/2024	18.20	20.03	6.98	8.67	4.20	6.72	9.99	10.12	1.83	1.69	2.52	0.13
22/04/2024	18.32	20.02	7.01	8.68	4.44	6.74	10.00	10.02	1.70	1.67	2.30	0.02
26/04/2024	18.35	20.03	7.12	8.68	4.44	6.72	9.99	10.03	1.68	1.56	2.28	0.04
03/05/2024	18.39	20.03	7.91	8.69	4.46	6.73	10.02	10.12	1.64	0.78	2.27	0.10
10/05/2024	18.32	20.03	7.69	8.69	4.52	6.73	10.10	10.12	1.71	1.00	2.21	0.02
17/05/2024	18.42	20.03	7.78	8.69	4.92	6.73	10.01	10.12	1.61	0.91	1.81	0.11
24/05/2024	18.41	20.03	7.93	8.69	4.68	6.73	10.05	10.12	1.62	0.76	2.05	0.07
30/05/2024	18.43	20.03	8.03	8.69	4.70	6.73	10.03	10.12	1.60	0.66	2.03	0.09
13/06/2024	18.41	20.03	8.43	8.69	4.77	6.73	10.05	10.12	1.62	0.26	1.96	0.07
20/06/2024	18.38	20.03	7.90	8.69	4.82	6.73	9.99	10.12	1.65	0.79	1.91	0.13
28/06/2024	18.40	20.03	7.76	8.69	4.90	6.73	10.01	10.12	1.63	0.93	1.83	0.11
05/07/2024	18.41	20.03	7.79	8.69	4.86	6.73	10.08	10.12	1.62	0.90	1.87	0.04
06/07/2024	18.65	20.02	7.85	8.69	4.85	6.74	9.94	10.13	1.37	0.84	1.89	0.19
07/07/2024	18.61	20.02	7.9	8.69	4.8	6.74	9.98	10.13	1.41	0.79	1.94	0.15
08/07/2024	18.51	20.02	8.59	8.7	5.33	6.75	10.08	10.14	1.51	0.11	1.42	0.06
09/07/2024	18.6	20.01	8.1	8.69	5.31	6.74	10.09	10.13	1.41	0.59	1.43	0.04
10/07/2024	18.57	20.01	8.6	8.71	5.23	6.74	10.07	10.1	1.44	0.11	1.51	0.03
11/07/2024	18.7	20.02	7.79	8.69	4.98	6.72	10.01	10.13	1.32	0.9	1.74	0.12
12/07/2024	18.6	20.01	7.79	8.69	4.98	6.72	10.01	10.13	1.41	0.9	1.74	0.12
13/07/2024	18.56	20.01	7.8	8.67	4.92	6.74	9.96	10.12	1.45	0.87	1.82	0.16
14/07/2024	18.49	20.01	8.35	8.67	4.95	6.72	9.96	10.13	1.52	0.32	1.77	0.17
15/07/2024	18.49	20.01	8.35	8.67	4.95	6.72	9.96	10.13	1.52	0.32	1.77	0.17
16/07/2024	18.51	20.02	8.5	8.69	4.5	6.74	10.02	10.12	1.51	0.19	2.24	0.1
17/07/2024	18.62	20.02	8.52	8.69	5.15	6.73	10.03	10.12	1.4	0.17	1.58	0.09
18/07/2024	18.59	20.03	8.46	8.69	5	6.73	10.01	10.13	1.44	0.23	1.73	0.12
19/07/2024	18.5	20.02	7.49	8.69	4.8	6.73	10.01	10.12	1.52	1.2	1.93	0.11
20/07/2024	18.5	20.01	7.14	8.69	4.86	6.72	9.99	10.12	1.51	1.55	1.86	0.13
21/07/2024	18.52	20.01	7.14	8.61	4.3	6.72	9.99	10.13	1.49	1.47	2.42	0.14
22/07/2024	18.6	20.01	7.4	8.69	4.82	6.72	9.98	10.12	1.41	1.29	1.9	0.14
23/07/2024	18.49	20.03	6.91	8.69	4.88	6.73	10.01	10.13	1.54	1.78	1.85	0.12
24/07/2024	18.48	20.03	6.67	8.69	4.62	6.73	9.96	10.13	1.55	2.02	2.11	0.17
25/07/2024	18.5	20.03	6.7	8.69	4.68	6.73	9.99	10.13	1.53	1.99	2.05	0.14
26/07/2024	18.48	20.02	6.8	8.69	4.68	6.72	9.98	10.12	1.54	1.89	2.04	0.14
27/07/2024	18.51	20.02	6.72	8.67	4.7	6.73	10.1	10.13	1.51	1.95	2.03	0.03
28/07/2024	18.51	20.03	6.81	8.89	4.66	6.72	10.02	10.12	1.52	2.08	2.06	0.1
29/07/2024	18.48	20.02	7.1	8.68	4.58	6.73	9.97	10.12	1.54	1.58	2.15	0.15
30/07/2024	18.42	20	7.16	8.68	4.41	6.75	10	10.1	1.58	1.52	2.34	0.1
31/07/2024	18.43	20.03	7.01	8.68	4.5	6.75	9.98	10.12	1.6	1.67	2.25	0.14
01/08/2024	18.46	20.02	6.45	8.69	4.44	6.73	9.99	10.12	1.56	2.24	2.29	0.13
12/01/2024	18.39	20.02	6.56	8.68	4.27	6.74	9.9	10.1	1.63	2.12	2.47	0.2
19/01/2024	18.39	20.02	6.56	8.68	4.27	6.74	9.9	10.1	1.63	2.12	2.47	0.2
26/01/2024	18.46	20.03	7.01	8.69	4.58	6.74	9.98	10.12	1.57	1.68	2.16	0.14
02/02/2024	18.5	20.02	7.19	8.68	4.42	6.74	10	10.12	1.52	1.49	2.32	0.12
09/02/2024	18.51	20.02	7.27	8.68	4.6	6.74	10.1	10.12	1.51	1.41	2.14	0.02
16/02/2024	18.47	20.02	7.1	8.68	4.44	6.74	9.99	10.12	1.55	1.58	2.3	0.13
23/02/2024	18.46	20.03	6.75	8.68	4.46	6.74	9.97	10.12	1.57	1.93	2.28	0.15
01/03/2024	18.42	20.02	7.16	8.68	4.4	6.74	10	10.1	1.6	1.52	2.34	0.1
08/03/2024	18.39	20.03	6.92	8.68	4.36	6.74	9.94	10.13	1.64	1.76	2.38	0.19
15/03/2024	18.37	20.03	6.88	8.68	4.38	6.74	9.95	10.13	1.66	1.8	2.36	0.18
22/03/2024	18.4	20.03	6.99	8.68	4.41	6.74	9.9	10.02	1.63	1.69	2.33	0.12
29/03/2024	18.05	20.03	6.9	8.68	4.29	6.72	9.98	10.03	1.98	1.78	2.43	0.05
04/04/2024	18.2	20.03	6.98	8.67	4.2	6.72	9.99	10.12	1.83	1.69	2.52	0.13
22/04/2024	18.32	20.02	7.01	8.68	4.44	6.74	10	10.02	1.7	1.67	2.3	0.02
26/04/2024	18.35	20.03	7.12	8.68	4.44	6.72	9.99	10.03	1.68	1.56	2.28	0.04
03/05/2024	18.39	20.03	7.91	8.69	4.46	6.73	10.02	10.12	1.64	0.78	2.27	0.1
10/05/2024	18.32	20.03	7.69	8.69	4.52	6.73	10.1	10.12	1.71	1	2.21	0.02
17/05/2024	18.42	20.03	7.78	8.69	4.92	6.73	10.01	10.12	1.61	0.91	1.81	0.11
24/05/2024	18.41	20.03	7.93	8.69	4.68	6.73	10.05	10.12	1.62	0.76	2.05	0.07
30/05/2024	18.43	20.03	8.03	8.69	4.7	6.73	10.03	10.12	1.6	0.66	2.03	0.09
13/06/2024	18.41	20.03	8.43	8.69	4.77	6.73	10.05	10.12	1.62	0.26	1.96	0.07
20/06/2024	18.38	20.03	7.9	8.69	4.82	6.73	9.99	10.12	1.65	0.79	1.91	0.13
28/06/2024	18.4	20.03	7.76	8.69	4.9	6.73	10.01	10.12	1.63	0.93	1.83	0.11
05/07/2024	18.41	20.03	7.79	8.69	4.86	6.73	10.08	10.12	1.62	0.9	1.87	0.04
12/07/2024	18.62	20.03	8.52	8.69	5.15	6.73	10	10.12	1.41	0.17	1.58	0.12
19/07/2024	18.5	20.03	8.36	8.69	4.99	6.73	9.99	10.12	1.53	0.33	1.74	0.13
26/07/2024	18.41	20.03	7.9	8.69	4.86	6.73	10.01	10.12	1.62	0.79	1.87	0.11
02/08/2024	18.39	20.03	7.98	8.69	4.81	6.73	10.02	10.12	1.64	0.71	1.92	0.1
09/08/2024	18.42	20.03	8.01	8.69	4.88	6.73	10	10.12	1.61	0.68	1.85	0.12

BSC Pipe Monitoring

Date	BH1		BH2		BH3		BH4		Water column (m)			
	Water level depth (m)	Well depth to base (m)	Water level depth (m)	Well depth to base(m)	Water level depth (m)	Well depth to base (m)	Water level depth (m)	Well depth to base (m)	BH1	BH2	BH3	BH4
16/08/2024	18.38	20.03	7.87	8.69	4.93	6.73	10.01	10.12	1.65	0.82	1.8	0.11
23/08/2024	18.65	20.03	7.9	8.69	4.98	6.73	9.99	10.12	1.38	0.79	1.75	0.13
30/08/2024	18.45	20.03	7.79	8.69	5.36	6.73	9.96	10.12	1.58	0.9	1.37	0.16
06/09/2024	18.39	20.03	7.9	8.68	4.38	6.73	9.98	10.13	1.64	0.78	2.35	0.15
12/09/2024	18.4	20.02	6.9	8.62	4.99	6.73	10.01	10.02	1.62	1.72	1.74	0.01
20/09/2024	18.64	20.03	7.9	8.69	5.1	6.73	9.98	10.13	1.39	0.79	1.63	0.15
27/09/2024	18.68	20.02	6.99	8.67	5.09	6.73	10	10.02	1.34	1.68	1.64	0.02
04/10/2024	18.63	20.04	6.9	8.67	5.11	6.74	10	10.12	1.41	1.77	1.63	0.12
11/10/2024	18.66	20.03	7.3	8.67	5	6.74	9.9	10.12	1.37	1.37	1.74	0.22
18/10/2024	18.6	20.2	7.85	8.67	4.9	6.74	9.7	10.12	1.6	0.82	1.84	0.42
25/10/2024	18.50	20.80	7.75	8.70	4.78	6.76	9.22	10.10	2.30	0.95	1.98	0.88
01/11/2024	18.64	20.02	7.50	8.68	4.65	6.74	9.82	10.02	1.38	1.18	2.09	0.20
08/11/2024	18.44	20.06	7.73	8.68	4.80	6.76	9.28	10.04	1.62	0.95	1.96	0.76
15/11/2024	18.52	20.04	7.71	8.64	4.76	6.78	9.24	10.06	1.52	0.93	2.02	0.82
22/11/2024	18.54	20.06	7.68	8.68	4.70	6.76	9.22	10.06	1.52	1.00	2.06	0.84
29/11/2024	18.47	20.08	7.78	8.76	4.84	6.74	9.72	10.60	1.61	0.98	1.90	0.88
09/12/2024	18.52	20.06	7.74	8.74	4.90	6.74	9.78	10.04	1.54	1.00	1.84	0.26
16/12/2024	18.48	20.80	7.78	8.76	4.82	6.74	9.72	10.02	2.32	0.98	1.92	0.30
23/12/2024	18.92	20.04	7.69	8.76	4.88	6.72	9.76	10.04	1.12	1.07	1.84	0.28
03/01/2025	18.41	20.02	7.79	8.69	4.95	6.73	10.02	10.12	1.61	0.90	1.78	0.10
10/01/2025	18.38	20.04	7.78	8.70	4.92	6.74	10.04	10.10	1.66	0.92	1.82	0.06
15/01/2025	18.52	20.05	7.75	8.68	4.94	6.94	10.05	10.12	1.53	0.93	2.00	0.07
24/01/2025	18.40	20.04	7.78	8.69	4.93	6.72	10.04	10.12	1.64	0.91	1.79	0.08
29/01/2025	18.41	20.06	7.70	8.68	4.90	6.74	10.02	10.14	1.65	0.98	1.84	0.12
07/02/2025	18.48	20.04	7.70	8.70	4.72	6.71	10.04	10.14	1.56	1.00	1.99	0.10
14/02/2025	18.40	20.02	7.72	8.74	4.92	6.72	10.02	10.12	1.62	1.02	1.80	0.10
21/02/2025	18.44	20.02	7.70	8.70	4.90	6.72	10.05	10.14	1.58	1.00	1.82	0.09
07/03/2025	18.50	20.02	7.70	8.72	4.90	6.74	10.02	10.12	1.52	1.02	1.84	0.10
14/03/2025	18.42	20.02	7.72	8.72	4.90	6.74	10.02	10.10	1.60	1.00	1.84	0.08
21/03/2025	18.40	20.02	7.79	8.69	4.93	6.72	10.04	10.14	1.62	0.90	1.79	0.10
28/03/2025	18.42	20.02	7.77	8.69	4.92	6.74	10.02	10.12	1.60	0.92	1.82	0.10
04/04/2025	18.40	20.04	7.78	8.68	4.94	5.74	10.02	10.14	1.64	0.90	0.80	0.12
11/04/2025	18.38	20.04	7.74	8.68	4.96	6.76	10.02	10.12	1.66	0.94	1.80	0.10
18/04/2025	18.48	20.02	7.78	8.68	4.94	6.78	10.04	10.14	1.54	0.90	1.84	0.10
25/04/2025	18.40	20.04	7.76	8.64	4.93	6.79	10.02	10.14	1.64	0.88	1.86	0.12
02/05/2025	18.59	20.02	7.78	8.69	5.23	6.75	10.03	10.11	1.43	0.91	1.52	0.08
09/05/2025	18.48	20.03	7.80	8.68	5.01	6.72	10.03	10.12	1.55	0.88	1.71	0.09
16/05/2025	18.50	20.03	7.86	8.67	5.08	6.72	10.10	10.12	1.53	0.81	1.64	0.02
23/05/2025	18.56	20.04	8.62	8.68	5.12	6.76	10.06	10.12	1.48	0.06	1.64	0.06
30/05/2025	18.54	20.02	8.54	8.69	5.08	6.74	10.04	10.12	1.48	0.15	1.66	0.08
05/06/2025	18.65	20.04	8.49	8.66	5.18	6.74	10.04	10.12	1.39	0.17	1.56	0.08
13/06/2025	18.48	20.02	8.42	8.68	5.45	6.77	10.02	10.12	1.54	0.26	1.32	0.10
20/06/2025	18.62	20.04	8.50	8.66	5.46	6.72	9.84	10.10	1.42	0.16	1.26	0.26
27/06/2025	18.56	20.02	8.60	8.66	5.52	6.72	10.04	10.14	1.46	0.06	1.20	0.10
04/07/2025	18.60	20.04	8.20	8.67	5.49	6.72	10.02	10.12	1.44	0.47	1.23	0.10