Point of Ayr Gas Terminal, Liverpool Bay
Pumping Test Factual Report

Contract Name:	Point of Ayr Gas Terminal, Liverpool Bay
Client Name:	SAIPEM Ltd.
Groundwater & Dewatering Specialist:	Stuart Wells Limited (SWL)
Report No:	SWL24-380-01-PT-01

Revision	Date	Description	Prepared By (SWL)	Checked By (SWL)
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1. Introduction

As part of the project known as Point of Ayr Gas Terminal, Liverpool Bay, several structures require dewatering as part of construction works. A pumping test was required to assist in dewatering design and aid the environmental consent process.

Stuart Wells Limited (hereafter referred to as SWL) were appointed by SAIPEM Limited to install 1 no. abstraction well (PW01) and 17 no. groundwater monitoring wells (PWMW01, MW01S to MW08S, and MW01D to MW08D) to conduct the pumping test. In addition, 3 no. stilling wells (Stilling Well 1, Stilling Well 2 and Stilling Well 3) were installed and were adopted into the groundwater monitoring network.

As well as the pumping test, falling head testing was also completed in the pumping well (PW01) and one monitoring well (PWMW01).

Our investigation was completed in general accordance with Natural Resources Wales consent to investigate a groundwater source, document no. WA06700100021, dated 25 June 2025.

Following the introduction, this Pumping Test Factual Report is structured as follows:

- Section 2: A summary of Ground Conditions encountered;
- Section 3: Scope of works;
- Section 4: Fieldwork completed;
- Section 5: Test Results;
- Section 6: Groundwater Quality; and
- Section 7: References.

2. Ground Conditions

The Geotechnical Investigation (Soil Engineering, 2025) presented the ground model for the site. The ground conditions, as encountered during our drilling works concurred with the previous ground investigations. A summary of the site ground conditions is presented in Table 1. Please find individual borehole records, as drilled during this investigation presented in Appendix A.

Table 1: Ground model.

Geotechnical Unit	Depth to top of strata (mBGL)	Depth to base of strata (mBGL)	Description
Made Ground	GL	0.50 to 2.50	Made Ground
Tidal Flat Deposits	0.32 to 2.50	15.00 to 23.20	Very soft to firm CLAY, silty sand, with some SAND and GRAVEL interbeds
Glacial Till	18.75 to 23.20	proven to 31.00	Firm to very stiff generally slightly sandy slightly gravelly clay

Standing groundwater levels at the pumping well (PW01) were recorded during pre-test monitoring between 2.53 and 2.63 mAOD (2.16 to 2.26 mBGL).

3. Scope of Works

The site works comprised the drilling and installation of 1 no. pumping well (PW01) and 17 no. groundwater monitoring wells (PWMW01, MW01S through to MW08S, and MW01D to MW08D) to conduct the pumping test, detailed below. In addition, 3 no. stilling wells (Stilling Well 1, Stilling Well 2 and Stilling Well 3) were installed and adopted into the groundwater monitoring network.

An electric submersible borehole pump was installed on a rigid PVC riser into the pumping well. The pump was powered by a 40 kVA generator with standby generator, AMF panel and bunded fuel tank.

Prior to the pumping test, falling head testing was completed in the pumping well (PW01) and one monitoring well (PWMW01).

The investigation consisted of the following testing requirements:

- Falling Head Testing;
- 1 no. Pumping Tests:
  - Pre-test monitoring;
  - Equipment installation and equipment test;
  - Step Test;
  - Constant Rate Testing;
  - Groundwater sampling and analysis; and
  - Recovery monitoring.

A summary of boreholes is presented in Table 2. The general pumping test configuration is shown in the layout drawing Figure 1. Whilst, Figures 2, 3 and 4 identify the locations at a smaller scale.

Equipment used during testing is summarised as follows:

- Submersible Borehole Pump.
- A duty 40kVA silenced generator was used to power the borehole pump, with bunded fuel tank, auto-mains failure (AMF) panel and standby generator.
- Electronic level-loggers were used at the pumping and monitoring wells to record continuous water level readings for the duration of the testing period.
- Manual water level readings were recorded using a Manual Dip Tape.
- Flow rate was monitored using 2 no. flowmeters.

TABLE 2: Borehole Details.

Well ID	Location		Ground Elevation (mAOD)	Bore dia. (mm)	Liner dia. (mm)	Response (mBGL)	Target Geology*1
	Easting	Northing					
PW01 (Pumping Well)	312162.0	384071.5	4.79	300	155	1.0 to 17.0	TFD
PWMW01 (Monitoring Well)	312166.4	384074.2	4.89	150	52	0.5 to 4.5	TFD
MW01S (Monitoring Well)	312166.9	384062.2	4.70	150	52	0.5 to 17.0	TFD
MW01D (Monitoring Well)	312161.8	384061.7	4.72	150	52	0.5 to 4.5	TFD
MW02S (Monitoring Well)	312192.1	384064.4	4.84	150	52	0.5 to 17.0	TFD
MW02D (Monitoring Well)	312192.2	384069.8	4.81	150	52	0.5 to 4.5	TFD
MW03S (Monitoring Well)	312159.0	384021.8	4.74	150	52	1.0 to 16.8	TFD
MW03D (Monitoring Well)	312166.9	384022.0	4.79	150	52	0.5 to 4.5	TFD
MW04S (Monitoring Well)	312302.6	384141.6	4.89	150	52	1.0 to 8.0	TFD
MW04D (Monitoring Well)	312303.7	384146.7	4.79	150	52	0.5 to 4.5	TFD
MW05S (Monitoring Well)	312107.4	383971.5	5.12	150	52	1.0 to 16.9	TFD
MW05D (Monitoring Well)	312102.0	383971.9	5.12	150	52	0.5 to 4.5	TFD
MW06S (Monitoring Well)	312168.3	383950.1	4.84	150	52	0.5 to 18.0	TFD
MW06D (Monitoring Well)	312172.9	383949.0	4.87	150	52	0.5 to 4.5	TFD
MW07S (Monitoring Well)	312369.9	384070.4	4.75	150	52	1.0 to 18.0	TFD
MW07D (Monitoring Well)	312370.6	384065.0	4.84	150	52	0.5 to 4.5	TFD
MW08S (Monitoring Well)	312459.7	384069.2	5.01	150	52	1.0 to 18.0	TFD
MW08D (Monitoring Well)	312459.9	384074.2	4.94	150	52	0.5 to 4.5	TFD

Notes: (1) TFD = Tidal Flat Deposits.

4. Field Work

The programme of works undertaken at site is summarised in Table 3 below:

TABLE 3: Programme of Works

Date	Activity
07 July 2025	Drill and install MW01 S
07 July 2025	Drill and install MW02 D
07 July 2025	Drill and install MW02 S
08 July 2025	Drill and install MW03 S
08 July 2025	Drill and install PWMW01
09 July 2025	Drill and install MW01 D
09 July 2025	Drill and install MW03 D
10 July 2025	Drill and install MW07 D
11 July 2025	Drill and install MW05 D
14 July 2025	Drill and install MW04 S
14 July 2025	Drill and install MW05 S
14 July 2025	Drill and install MW06 S
14 July 2025	Drill and install MW07 S
15 July 2025	Drill and install MW06 D
16 July 2025	Drill and install MW04 D
16 July 2025	Drill and install MW08 S
16 July 2025	Water Samples Taken
17 July 2025	Drill and install PW01
18 July 2025	Drill and install MW08 D
21 July 2025	Water Samples Taken
22 July 2025	Water Samples Taken
23 July 2025	Water Samples Taken
28 July 2025	PW01 - Falling Head Testing
28 July 2025	Water Samples Taken
29 July 2025	Water Samples Taken
29 July 2025	PWMW01 - Falling Head Testing
30 July 2025	Water Samples Taken
05 to 11 August 2025	Pretest Monitoring
05 August 2025	Equipment Test
05 August 2025	Water Samples Taken
05 August 2025	Water Samples Taken
06 August 2025	Water Samples Taken
12 August 2025	Step Test
13 to 19 August 2025	Constant Rate Test
19 to 29 August 2025	Recovery Monitoring

Figure 1: General Pumping Test Layout.

5. Results

The following section presents the results obtained during this ground investigation, including Rising Head Tests and the Pumping Test.

5.1 Falling Head Testing

Falling Head Testing was undertaken in the pumping well (PW01) on 28 July 2025. Two tests were conducted in the well. A summary of the results is presented in Table 4. The full test results are included in Appendix B.

TABLE 4: Summary of Falling Head Test Results

Test No	Test Duration (seconds)	Basic Time Factor (seconds)	Calculated Permeability (m/s)	
			Formula 1*1	Formula 2*2
PW01-1	1,350	86	1.02E-05	7.46E-06
PW01-2	1,350	174	5.0E-06	5.09E-06
PWMW01 -1	210	34	9.88E-06	6.96E-06

NOTES: (1) Hvorslev Calculation - BS 5930 (1999) Section 25.4.6.1 CALCULATION B.
(2) Hvorslev Calculation - BS 5930 (1999) Section 25.4.6.1 CALCULATION B.1.

5.2 Pumping Test

The pumping test involved the installation of pumping equipment, pre-test monitoring of groundwater levels prior to an equipment test, step test, followed by a constant rate test (CRT) with subsequent recovery monitoring.

A summary of the results of the full pumping test programme is presented in the hydrograph, Figure 2.

The full pumping test data, is included in the associated excel sheet. It has been uploaded to a dropbox and is available to download upon request and with permission granted by the Client.

5.2.1 Equipment Test

The first stage of the pumping test comprised an equipment test. Following insertion of the submersible pump into the pumping (abstraction) well (PW01), the pump was switched on and an equipment test undertaken on 05 August 2025.

Flow rates were gradually increased to confirm the abstraction well was capable of yielding the desired flows. All pipework and equipment were checked and tightened/replaced as necessary. After the equipment test, groundwater levels were left to recover and pre-test monitoring begun.

5.2.2 Pre-test monitoring

An initial period of pre-test monitoring was undertaken between 31 July and 05 August 2025 prior to an equipment test. A second period of pre-test monitoring was completed between the 05 and 11 August 2025.

5.2.3 Step Test

A step test was completed between 10:00 and 16:40 on the 12 August 2025. The step test comprised of 4 no. steps pumping at 2.15 l/s, 3.45 l/s, 4.34 l/s and 5.35 l/s with abstracted water discharged directly to the fire water pond. On completion of the step test, groundwater levels were left to recover.

A summary of water depths and drawdown achieved during the Step Test is presented in Table 5. The results are also presented in the hydrograph, Figure 3 (time-water level).

5.2.4 Constant Recharge Test (CRT)

The CRT was started at 09:30 on 13 August 2025 and conducted for a period of approximately 7 days (148 hours), finishing at 13:52 on 19 August 2025. An average flow rate of 5.34 l/s was maintained.

A summary of water depths and change in groundwater level achieved during the CRT is presented in Table 6. The results of the pumping test are also presented in the hydrograph, Figure 4 (time-water level), whilst Figure 5 presents a semi-log plot of the distance change in groundwater level.

Upon completion of the CRT, recovery monitoring was completed from the 19 August 2025 until the 29 August 2025.

TABLE 5: Results of Step Test.

							Step Test (1) at 2.15 l/s			Step Test (2) at 3.45 l/s		
Well No.	Distance from pumped well (m)	Easting	Northing	Ground Elevation (mAOD)	Starting Water Level (mbgl)	Starting Water Depth (mAOD)	Lowest Water Level (mbgl)	Lowest Water Depth (mAOD)	Drawdown (m)	Lowest Water Level (mbgl)	Lowest Water Depth (mAOD)	Drawdown (m)
Pumping Well (PW01)	0.10	312162.05	384071.47	4.79	2.22	2.57	5.39	-0.60	3.17	7.32	-2.53	5.11
PWMW01	5.17	312166.45	384074.18	4.89	2.08	2.81	2.09	2.80	0.01	2.09	2.80	0.01
MW01D	9.78	312161.79	384061.69	4.72	1.77	2.95	2.39	2.33	0.62	2.81	1.92	1.03
MW01S	10.49	312166.93	384062.18	4.70	1.87	2.83	1.91	2.79	0.04	2.00	2.70	0.13
MW02S	30.88	312192.11	384064.38	4.84	0.90	3.94	0.90	3.94	0.00	0.90	3.94	0.00
MW02D	30.20	312192.20	384069.83	4.81	1.94	2.87	2.26	2.55	0.32	2.51	2.30	0.57
MW03D	49.68	312166.90	384022.03	4.79	1.93	2.87	2.13	2.66	0.21	2.31	2.48	0.39
MW03S	49.78	312158.95	384021.79	4.74	1.75	2.99	1.83	2.91	0.08	2.06	2.68	0.31
MW04D	160.38	312303.68	384146.72	4.79	1.52	3.27	1.58	3.21	0.06	1.65	3.14	0.12
MW04S	157.07	312302.61	384141.57	4.89	1.80	3.09	1.80	3.09	0.00	1.79	3.10	0.00
MW05D	116.26	312101.98	383971.94	5.12	2.27	2.86	2.32	2.80	0.06	2.39	2.74	0.12
MW05S	113.94	312107.40	383971.49	5.12	2.22	2.90	2.20	2.92	-0.02	2.20	2.92	-0.02
MW06D	122.92	312172.91	383949.03	4.87	1.97	2.90	2.03	2.84	0.06	2.11	2.77	0.13
MW06S	121.55	312168.26	383950.08	4.84	1.89	2.96	1.89	2.96	0.00	1.89	2.96	0.00
MW07D	208.61	312370.56	384065.03	4.84	1.76	3.08	1.80	3.04	0.03	1.84	3.00	0.08
MW07S	207.83	312369.87	384070.35	4.75	1.34	3.41	1.36	3.39	0.02	1.39	3.36	0.05
MW08D	297.82	312459.86	384074.17	4.94	1.66	3.28	1.68	3.26	0.02	1.70	3.24	0.04
MW08S	297.64	312459.68	384069.19	5.01	1.63	3.38	1.63	3.37	0.00	1.64	3.36	0.02

							Step Test (3) at 4.34 l/s			Step Test (4) at 5.35 l/s		
Well No.	Distance from pumped well (m)	Easting	Northing	Ground Elevation (mAOD)	Starting Water Level (mbgl)	Starting Water Depth (mAOD)	Lowest Water Level (mbgl)	Lowest Water Depth (mAOD)	Drawdown (m)	Lowest Water Level (mbgl)	Lowest Water Depth (mAOD)	Drawdown (m)
Pumping Well (PW01)	0.10	312162.05	384071.47	4.79	2.22	2.57	8.94	-4.15	6.72	10.66	-5.87	8.44
PWMW01	5.17	312166.45	384074.18	4.89	2.08	2.81	2.09	2.80	0.01	2.08	2.81	0.00
MW01D	9.78	312161.79	384061.69	4.72	1.77	2.95	3.15	1.57	1.38	3.47	1.25	1.70
MW01S	10.49	312166.93	384062.18	4.70	1.87	2.83	2.11	2.59	0.24	2.26	2.44	0.39
MW02S	30.88	312192.11	384064.38	4.84	0.90	3.94	0.90	3.94	0.00	0.90	3.94	0.00
MW02D	30.20	312192.20	384069.83	4.81	1.94	2.87	2.72	2.08	0.78	2.92	1.88	0.98
MW03D	49.68	312166.90	384022.03	4.79	1.93	2.87	2.47	2.32	0.55	2.62	2.17	0.69
MW03S	49.78	312158.95	384021.79	4.74	1.75	2.99	2.21	2.53	0.46	2.35	2.39	0.60
MW04D	160.38	312303.68	384146.72	4.79	1.52	3.27	1.71	3.08	0.19	1.77	3.02	0.25
MW04S	157.07	312302.61	384141.57	4.89	1.80	3.09	1.80	3.09	0.00	1.80	3.09	0.01
MW05D	116.26	312101.98	383971.94	5.12	2.27	2.86	2.45	2.67	0.18	2.52	2.61	0.25
MW05S	113.94	312107.40	383971.49	5.12	2.22	2.90	2.20	2.92	-0.02	2.25	2.87	0.03
MW06D	122.92	312172.91	383949.03	4.87	1.97	2.90	2.18	2.70	0.21	2.25	2.63	0.28
MW06S	121.55	312168.26	383950.08	4.84	1.89	2.96	1.89	2.96	0.00	1.89	2.95	0.00
MW07D	208.61	312370.56	384065.03	4.84	1.76	3.08	1.89	2.96	0.12	1.94	2.91	0.17
MW07S	207.83	312369.87	384070.35	4.75	1.34	3.41	1.43	3.33	0.08	1.47	3.28	0.13
MW08D	297.82	312459.86	384074.17	4.94	1.66	3.28	1.72	3.22	0.06	1.77	3.17	0.11
MW08S	297.64	312459.68	384069.19	5.01	1.63	3.38	1.66	3.35	0.03	1.69	3.32	0.06

NOTES: MW05S logger error, manual data presented

MW06D removed by trespassers at 18:41 on the 16-08-2025

					Max Tide Level (mAOD)	Min Tide Level (mAOD)	Range (m)
Stilling Well 1	230.25	311972.08	383941.38	4.56	2.91	2.88	0.03
Stilling Well 2	202.36	311959.73	384075.79	4.63	3.13	2.94	0.19
Stilling Well 3	208.86	311954.31	384093.08	4.62	3.16	2.92	0.24

TABLE 6: Results of Constant Rate Test

					CRT @ 5.34 l/s				
Well No.	Distance from pumped well (m)	Easting	Northing	Ground Elevation (mAOD)	Starting Water Level (mbgl)	Starting Water Depth (mAOD)	Lowest Water Level (mbgl)	Lowest Water Depth (mAOD)	Drawdown (m)
Pumping Well (PW01)	0.10	312162.05	384071.47	4.79	2.14	2.65	11.84	-7.05	9.70
PWMW01	5.17	312166.45	384074.18	4.89	2.08	2.81	2.08	2.81	0.00
MW01D	9.78	312161.79	384061.69	4.72	1.71	3.01	3.82	0.91	2.11
MW01S	10.49	312166.93	384062.18	4.70	2.02	2.68	3.39	1.31	1.37
MW02S	30.88	312192.11	384064.38	4.84	0.90	3.94	2.24	2.59	1.34
MW02D	30.20	312192.20	384069.83	4.81	1.87	2.94	3.24	1.56	1.37
MW03D	49.68	312166.90	384022.03	4.79	1.88	2.92	2.99	1.80	1.12
MW03S	49.78	312158.95	384021.79	4.74	1.75	2.99	2.75	1.98	1.00
MW04D	160.38	312303.68	384146.72	4.79	1.49	3.30	2.06	2.73	0.56
MW04S	157.07	312302.61	384141.57	4.89	1.80	3.09	2.14	2.75	0.34
MW05D	116.26	312101.98	383971.94	5.12	2.26	2.87	2.89	2.24	0.63
MW05S	113.94	312107.40	383971.49	5.12	2.60	2.52	3.05	2.07	0.45
MW06D	122.92	312172.91	383949.03	4.87	1.95	2.92	2.52	2.35	0.57
MW06S	121.55	312168.26	383950.08	4.84	1.90	2.95	2.32	2.52	0.42
MW07D	208.61	312370.56	384065.03	4.84	1.73	3.11	2.14	2.70	0.41
MW07S	207.83	312369.87	384070.35	4.75	1.31	3.45	1.77	2.98	0.46
MW08D	297.82	312459.86	384074.17	4.94	1.61	3.33	2.09	2.85	0.48
MW08S	297.64	312459.68	384069.19	5.01	1.58	3.42	1.98	3.03	0.39

NOTES: MW05S logger error, manual data presented

MW06D removed by trespassers at 18:41 on the 16-08-2025

					Max Tide Level (mAOD)	Min Tide Level (mAOD)	Range (m)
Stilling Well 1	230.25	311972.08	383941.38	4.56	2.93	2.86	0.06
Stilling Well 2	202.36	311959.73	384075.79	4.63	3.13	2.92	0.21
Stilling Well 3	208.86	311954.31	384093.08	4.62	3.16	2.92	0.24

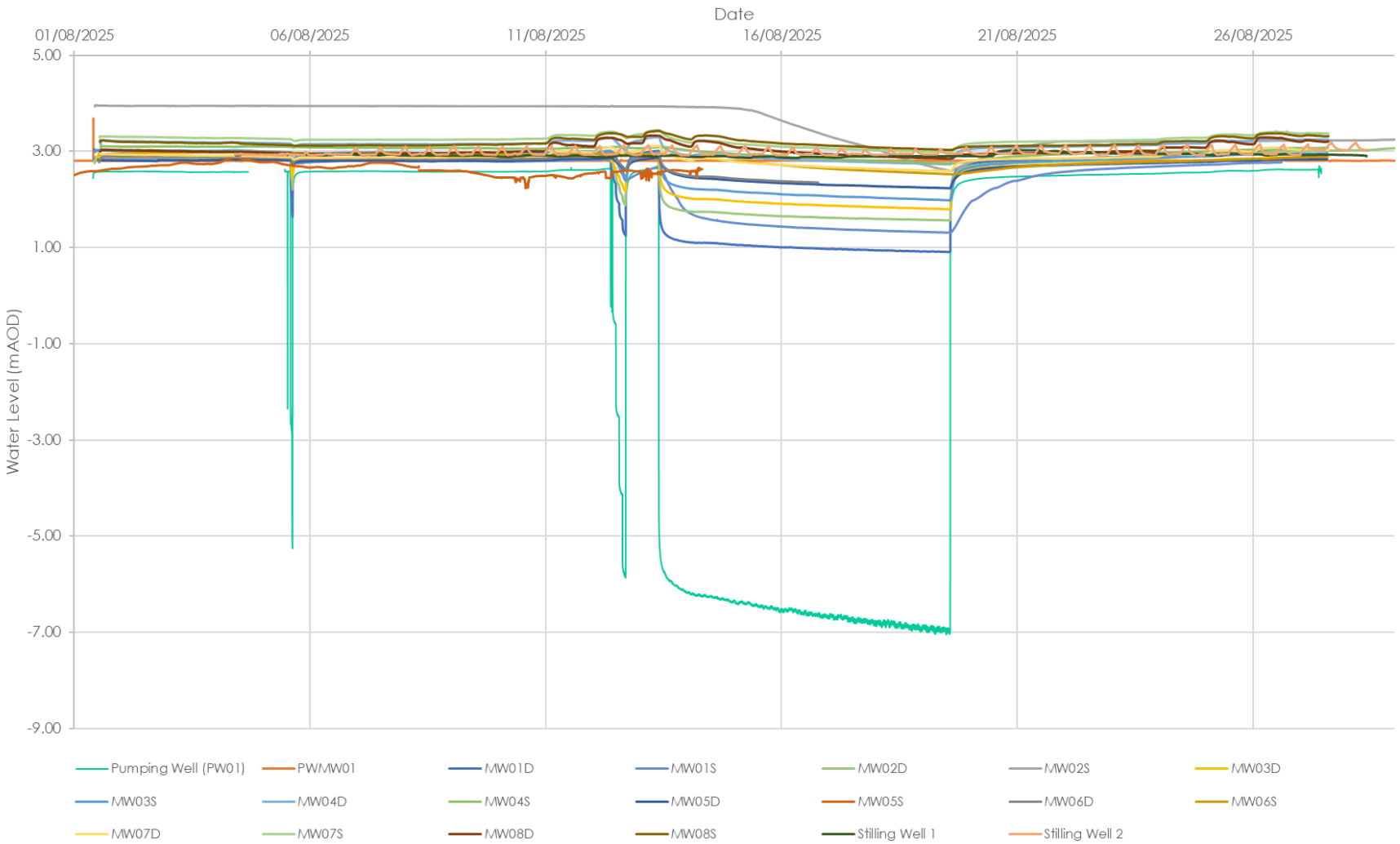

Figure 2: Pumping Test Hydrograph (Time-Water Level) (all data).

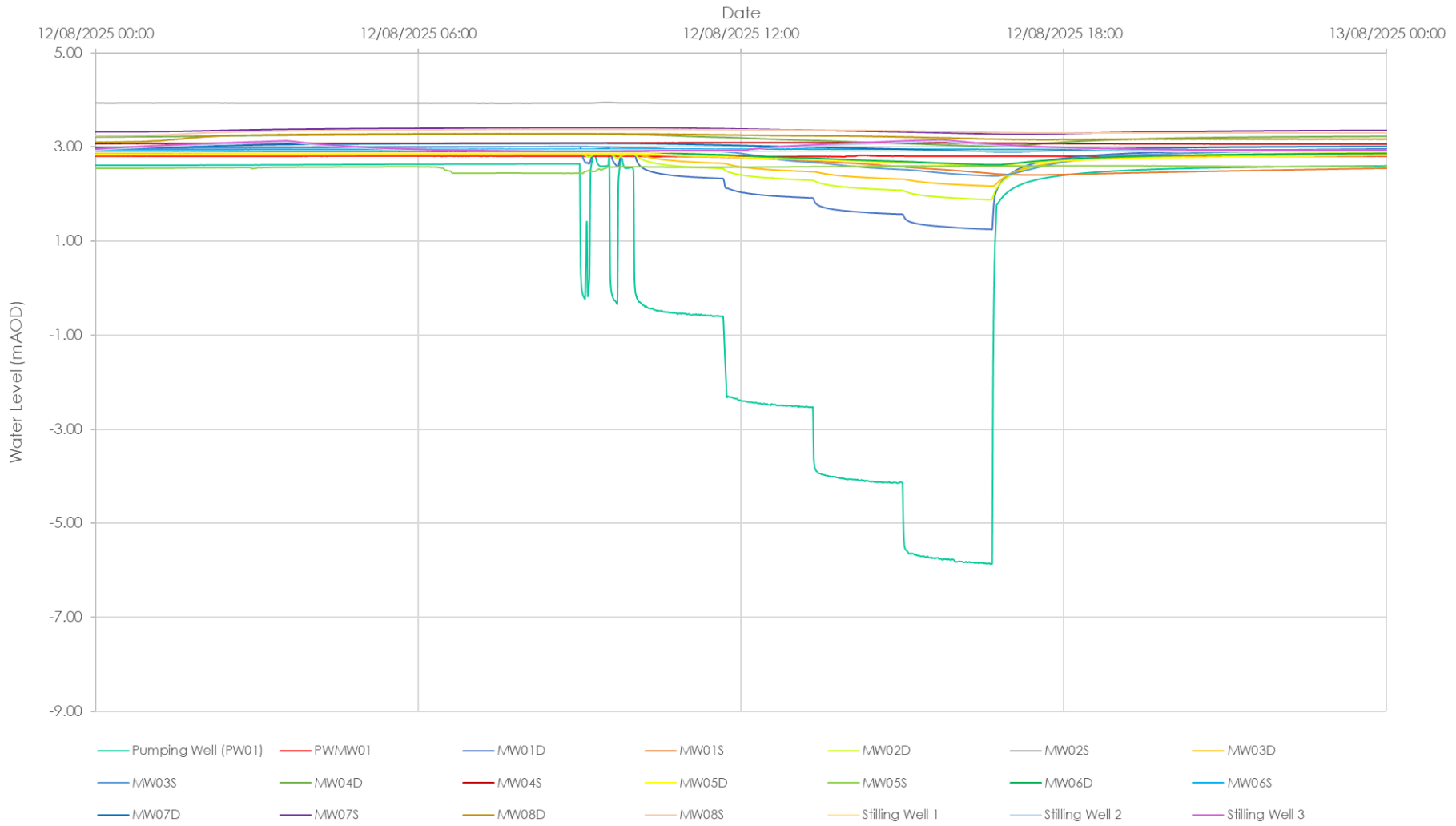

Figure 3: Step Test Hydrograph (Time-Water Level).

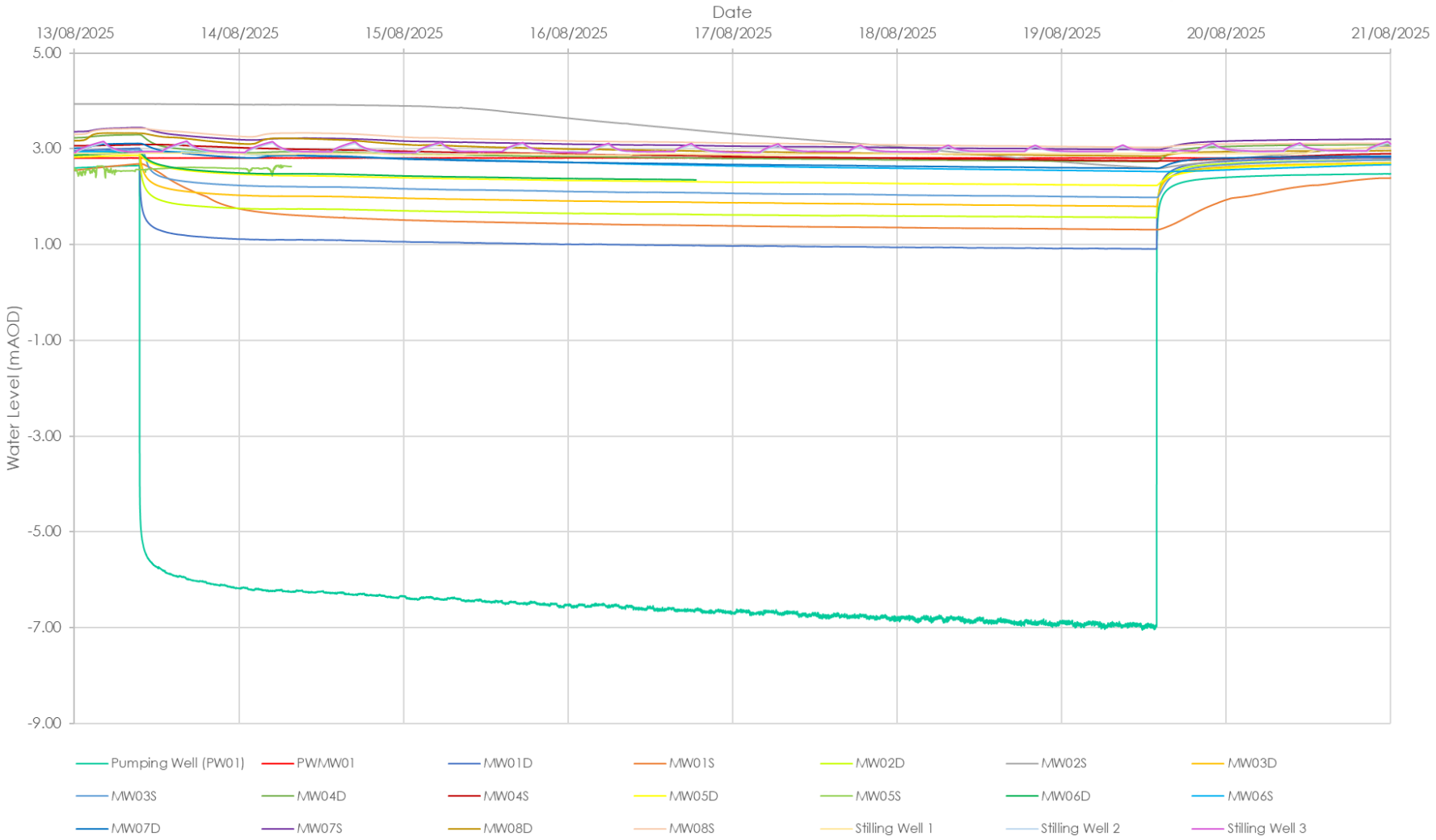

Figure 4: Constant Rate Test Hydrograph (Time-Water Level).

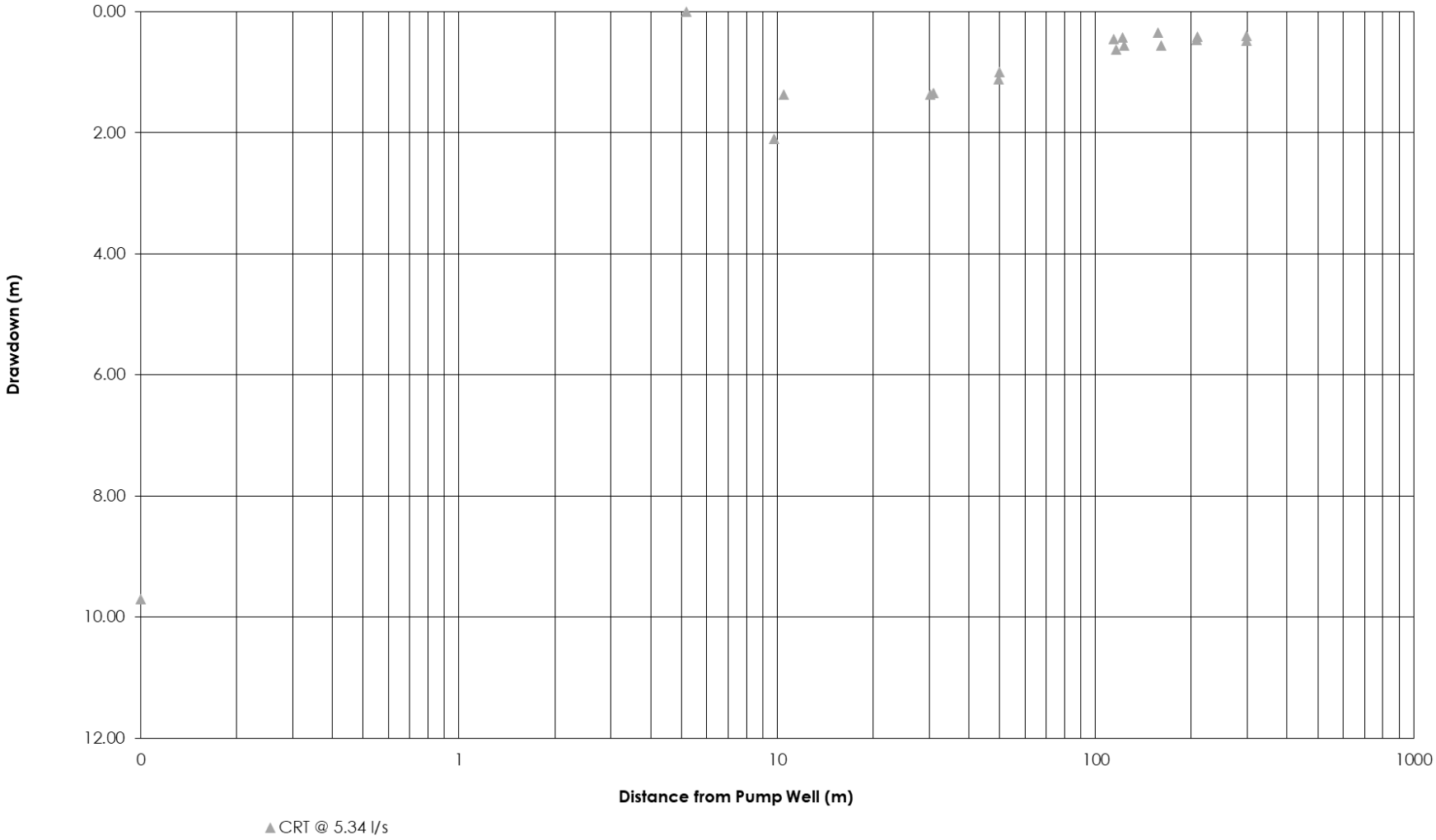

Figure 5: Semi-Log Plot of The Distance Drawdown

6 Groundwater Quality

6.1 Field Parameters

Groundwater quality monitoring was undertaken during both pumping tests to minimise the risk of migration of any abstracted contaminated water. A SmartTROLL multiparameter handheld probe was used to digitally record the following parameters:

- pH;
- Electrical Conductivity;
- Redox potential;
- Temperature; and
- Dissolved Oxygen.

Water quality was monitored at the discharge location at approximately hourly intervals during the working day. The results are presented in Figures 6 through to 10. The full data is available upon request.

6.1 Water Sampling

Groundwater samples were collected from PW01, PWMW01, MW01S, MW01D, MW02S, MW02D, MW03S, MW03D, MW04S, MW04D, MW05S, MW05D, MW06S, MW06D, MW07S, MW07D, MW08S, MW08D, Stilling Well 1, Stilling Well 2, Stilling Well 3 and the Fire Water Pond between 16 July and 06 August 2025. A duplicate of PW01 was taken on 29 July 2025.

The groundwater samples were taken to a UKAS accredited laboratory and analysed for the suite included in Table 7, as well as PFAS suite. Groundwater sampling dates are presented in Table 8. The full laboratory test results are included in Appendix C.

TABLE 8: Groundwater Analysis Suite

Groundwater Sampling Suite				
Aluminium	Antimony	Arsenic	Barium	Boron
Cadmium	Calcium	Chromium	Copper	Iron
Lead	Magnesium	Manganese	Molybdenum	Nickel
Potassium	Selenium	Sodium	Zinc	TPH (>C8 - C10)
TPH Total (>C8 - C40)	TPH1 (C10 - C40)	BTEX	PAH	PFAS
VOCs	Ammoniacal Nitrogen	Chloride	Fluoride	Nitrate as N
Nitrate as NO2	Nitrite as NO3	Sulphate	Total Oxidised Nitrogen	Electrical Conductivity
Dissolved Oxygen	Biochemical Oxygen Demand (total)	Chemical Oxygen Demand	Total Organic Carbon (TOC)	pH in water
Alkalinity as CaCO3	Hardness - Total as CaCO3			

TABLE 9: Groundwater Sampling Dates

Date	FWP	PW01	PWMW01	MW01S	MW01D	MW02S	MW02D	MW03S	MW03D	MW04S	MW04D
16/07/2025											
21/07/2025						x				x	x
22/07/2025				x	x						
23/07/2025		X	x					x	x		
28/07/2025		X	x	x	x						
29/07/2025						x	x	x	x	x	x
30/07/2025											
Pre ET 05/08/2025	X	x									
During ET 05/08/2025	X	x									
06/08/2025							x				

Date	MW05S	MW05D	MW06S	MW06D	MW07S	MW07D	MW08S	MW08D	Stilling Well 1	Stilling Well 2	Stilling Well 3	PW01 Dupe 1
16/07/2025	X	x							x			
21/07/2025					x	x				x		
22/07/2025			X	x								
23/07/2025							x	x	x			
28/07/2025									X			
29/07/2025										x		x
30/07/2025	X	x	x	x	x	x	x	x			x	
Pre ET 05/08/2025												
During ET 05/08/2025												
06/08/2025												

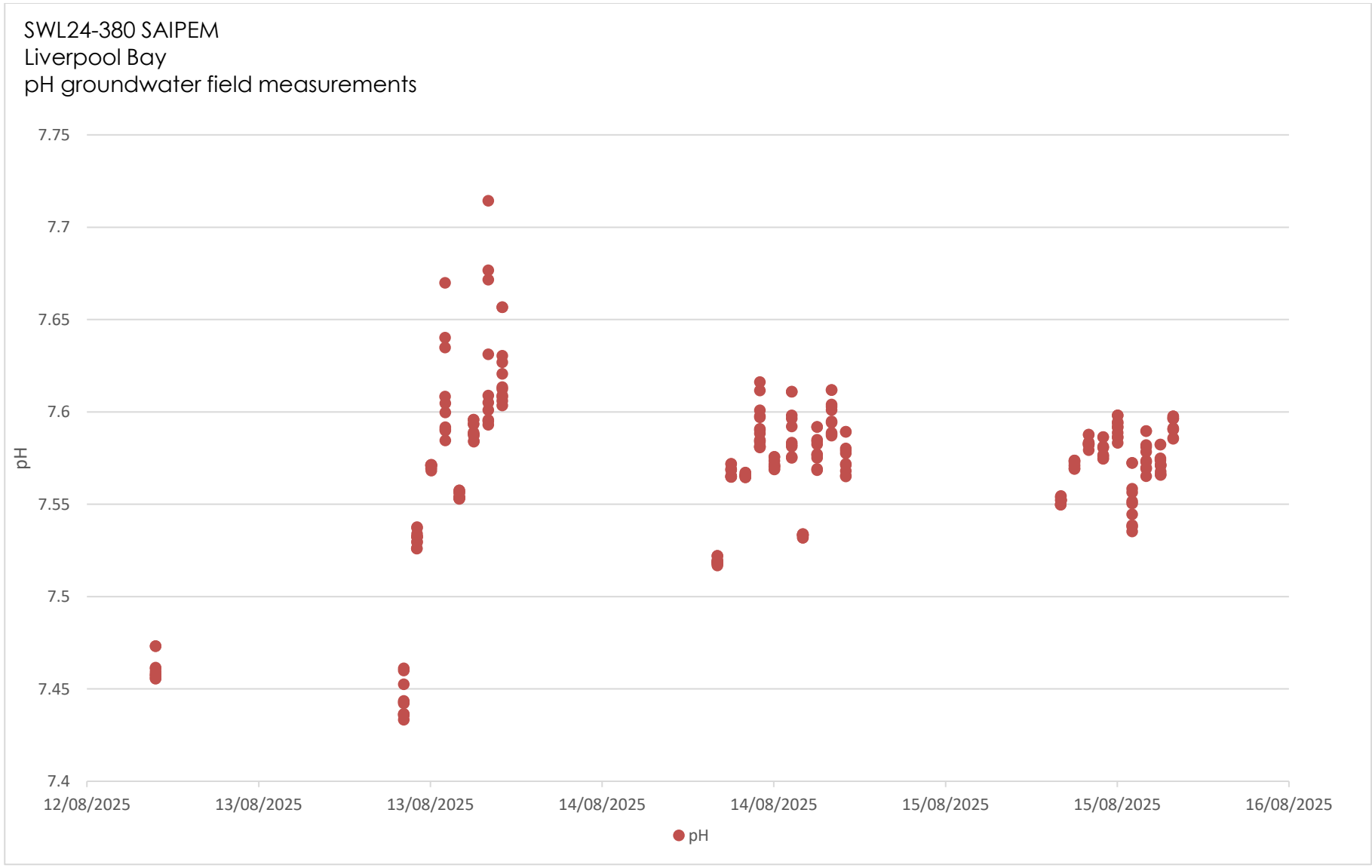

Figure 6: pH Groundwater Field Measurements.

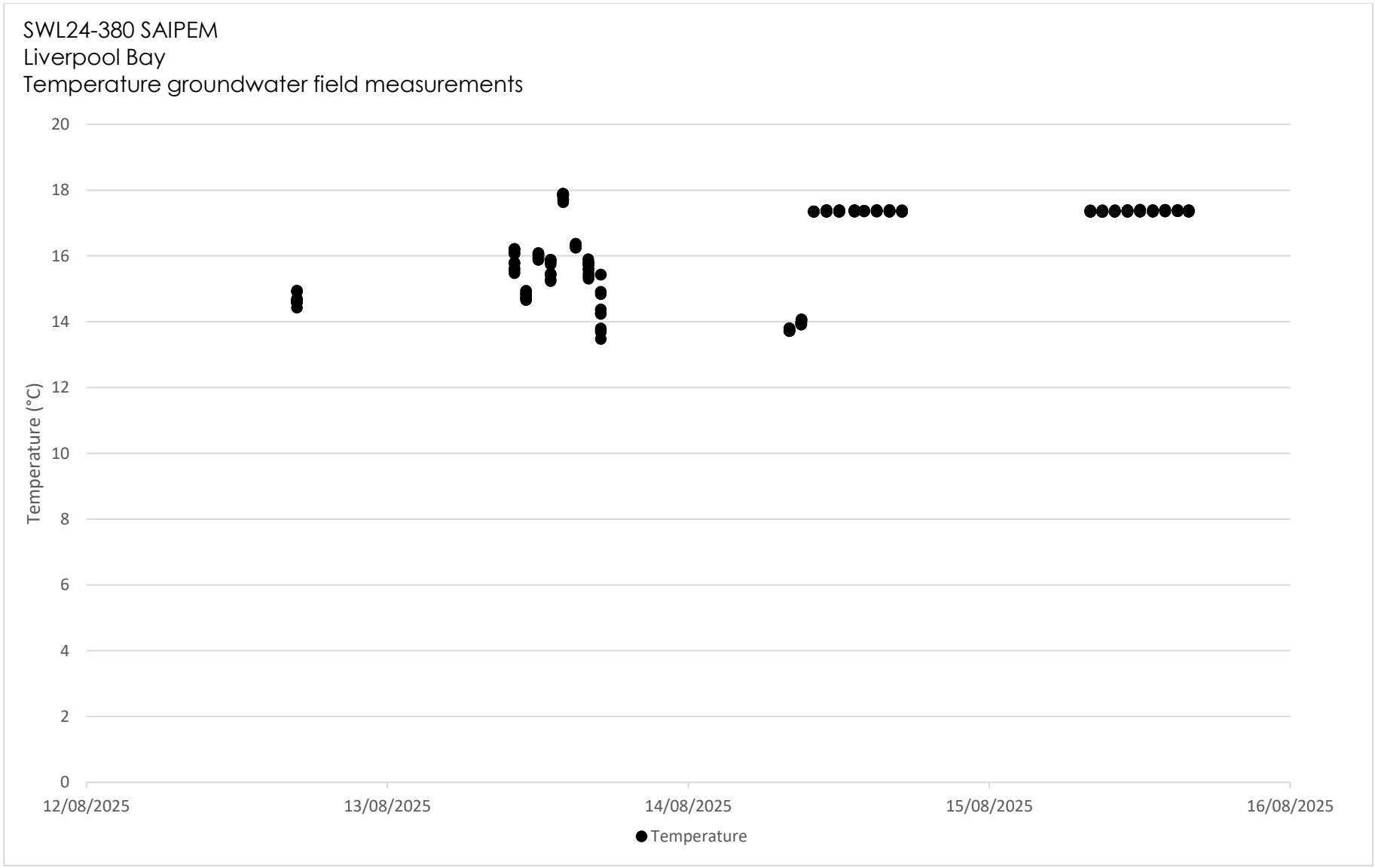

Figure 7: Temperature Groundwater Field Measurements.

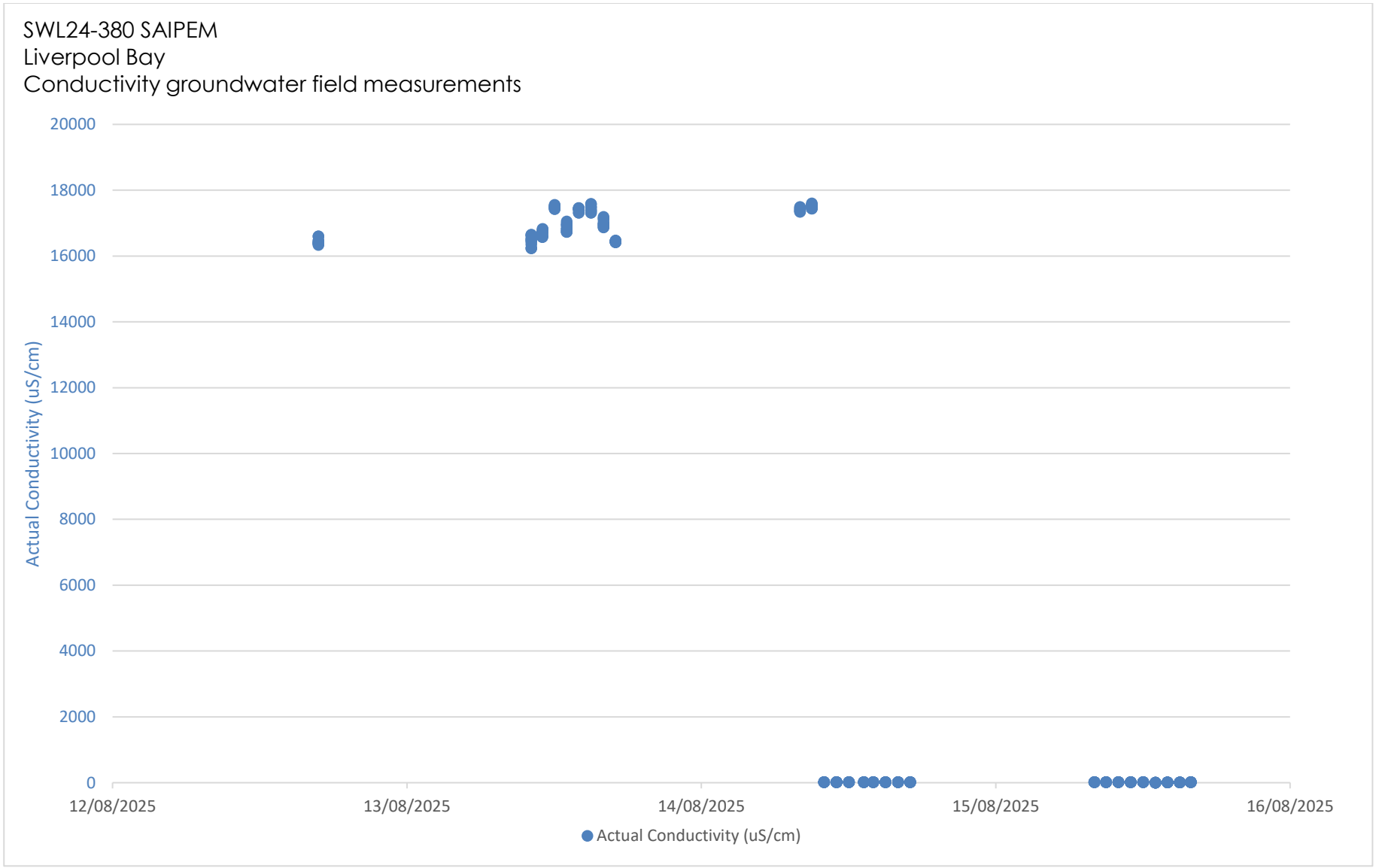

Figure 8: Conductivity Groundwater Field Measurements.

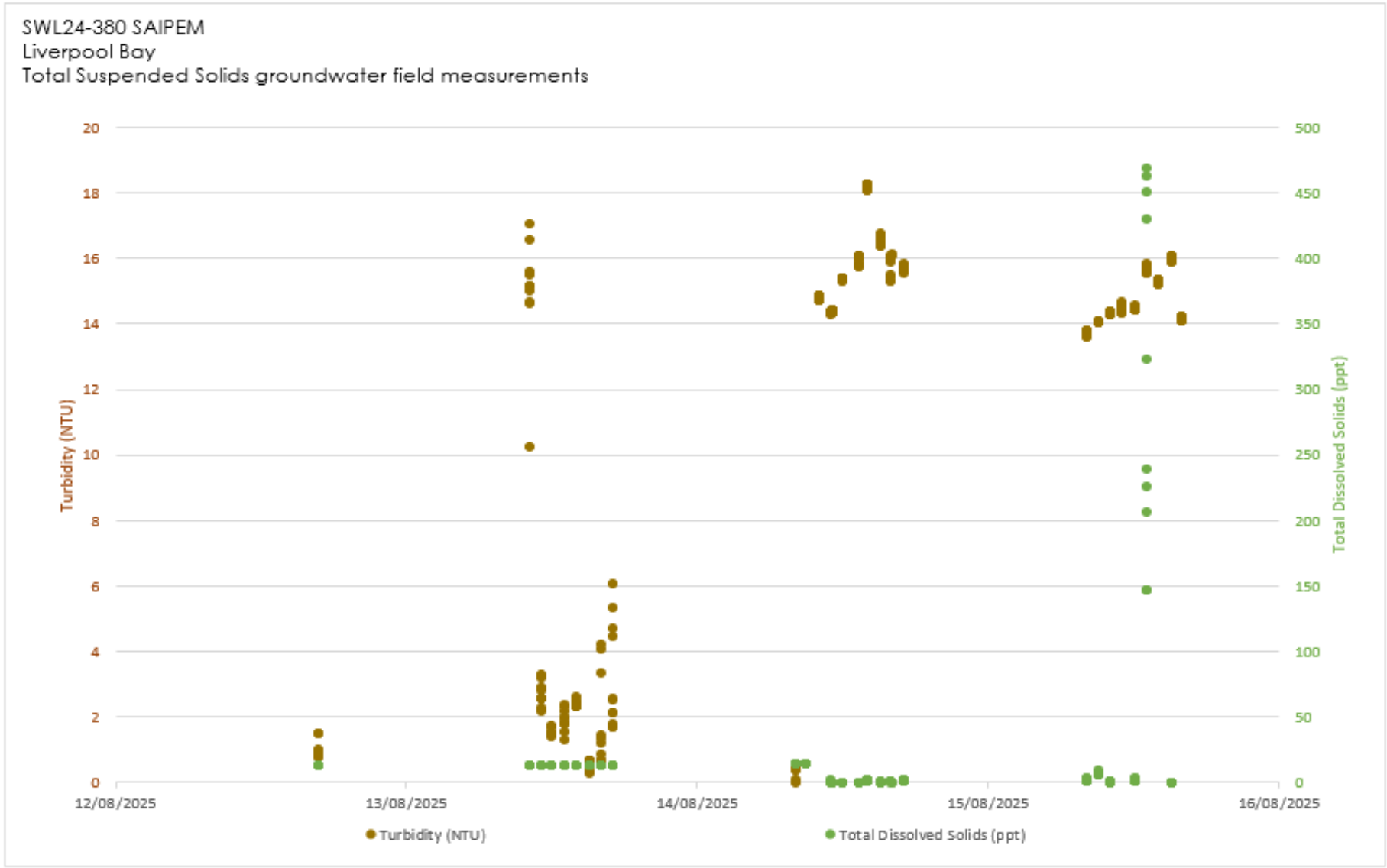

Figure 9: Total Suspended Solids Groundwater Field Measurements.

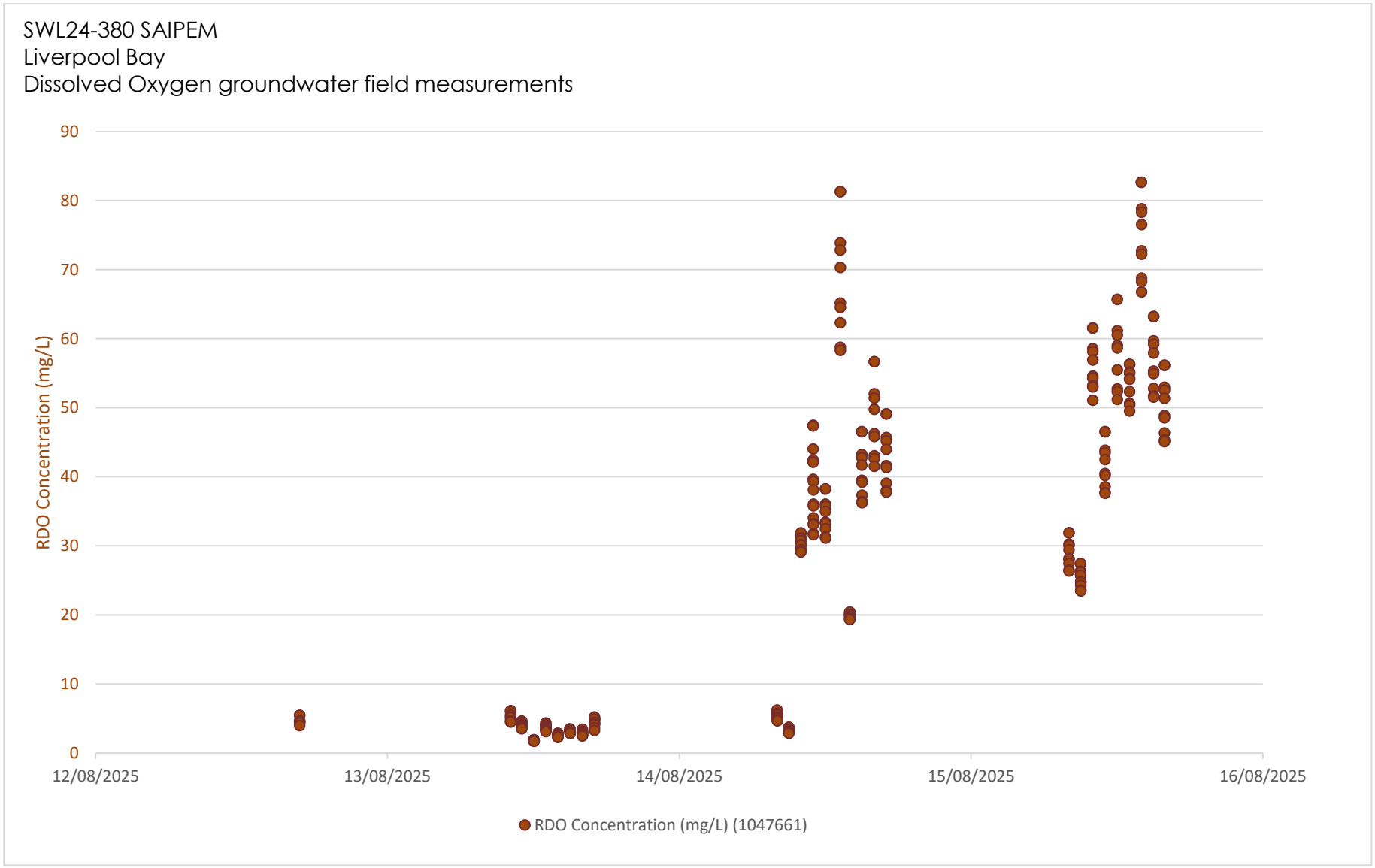

Figure 10: Dissolved Oxygen Groundwater Field Measurement.

7. References

Preene, M., Roberts, T.O.L., and Powrie, W. 2016. *Groundwater control: design and practice, second edition*. Construction Industry Research and Information Association, CIRIA Report C750.

Cashman, P.M. and Preene, M. 2021. *Groundwater Lowering in Construction: A Practical Guide to Dewatering, third edition*. CRC Press.

Soil Engineering, document entitled 'Report on a Ground Investigation for LBA CSS Project – WP3 Point of Ayr Gas Plant', document No: TA8701 issue 02 dated 11 April 2025.

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APPENDIX A:

BOREHOLE LOGS

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Key to exploratory hole symbols and abbreviations

SAMPLE TYPES

ACM - Asbestos sample
AMAL - Amalgamated sample
B - Bulk disturbed sample
BLK - Block sample
C - Core sample
CBR - CBR test sample
D - Disturbed sample
ES - Environmental sample
EW - Environmental water sample
G - Gas sample
J - Jar sample
L - Liner sample
TW - Pushed thin wall sample
U - Undisturbed sample
UT - Undisturbed thin wall sample
W - Water sample

IN-SITU TESTS

HV - Hand shear vane
HV(r) - Hand shear vane residual
PID - Photo ionisation detector
PP - Hand penetrometer
SPT - Standard penetration test
SPT(C) - SPT using cone

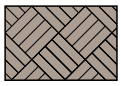
GROUNDWATER

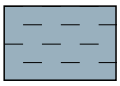
Groundwater strike
Groundwater rest level

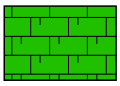
ROTARY CORE DETAILS

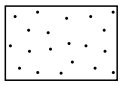
TCR - Total core recovery (%)
SCR - Solid core recovery (%)
RQD - Rock quality designation (%)
FI - Fracture index
NI - Non-intact core
AZCL - Assumed zone of core loss

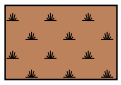
LEGEND

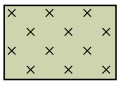

Topsoil

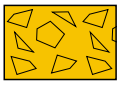

Clay

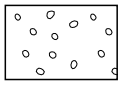

Chalk

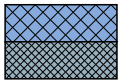

Sand backfill


Peat


Silt


Breccia


Gravel backfill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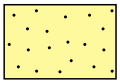
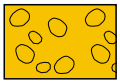
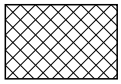
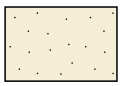
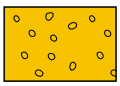

Sand

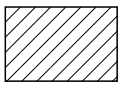

Conglomerate

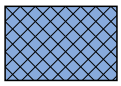

Arisings

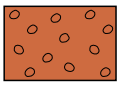

Concrete

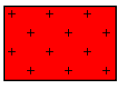

Gravel

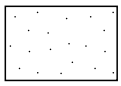

Metamorphic


Bentonite


Wood


Cobbles


Igneous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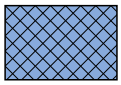
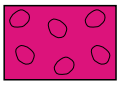

Brick


Boulders

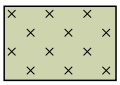

Grout


Bituminous material

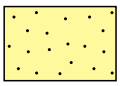

Mudstone


Plain pipe

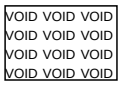

Gypsum


Siltstone


Coal


Sandstone


Slotted pipe



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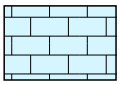

Limestone

Stuart Wells Limited

Cable Percussion Log

PW01

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312162.05	384071.47	4.79	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-17	2025-07-17

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
					4.49	(0.30) 0.30		Grass over TOPSOIL
					3.99	(0.50) 0.80		Made Ground (Hardcore)
					3.54	(0.45) 1.25		Brown soft to stiff boulder CLAY
								Grey soft sandy silty CLAY
						(2.55)		
					0.99	3.80		Grey silty SAND
						(3.95)		
					-2.96	7.75		Dense grey SAND
						(9.25)		
					-12.21	17.00		*End of Borehole at 17.00m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0

Remarks

Method, Plant, Stability, Dimensions
0.00 - 17.00m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW01 s

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312166.93	384062.18	4.70	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-07	2025-07-07

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
					4.40	(0.30) 0.30		Pit to 0.3
						(0.90)		Very hard compact hardcore / concrete
					3.50	1.20		Soft to firm brown boulder CLAY
						(2.20)		
					1.30	3.40		Grey black soft sandy SILT
						(1.10)		
					0.20	4.50		*End of Borehole at 4.50m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 4.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW01 d

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312161.79	384061.69	4.72	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-09	2025-07-09

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.57	(0.15) 0.15		Grass over TOPSOIL
					4.12	(0.45) 0.60		Very compact hardcore
								Firm brown boulder CLAY
						(3.80)		
					0.32	4.40		Grey black soft sandy SILT
						(2.40)		
					-2.08	6.80		Dense grey fine to coarse SAND
						(10.70)		
					-12.78	17.50		*End of Borehole at 17.50m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 18.00m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW02 s

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312192.11	384064.38	4.84	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-07	2025-07-07

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.54	(0.30) 0.30		Pit to 0.3
						(0.95)		Very hard compact hardcore / concrete
					3.59	1.25		Soft to stiff brown boulder CLAY
						(1.95)		
					1.64	3.20		Grey black and grey soft sandy SILT
						(1.30)		
					0.34	4.50		*End of Borehole at 4.50m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 4.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW02 d

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312192.20	384069.83	4.81	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-07	2025-07-07

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
					4.51	(0.30) 0.30		Grass over TOPSOIL
					4.11	(0.40) 0.70		Very compact hardcore
								Firm brown boulder CLAY
						(3.80)		
					0.31	4.50		Black grey SILT
						(1.90)		
					-1.59	6.40		Dense grey fine to coarse SAND
						(12.16)		
					-13.75	18.56		*End of Borehole at 18.56m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0

Remarks

Method, Plant, Stability, Dimensions
0.00 - 18.00m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW03 s

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312158.95	384021.79	4.74	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-08	2025-07-08

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.44	(0.30) 0.30		Pit to 0.3
						(0.90)		MADE GROUND (Hard compacted GRAVEL)
					3.54	1.20		Soft to stiff brown boulder CLAY
						(2.60)		
					0.94	3.80		Soft grey SILT
						(0.70)		
					0.24	4.50		*End of Borehole at 4.50m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 4.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW03 d

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312166.90	384022.03	4.79	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-09	2025-07-09

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
					4.49	(0.30) 0.30		Pit to 0.3
					3.99	(0.50) 0.80		MADE GROUND (Hard compacted GRAVEL)
					3.49	(0.50) 1.30		Firm brown boulder CLAY
						(2.55)		Soft grey SILT
					0.94	3.85		Loose to dense silty SAND
						(13.95)		
					-13.01	17.80		*End of Borehole at 17.80m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0

Remarks

Method, Plant, Stability, Dimensions
0.00 - 17.80m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW04 s

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312302.61	384141.57	4.89	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-14	2025-07-14

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.49	(0.40) 0.40		Grass over TOPSOIL
					4.09	(0.40) 0.80		Very compact hardcore
						(1.50)		Firm brown boulder CLAY
					2.59	2.30		Soft black grey SILT
						(2.20)		
					0.39	4.50		*End of Borehole at 4.50m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 4.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW04 d

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312303.68	384146.72	4.79	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-16	2025-07-16

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.39	(0.40) 0.40		Grass over TOPSOIL
					3.99	(0.40) 0.80		Very compact hardcore
						(1.50)		Firm brown boulder CLAY
					2.49	2.30		Grey black soft SILT
						(5.90)		
					-3.41	8.20		Cream very dense SAND
						(9.80)		
					-13.21	18.00		*End of Borehole at 18.00m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 18.00m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW05 s

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312107.40	383971.49	5.12	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-14	2025-07-14

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.82	(0.30) 0.30		Pit to 0.3
					4.32	(0.50) 0.80		MADE GROUND (Hard compacted GRAVEL)
					3.87	(0.45) 1.25		Firm brown boulder CLAY
						(2.55)		Soft grey SILT
					1.32	3.80		Soft grey silty SAND
					0.62	(0.70) 4.50		*End of Borehole at 4.50m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 4.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW05 d

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312101.98	383971.94	5.12	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-11	2025-07-11

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
						(0.50)		Pit to 0.5
					4.62	0.50		
						(0.70)		Very compact hardcore
					3.92	1.20		
						(2.40)		Soft to stiff brown boulder CLAY
					1.52	3.60		
						(3.90)		Soft grey sandy SILT
					-2.38	7.50		
						(10.50)		Grey slightly silty SAND
					-12.88	18.00		
								End of Borehole at 18.00m

Remarks

Method, Plant, Stability, Dimensions
0.00 - 18.00m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW06 s

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312168.26	383950.08	4.84	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-14	2025-07-14

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.49	(0.35) 0.35		Pit to 0.3
					4.04	(0.45) 0.80		Hardcore / concrete
					3.59	(0.45) 1.25		Soft brown boulder CLAY
						(3.25)		Grey black soft silty SAND
					0.34	4.50		*End of Borehole at 4.50m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 4.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW06 d

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312172.91	383949.03	4.87	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-15	2025-07-15

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
					4.62	(0.25) 0.25		Grass over TOPSOIL
						(0.55)		Very compact hardcore
					4.07	0.80		
						(0.45)		Soft to stiff brown boulder CLAY
					3.62	1.25		Soft grey silty SAND
						(6.25)		
					-2.63	7.50		Dense grey SAND
						(10.50)		
					-13.13	18.00		*End of Borehole at 18.00m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 18.00m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW07 s

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312369.87	384070.35	4.75	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-14	2025-07-14

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.30	(0.45) 0.45		Grass over TOPSOIL
					4.05	(0.25) 0.70		Very compact hardcore
						(2.90)		Firm brown boulder CLAY
					1.15	3.60		Very soft black grey SILT
					0.25	(0.90) 4.50		*End of Borehole at 4.50m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 4.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Stuart Wells Limited

Cable Percussion Log

MW07 d

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312370.56	384065.03	4.84	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-10	2025-07-10

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
						(0.70)		Grass over TOPSOIL
					4.14	0.70		
						(0.30)		Very compact hardcore
					3.84	1.00		
								Firm brown boulder CLAY
						(2.20)		
					1.64	3.20		Very soft black grey SILT
						(3.50)		
					-1.86	6.70		Very dense grey gravelly SAND. Less gravel with depth.
						(11.30)		
					-13.16	18.00		*End of Borehole at 18.00m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 18.00m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

MW08 s

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312459.68	384069.19	5.01	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-16	2025-07-16

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.66	(0.35) 0.35		Grass over TOPSOIL
					4.11	(0.55) 0.90		Very compact hardcore
					3.01	(1.10) 2.00		Firm brown boulder CLAY
					0.51	(2.50) 4.50		Grey black soft SILT
								End of Borehole at 4.50m

Remarks

Method, Plant, Stability, Dimensions
0.00 - 4.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Stuart Wells Limited

Cable Percussion Log

MW08 d

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312459.86	384074.17	4.94	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-18	2025-07-18

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
						(0.60)		Grass over TOPSOIL
					4.34	0.60		
						(0.37)		Very compact hardcore
					3.97	0.97		Firm brown boulder CLAY
						(1.73)		
					2.24	2.70		Grey black soft SILT
						(2.80)		
					-0.56	5.50		Very dense grey gravelly SAND. Less gravel with depth.
						(12.50)		
					-13.06	18.00		*End of Borehole at 18.00m*

Remarks

Method, Plant, Stability, Dimensions
0.00 - 18.00m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Cable Percussion Log

PWMW01

Sheet 1 of 1

Stuart Wells Limited

Hole Type	Easting	Northing	Ground Level (m)	Scale
CP	312166.45	384074.18	4.89	1:100

Project Name	Project No.	Start Date	End Date
Point of Ayr Gas Terminal, Liverpool Bay	SWL24-380	2025-07-08	2025-07-08

Client
SAIPEM Ltd.

Consultant

Contractor
Stuart Wells Ltd.

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
					4.59	(0.30) 0.30		Pit to 0.3
					4.09	(0.50) 0.80		MADE GROUND (Hard compacted GRAVEL)
					3.59	(0.50) 1.30		Brown soft to stiff boulder CLAY
						(2.55)		Grey black soft sandy SILT
					1.04	3.85		Soft grey silty SAND
						(3.65)		
					-2.61	7.50		Dense SAND
						(3.00)		
					-5.61	10.50		*End of Borehole at 10.50m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0

Remarks

Method, Plant, Stability, Dimensions
0.00 - 10.50m CP Dando 2000

Logger
Driller

Checked By: P Price **Approved By:** M Pickett

Stuart Wells Limited

APPENDIX B:

FALLING HEAD TEST DATA SHEETS

Stuart Wells Limited		
	Project No:	SWL24-380
	Project Name:	Liverpool Bay
	Prepared by:	PP
	Checked by:	MTP
	Date:	09/09/2025

Calculation Details	
Type of Test	Falling Head Test
Client	SAIPEM Ltd.
Borehole No./Test no.	PW01-1
Date of test	28/07/2025
Time of test	09:45:30
Depth of borehole (mbgl)	17.0
Depth of casing (mbgl)	1.0
Standpipe Stickup (m)	0.0
Installation Diameter (m)	0.155
Initial groundwater depth (mbgl)	-2.13
Response Zone L (m)	16.0
Borehole drilling diameter D (m)	0.30
Radius of Test Section (m)	0.078
L/D	53.3
Intake factor (F)	21.5

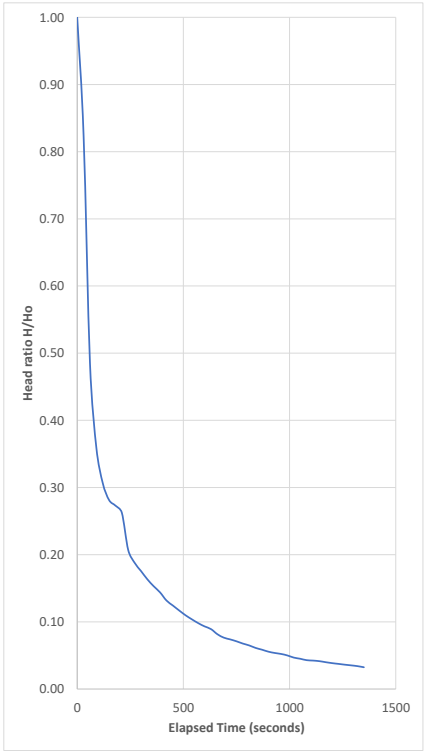
Variable Head Testing Calculations	
BS 5930 (1999) Section 25.4.6.1 CALCULATION B	
Cross Sectional Area of Test Section A (m2)	0.019
Intake Factor (F)	21.53
Basic Time Factor T (seconds)	86.00
K (m/s)	1.02E-05
BS 5930 (1999) Section 25.4.6.1 CALCULATION B.1	
Cross Sectional Area of Test Section A (m2)	0.019
Intake Factor (F)	21.53
Selected t1 (seconds)	1.00
Selected t2 (seconds)	150.00
H1 (m)	2.21
H2 (m)	0.62
K (m/s)	7.46E-06
TEST DATA	
Start Water Level (mbgl)	0.08
End Water Level (mbgl)	-2.06
37 % change in head (m)	0.89
Change in head (m)	2.21
37 % change in head (seconds)	86.00

$$k = \frac{A}{FT}$$

$$k = \frac{A}{F(t_2 - t_1)} \log_e \frac{H_1}{H_2} \text{ (general approach)}$$

Elapsed Time (seconds)	Groundwater Level (mBGL)	Change (m)	Head ratio H/Ho
0	0.08	2.21	1.00
30	-0.31	1.82	0.82
60	-1.06	1.07	0.49
90	-1.34	0.79	0.36
120	-1.46	0.68	0.31
150	-1.51	0.62	0.28
180	-1.53	0.60	0.27
210	-1.55	0.58	0.26
240	-1.68	0.46	0.21
270	-1.72	0.42	0.19
300	-1.75	0.39	0.18
330	-1.77	0.36	0.16
360	-1.80	0.34	0.15
390	-1.82	0.32	0.14
420	-1.84	0.29	0.13
450	-1.86	0.27	0.12
480	-1.88	0.26	0.12
510	-1.89	0.24	0.11
540	-1.90	0.23	0.10
570	-1.92	0.22	0.10
600	-1.93	0.21	0.09
630	-1.94	0.20	0.09
660	-1.95	0.18	0.08
690	-1.96	0.17	0.08
720	-1.97	0.16	0.07
750	-1.98	0.16	0.07
780	-1.98	0.15	0.07
810	-1.99	0.14	0.06
840	-2.00	0.14	0.06
870	-2.00	0.13	0.06
900	-2.01	0.12	0.06
930	-2.02	0.12	0.05
960	-2.02	0.12	0.05
990	-2.02	0.11	0.05
1020	-2.03	0.10	0.05
1050	-2.03	0.10	0.05
1080	-2.04	0.09	0.04
1110	-2.04	0.09	0.04
1140	-2.04	0.09	0.04
1170	-2.05	0.09	0.04
1200	-2.05	0.09	0.04
1230	-2.05	0.08	0.04
1260	-2.05	0.08	0.04
1290	-2.06	0.08	0.04
1320	-2.06	0.08	0.03
1350	-2.06	0.07	0.03

Graphical Plot



Stuart Wells Limited

Project No:	SWL24-380
Project Name:	Liverpool Bay
Prepared by:	PP
Checked by:	MTP
Date:	09/09/2025

Calculation Details	
Type of Test	Falling Head Test
Client	SAIPEM Ltd.
Borehole No./Test no.	PW01-2
Date of test	28/07/2025
Time of test	11:00:30
Depth of borehole (mbgl)	17.0
Depth of casing (mbgl)	1.0
Standpipe Stickup (m)	0.0
Installation Diameter (m)	0.155
Initial groundwater depth (mbTOC))	-2.10
Response Zone L (m)	16.0
Borehole drilling diameter D (m)	0.16
Radius of Test Section (m)	0.078
L/D	98.8
Intake factor (F)	21.5

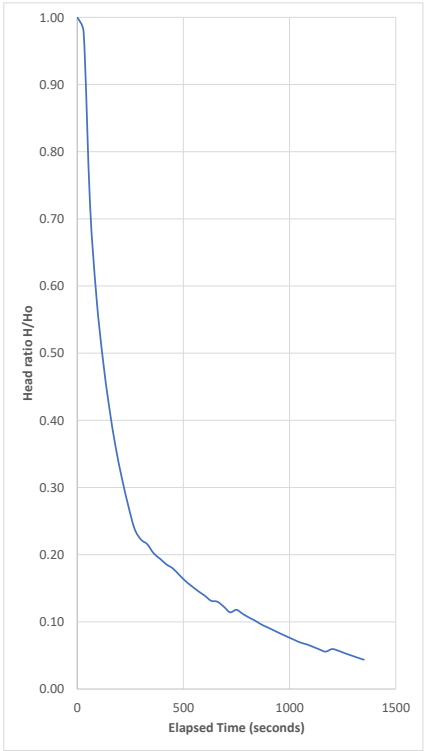
Variable Head Testing Calculations	
BS 5930 (1999) Section 25.4.6.1 CALCULATION B	
Cross Sectional Area of Test Section A (m2)	0.019
Intake Factor (F)	21.53
Basic Time Factor T (seconds)	174.00
K (m/s)	5.04E-06
BS 5930 (1999) Section 25.4.6.1 CALCULATION B.1	
Cross Sectional Area of Test Section A (m2)	0.019
Intake Factor (F)	21.53
Selected t1 (seconds)	1.00
Selected t2 (seconds)	150.00
H1 (m)	2.12
H2 (m)	0.89
K (m/s)	5.09E-06
TEST DATA	
Start Water Level (mbTOC)	0.03
End Water Level (mbTOC)	-2.00
37 % change in head (m)	0.81
Change in head (m)	2.12
37 % change in head (seconds)	174.00

$$k = \frac{A}{FT}$$

$$k = \frac{A}{F(t_2 - t_1)} \log_e \frac{H_1}{H_2} \text{ (general approach)}$$

Elapsed Time (seconds)	Groundwater Level (mBGL)	Change (m)	Head ratio H/Ho
0	0.03	2.12	1.00
30	-0.02	2.08	0.98
60	-0.56	1.54	0.72
90	-0.85	1.24	0.59
120	-1.05	1.05	0.49
150	-1.20	0.89	0.42
180	-1.33	0.77	0.36
210	-1.43	0.67	0.31
240	-1.52	0.58	0.27
270	-1.59	0.51	0.24
300	-1.62	0.47	0.22
330	-1.64	0.46	0.22
360	-1.67	0.43	0.20
390	-1.69	0.41	0.19
420	-1.70	0.39	0.19
450	-1.72	0.38	0.18
480	-1.74	0.36	0.17
510	-1.76	0.34	0.16
540	-1.77	0.32	0.15
570	-1.79	0.31	0.15
600	-1.80	0.30	0.14
630	-1.82	0.28	0.13
660	-1.82	0.28	0.13
690	-1.84	0.26	0.12
720	-1.86	0.24	0.11
750	-1.85	0.25	0.12
780	-1.86	0.24	0.11
810	-1.87	0.23	0.11
840	-1.88	0.22	0.10
870	-1.89	0.20	0.10
900	-1.90	0.19	0.09
930	-1.91	0.18	0.09
960	-1.92	0.17	0.08
990	-1.93	0.17	0.08
1020	-1.94	0.16	0.07
1050	-1.95	0.15	0.07
1080	-1.96	0.14	0.07
1110	-1.96	0.13	0.06
1140	-1.97	0.13	0.06
1170	-1.98	0.12	0.06
1200	-1.97	0.13	0.06
1230	-1.98	0.12	0.06
1260	-1.98	0.11	0.05
1290	-1.99	0.11	0.05
1320	-2.00	0.10	0.05
1350	-2.00	0.09	0.04

Graphical Plot



Stuart Wells Limited		
	Project No:	SWL24-380
	Project Name:	Liverpool Bay
	Prepared by:	PP
	Checked by:	MTP
	Date:	09/09/2025

Calculation Details	
Type of Test	Falling Head Test
Client	SAIPEM Ltd.
Borehole No./Test no.	PWMW01-1
Date of test	29/07/2025
Time of test	13:02:00
Depth of borehole (mbgl)	4.5
Depth of casing (mbgl)	0.5
Standpipe Stickup (m)	0.0
Installation Diameter (m)	0.052
Initial groundwater depth (mBGL)	0.52
Response Zone L (m)	4.0
Borehole drilling diameter D (m)	0.15
Radius of Test Section (m)	0.026
L/D	26.7
Intake factor (F)	6.3

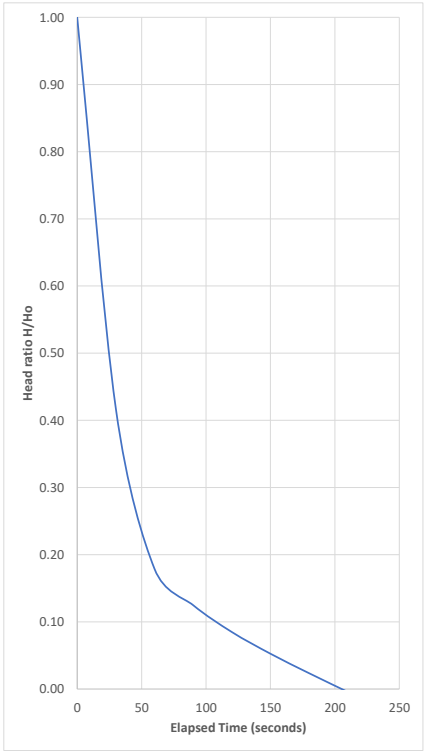
Variable Head Testing Calculations	
BS 5930 (1999) Section 25.4.6.1 CALCULATION B	
Cross Sectional Area of Test Section A (m2)	0.002
Intake Factor (F)	6.32
Basic Time Factor T (seconds)	34.00
K (m/s)	9.88E-06
BS 5930 (1999) Section 25.4.6.1 CALCULATION B.1	
Cross Sectional Area of Test Section A (m2)	0.002
Intake Factor (F)	6.32
Selected t1 (seconds)	1.00
Selected t2 (seconds)	120.00
H1 (m)	1.00
H2 (m)	0.08
K (m/s)	6.96E-06
TEST DATA	
Start Water Level (mBGL)	1.52
End Water Level (mBGL)	0.52
37 % change in head (m)	0.37
Change in head (m)	1.00
37 % change in head (seconds)	34.00

$$k = \frac{A}{FT}$$

$$k = \frac{A}{F(t_2 - t_1)} \log_e \frac{H_1}{H_2} \text{ (general approach)}$$

Elapsed Time (seconds)	Groundwater Level (mBGL)	Change (m)	Head ratio H/Ho
0	1.52	1.00	1.00
30	0.94	0.42	0.42
60	0.70	0.18	0.18
90	0.64	0.12	0.12
120	0.60	0.08	0.08
150	0.57	0.05	0.05
180	0.54	0.02	0.02
210	0.52	0.00	0.00

Graphical Plot



Stuart Wells Limited

APPENDIX C:

LABORATORY TEST RESULTS

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Analytical Report Number : 25-037772

Project / Site name:	Point of Ayr	**Samples received on:**	17/07/2025
Your job number:	SW-24-380-GI	**Samples instructed on/ Analysis started on:**	17/07/2025
Your order number:	701707	**Analysis completed by:**	24/07/2025
Report Issue Number:	1	**Report issued on:**	24/07/2025
Samples Analysed:	3 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 25-037772
Project / Site name: Point of Ayr

Your Order No: 701707

Lab Sample Number				616630	616631
Sample Reference				MW05D	MW05S
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				2.00	2.20
Date Sampled				16/07/2025	16/07/2025
Time Taken				1330	1344
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
General Inorganics					
pH (L099)	pH Units	N/A	ISO 17025	8.2	8
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	4900	430
Sulphate as SO_4	mg/l	0.045	ISO 17025	221	61.4
Chloride	mg/l	0.15	ISO 17025	1300 $^{\$\$}$	40
Orthophosphate as PO_4	µg/l	62	ISO 17025	8400	690
Fluoride	µg/l	50	ISO 17025	2200	300
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	1500	< 15
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	10.1	2.7
Nitrate as N	mg/l	0.01	ISO 17025	0.01	1.66
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.05	7.35
Nitrite as NO_2	µg/l	5	ISO 17025	14	44
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	760	92
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	39	2.2
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	2.3	< 1.0
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	< 0.020	1.67
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	300	190
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	2900	250
Hardness - Total	mgCaCO3/l	1	ISO 17025	439	138
Dissolved Oxygen	mg/l	1	NONE	2.8	8.8
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	0.02
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01 $^{\#\#}$	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16

Analytical Report Number: 25-037772
Project / Site name: Point of Ayr

Your Order No: 701707

Lab Sample Number				616630	616631
Sample Reference				MW05D	MW05S
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				2.00	2.20
Date Sampled				16/07/2025	16/07/2025
Time Taken				1330	1344
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Heavy Metals / Metalloids					
Aluminium (dissolved)	µg/l	1	NONE	210	13
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.6	0.6
Arsenic (dissolved)	µg/l	0.15	ISO 17025	16.3	2.97
Barium (dissolved)	µg/l	0.06	ISO 17025	33	14
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1	1.4
Copper (dissolved)	µg/l	0.5	ISO 17025	4.2	1.1
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3
Manganese (dissolved)	µg/l	0.05	ISO 17025	200	12
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	6.9	3.3
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.5	1
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	1.1
Zinc (dissolved)	µg/l	0.5	ISO 17025	14	2.9
Boron (dissolved)	µg/l	10	ISO 17025	1300	48
Calcium (dissolved)	mg/l	0.012	ISO 17025	46	42
Iron (dissolved)	mg/l	0.004	ISO 17025	0.055	0.04
Magnesium (dissolved)	mg/l	0.005	ISO 17025	79	7.8
Potassium (dissolved)	mg/l	0.025	ISO 17025	46	4.3
Sodium (dissolved)	mg/l	0.01	ISO 17025	1000	36
Petroleum Hydrocarbons					
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
VOCs					
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	23.3
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0

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Analytical Report Number: 25-037772
Project / Site name: Point of Ayr

Your Order No: 701707

Lab Sample Number				616630	616631
Sample Reference				MW05D	MW05S
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				2.00	2.20
Date Sampled				16/07/2025	16/07/2025
Time Taken				1330	1344
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	12.5
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	5.7
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0

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Analytical Report Number: 25-037772
Project / Site name: Point of Ayr

Your Order No: 701707

Lab Sample Number				616630	616631
Sample Reference				MW05D	MW05S
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				2.00	2.20
Date Sampled				16/07/2025	16/07/2025
Time Taken				1330	1344
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		
PFAS					
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acic	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/l	0.05	NONE	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	0.22
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	0.21
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-037772
Project / Site name: Point of Ayr

Your Order No: 701707

Lab Sample Number	616632
Sample Reference	Stilling Well 01
Sample Number	None Supplied
Water Matrix	Surface water
Depth (m)	0.00
Date Sampled	16/07/2025
Time Taken	1420

Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	7.6
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	3600
Sulphate as SO_4	mg/l	0.045	ISO 17025	325
Chloride	mg/l	0.15	ISO 17025	1200 $^{\$\$}$
Orthophosphate as PO_4	µg/l	62	ISO 17025	6300
Fluoride	µg/l	50	ISO 17025	530
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	6100
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	15.9
Nitrate as N	mg/l	0.01	ISO 17025	< 0.01
Nitrate as NO_3	mg/l	0.05	ISO 17025	< 0.05
Nitrite as NO_2	µg/l	5	ISO 17025	13
Alkalinity as $CaCO_3$	mgCaCO 3/l	3	ISO 17025	340
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	140
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	360
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	< 0.020
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	27000
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	2100
Hardness - Total	mgCaCO 3/l	1	ISO 17025	496
Dissolved Oxygen	mg/l	1	NONE	< 1.0
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01 $^{\#\#}$
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16

Analytical Report Number: 25-037772
Project / Site name: Point of Ayr

Your Order No: 701707

Lab Sample Number	616632
Sample Reference	Stilling Well 01
Sample Number	None Supplied
Water Matrix	Surface water
Depth (m)	0.00
Date Sampled	16/07/2025
Time Taken	1420

Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Heavy Metals / Metalloids				
Aluminium (dissolved)	µg/l	1	ISO 17025	33
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.5
Arsenic (dissolved)	µg/l	0.15	ISO 17025	17
Barium (dissolved)	µg/l	0.06	ISO 17025	98
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.8
Copper (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3
Manganese (dissolved)	µg/l	0.05	ISO 17025	780
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	0.94
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.8
Selenium (dissolved)	µg/l	0.6	ISO 17025	4.3
Zinc (dissolved)	µg/l	0.5	ISO 17025	4
Boron (dissolved)	µg/l	10	ISO 17025	550
Calcium (dissolved)	mg/l	0.012	ISO 17025	76
Iron (dissolved)	mg/l	0.004	ISO 17025	0.041
Magnesium (dissolved)	mg/l	0.005	ISO 17025	75
Potassium (dissolved)	mg/l	0.025	ISO 17025	30
Sodium (dissolved)	mg/l	0.01	ISO 17025	670
Petroleum Hydrocarbons				
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	12000
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	12000
VOCs				
Chloromethane	µg/l	3	ISO 17025	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0

Analytical Report Number: 25-037772
Project / Site name: Point of Ayr

Your Order No: 701707

Lab Sample Number				616632
Sample Reference				Stilling Well 01
Sample Number				None Supplied
Water Matrix				Surface water
Depth (m)				0.00
Date Sampled				16/07/2025
Time Taken				1420
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
Dibromomethane	µg/l	3	ISO 17025	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 25-037772
Project / Site name: Point of Ayr

Your Order No: 701707

Lab Sample Number	616632
Sample Reference	Stilling Well 01
Sample Number	None Supplied
Water Matrix	Surface water
Depth (m)	0.00
Date Sampled	16/07/2025
Time Taken	1420

Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
PFAS				
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/l	0.05	NONE	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	0.64
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acic	µg/l	0.05	NONE	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/l	0.05	NONE	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid	µg/l	0.05	NONE	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/l	0.05	NONE	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/l	0.05	NONE	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	0.38
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	1.5
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 25-037772
Project / Site name: Point of Ayr

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

Analytical Report Number : 25-037772
Project / Site name: Point of Ayr

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

Analytical Report Number : 25-037772
Project / Site name: Point of Ayr

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.
##- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 25-038435

Project / Site name:	Point or Ayt gas Terminal, Lives 800 1 Bry	**Samples received on:**	22/07/2025
Your job number:		**Samples instructed on/ Analysis started on:**	22/07/2025
Your order number:	701707	**Analysis completed by:**	29/07/2025
Report Issue Number:	1	**Report issued on:**	29/07/2025
Samples Analysed:	6 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Your Order No: 701707

Lab Sample Number				620248	620249	620250	620251	620252
Sample Reference				MW04D	MW04S	MW07D	MW07S	MW02S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/07/2025	21/07/2025	21/07/2025	21/07/2025	21/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	7.7	7.7	7.5	7.7	8.1
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	6900	930	9600	5300	470
Sulphate as SO_4	mg/l	0.045	ISO 17025	321	55.6	424	196	68.6
Chloride	mg/l	0.15	ISO 17025	2100 $^{\$\$}$	42	2100 $^{\$\$}$	1500 $^{\$\$}$	57
Orthophosphate as PO_4	µg/l	62	ISO 17025	260	200	230	190	670
Fluoride	µg/l	50	ISO 17025	730	780	880	760	400
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	2000	260	1500	2000	37
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	9.08	12.4	6.53	13.4	8.79
Nitrate as N	mg/l	0.01	ISO 17025	0.21	0.14	0.24	0.02	1.95
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.94	0.63	1.04	0.1	8.65
Nitrite as NO_2	µg/l	5	ISO 17025	8.7	130	14	11	27
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	670	510	610	620	110
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	68	59	51	19	21
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	5.4	5	2.6	9.5	1.5
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.214	0.179	0.239	0.027	1.96
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	1600	2500	900	2300	760
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	3900	290	630	3300	290
Hardness - Total	mgCaCO3/l	1	ISO 17025	1040	482	1320	927	134
Dissolved Oxygen	mg/l	1	NONE	3.8	4.7	5	1.5	8
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Your Order No: 701707

Lab Sample Number				620248	620249	620250	620251	620252
Sample Reference				MW04D	MW04S	MW07D	MW07S	MW02S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/07/2025	21/07/2025	21/07/2025	21/07/2025	21/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Aluminium (dissolved)	µg/l	1	NONE	8.7	13	9.5	21	410
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.7	3.3	0.6	1	1
Arsenic (dissolved)	µg/l	0.15	ISO 17025	6.73	9.49	5.66	9.76	2.37
Barium (dissolved)	µg/l	0.06	ISO 17025	130	59	120	230	23
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.2	< 0.2	< 0.2	3
Copper (dissolved)	µg/l	0.5	ISO 17025	1.5	2.4	7	0.6	2.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.2	< 0.2	0.3	3
Manganese (dissolved)	µg/l	0.05	ISO 17025	820	150	770	9.1	11
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	7.5	8.9	4.4	6.4	6
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.6	3.9	2.5	3.9	1.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.9	1.5	< 0.6	1.5	1.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	8.6	2.8	6.4	1.6	3
Boron (dissolved)	µg/l	10	ISO 17025	1100	460	1300	870	60
Calcium (dissolved)	mg/l	0.012	ISO 17025	130	120	140	140	42
Iron (dissolved)	mg/l	0.004	ISO 17025	< 0.004	0.004	< 0.004	0.25	0.37
Magnesium (dissolved)	mg/l	0.005	ISO 17025	170	43	230	140	7.3
Potassium (dissolved)	mg/l	0.025	ISO 17025	78	21	96	67	5.8
Sodium (dissolved)	mg/l	0.01	ISO 17025	1200	44	1400 $$	940	63
Petroleum Hydrocarbons								
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	3.6	10.5
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Your Order No: 701707

Lab Sample Number				620248	620249	620250	620251	620252
Sample Reference				MW04D	MW04S	MW07D	MW07S	MW02S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/07/2025	21/07/2025	21/07/2025	21/07/2025	21/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	6
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	1.1	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	3
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Your Order No: 701707

Lab Sample Number				620248	620249	620250	620251	620252
Sample Reference				MW04D	MW04S	MW07D	MW07S	MW02S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/07/2025	21/07/2025	21/07/2025	21/07/2025	21/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
PFAS								
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acic	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	0.06	0.18	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	0.29	1.4	< 0.05	0.06	0.3
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	0.12	0.09	< 0.05	< 0.05	1.6
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	0.24	< 0.05	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Your Order No: 701707

Lab Sample Number	620253
Sample Reference	Stilling Well 2
Sample Number	None Supplied
Water Matrix	Ground water
Depth (m)	None Supplied
Date Sampled	21/07/2025
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	8
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	650
Sulphate as SO_4	mg/l	0.045	ISO 17025	34.1
Chloride	mg/l	0.15	ISO 17025	38
Orthophosphate as PO_4	µg/l	62	ISO 17025	130
Fluoride	µg/l	50	ISO 17025	120
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	21
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	2.94
Nitrate as N	mg/l	0.01	ISO 17025	3.43
Nitrate as NO_3	mg/l	0.05	ISO 17025	15.2
Nitrite as NO_2	µg/l	5	ISO 17025	71
Alkalinity as $CaCO_3$	mgCaCO 3/l	3	ISO 17025	300
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	27
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	< 1.0
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	3.46
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	10
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	390
Hardness - Total	mgCaCO 3/l	1	ISO 17025	333
Dissolved Oxygen	mg/l	1	NONE	8.7
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16

Analytical Report Number: 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Your Order No: 701707

Lab Sample Number	620253
Sample Reference	Stilling Well 2
Sample Number	None Supplied
Water Matrix	Ground water
Depth (m)	None Supplied
Date Sampled	21/07/2025
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Heavy Metals / Metalloids				
Aluminium (dissolved)	µg/l	1	NONE	1.1
Antimony (dissolved)	µg/l	0.4	ISO 17025	< 0.4
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.49
Barium (dissolved)	µg/l	0.06	ISO 17025	28
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	1.8
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	12
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	1.1
Nickel (dissolved)	µg/l	0.5	ISO 17025	1
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.8
Zinc (dissolved)	µg/l	0.5	ISO 17025	38
Boron (dissolved)	µg/l	10	ISO 17025	27
Calcium (dissolved)	mg/l	0.012	ISO 17025	110
Iron (dissolved)	mg/l	0.004	ISO 17025	0.006
Magnesium (dissolved)	mg/l	0.005	ISO 17025	12
Potassium (dissolved)	mg/l	0.025	ISO 17025	2
Sodium (dissolved)	mg/l	0.01	ISO 17025	23
Petroleum Hydrocarbons				
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10
VOCs				
Chloromethane	µg/l	3	ISO 17025	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Your Order No: 701707

Lab Sample Number				620253
Sample Reference				Stilling Well 2
Sample Number				None Supplied
Water Matrix				Ground water
Depth (m)				None Supplied
Date Sampled				21/07/2025
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
Dibromomethane	µg/l	3	ISO 17025	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0

Analytical Report Number: 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Your Order No: 701707

Lab Sample Number	620253
Sample Reference	Stilling Well 2
Sample Number	None Supplied
Water Matrix	Ground water
Depth (m)	None Supplied
Date Sampled	21/07/2025
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
PFAS				
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/l	0.05	NONE	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acic	µg/l	0.05	NONE	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/l	0.05	NONE	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid	µg/l	0.05	NONE	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/l	0.05	NONE	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/l	0.05	NONE	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

Analytical Report Number : 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

Analytical Report Number : 25-038435
Project / Site name: Point or Ayt gas Terminal, Lives 800 1 Bry

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

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Analytical Report Number : 25-038657

Project / Site name:	Liverpool Bay Point of Ayr	**Samples received on:**	23/07/2025
Your job number:		**Samples instructed on/ Analysis started on:**	23/07/2025
Your order number:	701707	**Analysis completed by:**	30/07/2025
Report Issue Number:	1	**Report issued on:**	30/07/2025
Samples Analysed:	4 water samples		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-038657
Project / Site name: Liverpool Bay Point of Ayr

Your Order No: 701707

Lab Sample Number				621533	621534	621535	621536
Sample Reference				MW01d	MW01S	MW06d	MW06S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				18.00	4.50	18.00	4.50
Date Sampled				22/07/2025	22/07/2025	22/07/2025	22/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	NONE	7.9	7.9	7.6	7.6
Electrical Conductivity at 20°C	µS/cm	10	NONE	7800	7600	12000	9900
Sulphate as SO_4	mg/l	0.045	NONE	277	263	534	390
Chloride	mg/l	0.15	NONE	1700	120	3300	2900
Orthophosphate as PO_4	µg/l	62	NONE	4600	350	340	360
Fluoride	µg/l	50	NONE	1100	1200	920	1000
Ammoniacal Nitrogen as N	µg/l	15	NONE	2500	640	3300	2700
Total Organic Carbon (TOC)	mg/l	0.1	NONE	7.86	6.94	4.01	4.63
Nitrate as N	mg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate as NO_3	mg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrite as NO_2	µg/l	5	NONE	< 5.0	5.7	15	16
Alkalinity as $CaCO_3$	mgCaCO3/l	3	NONE	810	550	490	470
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	280	8.3	39	21
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	7	1.7	2.7	2.4
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
Total Suspended Solids (L004B)	mg/l	2	NONE	690	1300	960	180
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	4300	850	7300	6800
Hardness - Total	mgCaCO3/l	1	NONE	710	664	1590	1120
Dissolved Oxygen	mg/l	1	NONE	5	5.8	6	6
Speciated PAHs							
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH							
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-038657
Project / Site name: Liverpool Bay Point of Ayr

Your Order No: 701707

Lab Sample Number				621533	621534	621535	621536
Sample Reference				MW01d	MW01S	MW06d	MW06S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				18.00	4.50	18.00	4.50
Date Sampled				22/07/2025	22/07/2025	22/07/2025	22/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Heavy Metals / Metalloids							
Aluminium (dissolved)	µg/l	1	NONE	9.4	5.7	3.1	5.1
Antimony (dissolved)	µg/l	0.4	NONE	1.2	0.9	0.5	0.6
Arsenic (dissolved)	µg/l	0.15	NONE	15.7	12.4	4.03	4.14
Barium (dissolved)	µg/l	0.06	NONE	86	86	120	110
Cadmium (dissolved)	µg/l	0.02	NONE	< 0.02	< 0.02	0.05	0.04
Chromium (dissolved)	µg/l	0.2	NONE	0.7	0.7	0.3	< 0.2
Copper (dissolved)	µg/l	0.5	NONE	1.4	1.9	1.5	4.7
Lead (dissolved)	µg/l	0.2	NONE	0.2	0.2	0.7	< 0.2
Manganese (dissolved)	µg/l	0.05	NONE	330	310	720	610
Molybdenum (dissolved)	µg/l	0.05	NONE	11	10	7.1	8.4
Nickel (dissolved)	µg/l	0.5	NONE	4.9	4.1	2.3	2.2
Selenium (dissolved)	µg/l	0.6	NONE	0.9	0.6	13	0.6
Zinc (dissolved)	µg/l	0.5	NONE	3.1	2.7	16	19
Boron (dissolved)	µg/l	10	NONE	1500	1500	1200	1100
Calcium (dissolved)	mg/l	0.012	NONE	74	67	150	130
Iron (dissolved)	mg/l	0.004	NONE	0.026	0.35	0.024	0.014
Magnesium (dissolved)	mg/l	0.005	NONE	130	120	290	200
Potassium (dissolved)	mg/l	0.025	NONE	76	71	110	84
Sodium (dissolved)	mg/l	0.01	NONE	1400	1400	1900	1400
Petroleum Hydrocarbons							
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-038657
Project / Site name: Liverpool Bay Point of Ayr

Your Order No: 701707

Lab Sample Number				621533	621534	621535	621536
Sample Reference				MW01d	MW01S	MW06d	MW06S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				18.00	4.50	18.00	4.50
Date Sampled				22/07/2025	22/07/2025	22/07/2025	22/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-038657
Project / Site name: Liverpool Bay Point of Ayr

Your Order No: 701707

Lab Sample Number				621533	621534	621535	621536
Sample Reference				MW01d	MW01S	MW06d	MW06S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				18.00	4.50	18.00	4.50
Date Sampled				22/07/2025	22/07/2025	22/07/2025	22/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
PFAS							
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-038657
Project / Site name: Liverpool Bay Point of Ayr

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	NONE
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	NONE
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	NONE

Analytical Report Number : 25-038657
Project / Site name: Liverpool Bay Point of Ayr

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	NONE
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE

Analytical Report Number : 25-038657
Project / Site name: Liverpool Bay Point of Ayr

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

UKAS TESTING
4041

Environmental Science

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Analytical Report Number : 25-038944

Project / Site name:	Liverpool Bay Gas Therminal	**Samples received on:**	24/07/2025
Your job number:		**Samples instructed on/ Analysis started on:**	24/07/2025
Your order number:		**Analysis completed by:**	01/08/2025
Report Issue Number:	1	**Report issued on:**	01/08/2025
Samples Analysed:	7 water samples		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-038944
Project / Site name: Liverpool Bay Gas Therminal

Lab Sample Number				623018	623019	623020	623021	623022
Sample Reference				MW03S	MW03D	MW08S	MW08D	PW/MW/01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				4.50	18.00	4.50	18.00	4.50
Date Sampled				23/07/2025	23/07/2025	23/07/2025	23/07/2025	23/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	8.1	8	7.7	7.6	7.7
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	1100	4100	2600	13000	2000
Sulphate as SO_4	mg/l	0.045	ISO 17025	51.1	101	106	718	60.7
Chloride	mg/l	0.15	ISO 17025	95	1100 $^{\$\$}$	340	3100 $^{\$\$}$	280
Orthophosphate as PO_4	µg/l	62	ISO 17025	1100	3500	3600	850	440
Fluoride	µg/l	50	ISO 17025	1200	1900	1300	1200	1600
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	1300	1100	3300	1600	50
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	13.1	13.5	11.8	8.18	26.7
Nitrate as N	mg/l	0.01	ISO 17025	0.39	0.07	< 0.01	0.05	0.01
Nitrate as NO_3	mg/l	0.05	ISO 17025	1.72	0.31	< 0.05	0.21	0.05
Nitrite as NO_2	µg/l	5	ISO 17025	140	17	7.3	14	5.1
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	510	810	1100	840	760
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	2.2	31	29	36	71
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	4.6	5.6	3.7	4.4	270
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.431	0.076	< 0.020	0.051	< 0.020
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	2200	1800	1600 ^{*y}	940 ^{*y}	4200
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	700	1900	1700	8100	1400
Hardness - Total	mgCaCO3/l	1	ISO 17025	193	290	632	1790	134
Dissolved Oxygen	mg/l	1	NONE	5.5	4.1	5.2	7.9	< 1.0
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

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Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				4.50	18.00	4.50	18.00	4.50
Date Sampled				23/07/2025	23/07/2025	23/07/2025	23/07/2025	23/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Aluminium (dissolved)	µg/l	1	NONE	10	22	25	5.4	830
Antimony (dissolved)	µg/l	0.4	ISO 17025	1	1	< 0.4	0.7	1.6
Arsenic (dissolved)	µg/l	0.15	ISO 17025	12.2	6.14	11.3	13.8	21.5
Barium (dissolved)	µg/l	0.06	ISO 17025	47	53	61	150	64
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.6	1	0.5	0.4	1.1
Copper (dissolved)	µg/l	0.5	ISO 17025	2.1	2	1.9	3.3	2.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	1.5
Manganese (dissolved)	µg/l	0.05	ISO 17025	29	220	580	1200	520
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	14	11	2.5	5.2	29
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.1	3.1	1.4	4.7	5.8
Selenium (dissolved)	µg/l	0.6	ISO 17025	2.1	4.6	3.6	15	2.4
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.1	6.9	4	9.6	5
Boron (dissolved)	µg/l	10	ISO 17025	970	1300	1400	1500	1400
Calcium (dissolved)	mg/l	0.012	ISO 17025	38	46	90	180	23
Iron (dissolved)	mg/l	0.004	ISO 17025	0.006	0.029	< 0.004	0.013	0.044
Magnesium (dissolved)	mg/l	0.005	ISO 17025	24	42	99	320	19
Potassium (dissolved)	mg/l	0.025	ISO 17025	39	37	52	99	34
Sodium (dissolved)	mg/l	0.01	ISO 17025	200	650	400	1800 $^{\$\$}$	440
Petroleum Hydrocarbons								
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	4.4	< 3.0	< 3.0	58.9
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Depth (m)				4.50	18.00	4.50	18.00	4.50
Date Sampled				23/07/2025	23/07/2025	23/07/2025	23/07/2025	23/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	29.8
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	12
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Date Sampled				23/07/2025	23/07/2025	23/07/2025	23/07/2025	23/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
PFAS								
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	0.12	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	0.7	0.17	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	0.69	0.13	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	2.7	0.37	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	3.5	1.2	< 0.05	0.34	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	0.89	0.18	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	0.92	0.68	< 0.05	0.07	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	1.1	0.2	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	0.88	0.21	< 0.05	0.07	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-038944
Project / Site name: Liverpool Bay Gas Therminal

Lab Sample Number				623023	623024
Sample Reference				PW01	Stilingwell
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				18.00	3.00
Date Sampled				23/07/2025	23/07/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
General Inorganics					
pH (L099)	pH Units	N/A	ISO 17025	8.2	8
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	390	770
Sulphate as SO_4	mg/l	0.045	ISO 17025	55.4	45
Chloride	mg/l	0.15	ISO 17025	48	72
Orthophosphate as PO_4	µg/l	62	ISO 17025	2000	280
Fluoride	µg/l	50	ISO 17025	150	130
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	26	83
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	4.33	2.63
Nitrate as N	mg/l	0.01	ISO 17025	1.48	3.53
Nitrate as NO_3	mg/l	0.05	ISO 17025	6.56	15.6
Nitrite as NO_2	µg/l	5	ISO 17025	85	75
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	29	310
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	6.4	2.7
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	3.9	2
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	1.51	3.55
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	880	36
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	190	410
Hardness - Total	mgCaCO3/l	1	ISO 17025	84.6	353
Dissolved Oxygen	mg/l	1	NONE	7.7	9.7
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16

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Project / Site name: Liverpool Bay Gas Therminal

Lab Sample Number				623023	623024
Sample Reference				PW01	Stilingwell
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				18.00	3.00
Date Sampled				23/07/2025	23/07/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Heavy Metals / Metalloids					
Aluminium (dissolved)	µg/l	1	NONE	39	< 1.0
Antimony (dissolved)	µg/l	0.4	ISO 17025	< 0.4	< 0.4
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.91	0.83
Barium (dissolved)	µg/l	0.06	ISO 17025	17	32
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.06	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	1	1.4
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	13	39
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	2.7	1
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.8	1.2
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	2.5
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.8	44
Boron (dissolved)	µg/l	10	ISO 17025	55	53
Calcium (dissolved)	mg/l	0.012	ISO 17025	25	120
Iron (dissolved)	mg/l	0.004	ISO 17025	< 0.004	0.11
Magnesium (dissolved)	mg/l	0.005	ISO 17025	5.7	16
Potassium (dissolved)	mg/l	0.025	ISO 17025	4.8	3.5
Sodium (dissolved)	mg/l	0.01	ISO 17025	54	56
Petroleum Hydrocarbons					
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
VOCs					
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	61.9	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0

Analytical Report Number: 25-038944
Project / Site name: Liverpool Bay Gas Therminal

Lab Sample Number				623023	623024
Sample Reference				PW01	Stilingwell
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				18.00	3.00
Date Sampled				23/07/2025	23/07/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	30.6	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	12.4	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0

Analytical Report Number: 25-038944
Project / Site name: Liverpool Bay Gas Therminal

Lab Sample Number				623023	623024
Sample Reference				PW01	Stilingwell
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				18.00	3.00
Date Sampled				23/07/2025	23/07/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
PFAS					
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-038944
Project / Site name: Liverpool Bay Gas Therminal

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

Analytical Report Number : 25-038944
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Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

Analytical Report Number : 25-038944
Project / Site name: Liverpool Bay Gas Therminal

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

*y- Volume used for analysis is less than the lowest volume used for validation so the results should be interpreted with caution.

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Analytical Report Number : 25-039905

Project / Site name:	Liverpool Bay Gas Therminal	**Samples received on:**	29/07/2025
Your job number:		**Samples instructed on/ Analysis started on:**	29/07/2025
Your order number:	701707	**Analysis completed by:**	06/08/2025
Report Issue Number:	1	**Report issued on:**	06/08/2025
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-039905
Project / Site name: Liverpool Bay Gas Therminal

Your Order No: 701707

Lab Sample Number				628266	628267	628268	628269	628270
Sample Reference				PW01	PW/MW01	Strlling Well 1	MW01S	MW01D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/07/2025	28/07/2025	28/07/2025	28/07/2025	28/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	NONE	8	7.6	8	7.6	7.8
Electrical Conductivity at 20°C	µS/cm	10	NONE	7600	2200	7500	1500	6600
Sulphate as SO_4	mg/l	0.045	NONE	287	73.7	309	46.8	282
Chloride	mg/l	0.15	NONE	2000 $^{\$\$}$	280	2300 $^{\$\$}$	150	2300 $^{\$\$}$
Orthophosphate as PO_4	µg/l	62	NONE	1400	110	6800	480	4900
Fluoride	µg/l	50	NONE	1200	1300	I/S $^{*I/S}$	950	1700
Ammoniacal Nitrogen as N	µg/l	15	NONE	2200	24	2400	780	2400
Total Organic Carbon (TOC)	mg/l	0.1	NONE	19.7	19	16.2	16.1	6.18
Nitrate as N	mg/l	0.01	NONE	0.28	0.08	0.06	0.08	0.09
Nitrate as NO_3	mg/l	0.05	NONE	1.24	0.36	0.26	0.36	0.41
Nitrite as NO_2	µg/l	5	NONE	270	7.3	5.7	26	< 5.0
Alkalinity as $CaCO_3$	mgCaCO 3/l	3	NONE	510	900	500	720	850
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	35	740	120	55	51
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	2.4	340	110	3.1	4.5
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.363	0.084	0.06	0.089	0.094
Total Suspended Solids (L004B)	mg/l	2	NONE	2500	30000	I/S $^{*I/S}$	2000	1000
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	4600	1400	4400	970	5800
Hardness - Total	mgCaCO 3/l	1	NONE	668	245	854	349	734
Dissolved Oxygen	mg/l	1	NONE	4.9	< 1.0	< 1.0	5.4	4.6
Speciated PAHs								
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	0.21	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	0.24	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	0.45	< 0.16	< 0.16

Analytical Report Number: 25-039905
Project / Site name: Liverpool Bay Gas Therminal

Your Order No: 701707

Lab Sample Number				628266	628267	628268	628269	628270
Sample Reference				PW01	PW/MW01	Strlling Well 1	MW01S	MW01D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/07/2025	28/07/2025	28/07/2025	28/07/2025	28/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Aluminium (dissolved)	µg/l	1	NONE	450	890	140	980	4.8
Antimony (dissolved)	µg/l	0.4	NONE	0.7	1.5	< 0.4	1.1	< 0.4
Arsenic (dissolved)	µg/l	0.15	NONE	11.1	21.8	19.2	12.9	6.98
Barium (dissolved)	µg/l	0.06	NONE	74	97	120	80	51
Cadmium (dissolved)	µg/l	0.02	NONE	0.03	0.02	0.03	0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	NONE	0.8	1.3	0.8	1.9	0.3
Copper (dissolved)	µg/l	0.5	NONE	4.6	2.1	1.1	4.3	3.2
Lead (dissolved)	µg/l	0.2	NONE	3	4.8	0.5	0.7	< 0.2
Manganese (dissolved)	µg/l	0.05	NONE	290	1000	810	140	420
Molybdenum (dissolved)	µg/l	0.05	NONE	13	29	5.6	8.2	9.7
Nickel (dissolved)	µg/l	0.5	NONE	2.9	14	2.5	5.9	2.2
Selenium (dissolved)	µg/l	0.6	NONE	11	3.6	< 0.6	3.3	14
Zinc (dissolved)	µg/l	0.5	NONE	5.3	7.3	23	3.2	2.9
Boron (dissolved)	µg/l	10	NONE	1000	1500	1000	1400	1600
Calcium (dissolved)	mg/l	0.012	NONE	73	43	96	46	65
Iron (dissolved)	mg/l	0.004	NONE	0.019	0.034	0.14	0.37	0.21
Magnesium (dissolved)	mg/l	0.005	NONE	120	33	150	57	140
Potassium (dissolved)	mg/l	0.025	NONE	59	44	61	55	74
Sodium (dissolved)	mg/l	0.01	NONE	1200	530	1400	340	1600
Petroleum Hydrocarbons								
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	I/S *I/S	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	I/S	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	20000	< 10	< 10
VOCs								
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	6.8	< 3.0	I/S *I/S	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	I/S *I/S	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	I/S *I/S	< 3.0	< 3.0

Analytical Report Number: 25-039905
Project / Site name: Liverpool Bay Gas Therminal

Your Order No: 701707

Lab Sample Number				628266	628267	628268	628269	628270
Sample Reference				PW01	PW/MW01	Strlling Well 1	MW01S	MW01D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/07/2025	28/07/2025	28/07/2025	28/07/2025	28/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Toluene	µg/l	1	NONE	3	7.3	I/S *1/S	2.5	2.2
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	I/S *1/S	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	I/S *1/S	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	I/S *1/S	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	I/S *1/S	< 3.0	< 3.0

Analytical Report Number: 25-039905
Project / Site name: Liverpool Bay Gas Therminal

Your Order No: 701707

Lab Sample Number				628266	628267	628268	628269	628270
Sample Reference				PW01	PW/MW01	Strlling Well 1	MW01S	MW01D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/07/2025	28/07/2025	28/07/2025	28/07/2025	28/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
PFAS								
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	0.35	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	1.7	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	0.08	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-039905
Project / Site name: Liverpool Bay Gas Therminal

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	NONE
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	NONE
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	NONE

Analytical Report Number : 25-039905
Project / Site name: Liverpool Bay Gas Therminal

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	NONE
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE

Analytical Report Number : 25-039905
Project / Site name: Liverpool Bay Gas Therminal

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

*I/S- Insufficient sample for analysis.

Sample Deviation Report

Analytical Report Number : 25-039905
Project / Site name: Liverpool Bay Gas Therminal

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
Strlling Well 1	N/A	W	628268	b	BTEX and/or Volatile Organic Compounds in water	L073B	b
Strlling Well 1	N/A	W	628268	b	Total Petroleum Hydrocarbons in water by HS-GC/MS	L088-PL	b

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Analytical Report Number : 25-040027

Project / Site name:	Liverpool Bay Point of Agg	**Samples received on:**	30/07/2025
Your job number:		**Samples instructed on/ Analysis started on:**	30/07/2025
Your order number:	701707	**Analysis completed by:**	06/08/2025
Report Issue Number:	1	**Report issued on:**	06/08/2025
Samples Analysed:	8 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-040027
Project / Site name: Liverpool Bay Point of Agg

Your Order No: 701707

Lab Sample Number				628847	628848	628849	628850	628851
Sample Reference				MW02D	MW02S	MW03D	MW03S	Stilling Well 02
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/07/2025	29/07/2025	29/07/2025	29/07/2025	29/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	NONE	8.1	7.7	7.9	7.9	7.9
Electrical Conductivity at 20°C	µS/cm	10	NONE	4500	670	13000	1100	660
Sulphate as SO_4	mg/l	0.045	NONE	200	50.5	494	70.6	32.8
Chloride	mg/l	0.15	NONE	1300 $^{\$\$}$	71	3700 $^{\$\$}$	110	36
Orthophosphate as PO_4	µg/l	62	NONE	1700	180	1600	590	110
Fluoride	µg/l	50	NONE	1200	470	1300	750	110
Ammoniacal Nitrogen as N	µg/l	15	NONE	870	65	2900	440	26
Total Organic Carbon (TOC)	mg/l	0.1	NONE	8.43	4.32	8.42	10.2	2.09
Nitrate as N	mg/l	0.01	NONE	0.07	1.42	0.12	0.49	3.63
Nitrate as NO_3	mg/l	0.05	NONE	0.31	6.31	0.52	2.17	16.1
Nitrite as NO_2	µg/l	5	NONE	12	170	5.8	120	47
Alkalinity as $CaCO_3$	mgCaCO3/l	3	NONE	480	210	860	390	290
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	25	5.8	23	8.7	4.6
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	3.9	< 1.0	4.5	1.2	1.8
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.074	1.48	0.119	0.528	3.65
Total Suspended Solids (L004B)	mg/l	2	NONE	440	980	1800	4400	3
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	2800	450	7000	800	430
Hardness - Total	mgCaCO3/l	1	NONE	408	206	1320	269	355
Dissolved Oxygen	mg/l	1	NONE	3.7	8.2	6	6.4	7.5
Speciated PAHs								
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	0.03	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	0.03	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-040027
Project / Site name: Liverpool Bay Point of Agg

Your Order No: 701707

Lab Sample Number				628847	628848	628849	628850	628851
Sample Reference				MW02D	MW02S	MW03D	MW03S	Stilling Well 02
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/07/2025	29/07/2025	29/07/2025	29/07/2025	29/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Aluminium (dissolved)	µg/l	1	NONE	7.3	7.4	77	6.9	50
Antimony (dissolved)	µg/l	0.4	NONE	2	1.2	0.6	0.8	< 0.4
Arsenic (dissolved)	µg/l	0.15	NONE	6.53	1.48	5.89	4.69	0.48
Barium (dissolved)	µg/l	0.06	NONE	54	47	68	48	31
Cadmium (dissolved)	µg/l	0.02	NONE	< 0.02	< 0.02	< 0.02	< 0.02	0.09
Chromium (dissolved)	µg/l	0.2	NONE	0.3	1.2	0.8	< 0.2	0.3
Copper (dissolved)	µg/l	0.5	NONE	1	5.6	3.2	4.1	4.4
Lead (dissolved)	µg/l	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	0.6
Manganese (dissolved)	µg/l	0.05	NONE	290	2.4	750	30	17
Molybdenum (dissolved)	µg/l	0.05	NONE	16	7.6	7.9	9.3	1.2
Nickel (dissolved)	µg/l	0.5	NONE	2.3	4.1	4.1	3.5	2
Selenium (dissolved)	µg/l	0.6	NONE	7.4	2.6	0.6	2.4	2.5
Zinc (dissolved)	µg/l	0.5	NONE	21	11	11	2.5	56
Boron (dissolved)	µg/l	10	NONE	1000	170	1800	690	24
Calcium (dissolved)	mg/l	0.012	NONE	48	59	120	58	120
Iron (dissolved)	mg/l	0.004	NONE	0.015	0.037	0.2	< 0.004	0.009
Magnesium (dissolved)	mg/l	0.005	NONE	70	14	250	30	11
Potassium (dissolved)	mg/l	0.025	NONE	43	9.8	110	36	2.1
Sodium (dissolved)	mg/l	0.01	NONE	960	55	1500	140	20
Petroleum Hydrocarbons								
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	7.1	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-040027
Project / Site name: Liverpool Bay Point of Agg

Your Order No: 701707

Lab Sample Number				628847	628848	628849	628850	628851
Sample Reference				MW02D	MW02S	MW03D	MW03S	Stilling Well 02
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/07/2025	29/07/2025	29/07/2025	29/07/2025	29/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Your Order No: 701707

Lab Sample Number				628847	628848	628849	628850	628851
Sample Reference				MW02D	MW02S	MW03D	MW03S	Stilling Well 02
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/07/2025	29/07/2025	29/07/2025	29/07/2025	29/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
PFAS								
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acic	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	0.12	0.52	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	0.19	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	0.15	0.82	2.6	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	0.38	0.14	0.55	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	0.14	0.5	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-040027
Project / Site name: Liverpool Bay Point of Agg

Your Order No: 701707

Lab Sample Number				628852	628853	628854
Sample Reference				DUPE 1	MW04D	MW04S
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				29/07/2025	29/07/2025	29/07/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**			
General Inorganics						
pH (L099)	pH Units	N/A	NONE	8	7.6	7.4
Electrical Conductivity at 20°C	µS/cm	10	NONE	7100	1400	990
Sulphate as SO_4	mg/l	0.045	NONE	287	52.5	30.9
Chloride	mg/l	0.15	NONE	1900	110	28
Orthophosphate as PO_4	µg/l	62	NONE	2100	270	83
Fluoride	µg/l	50	NONE	1100	460	770
Ammoniacal Nitrogen as N	µg/l	15	NONE	2000	2100	400
Total Organic Carbon (TOC)	mg/l	0.1	NONE	11.5	7.55	8.95
Nitrate as N	mg/l	0.01	NONE	0.21	0.05	0.11
Nitrate as NO_3	mg/l	0.05	NONE	0.93	0.21	0.47
Nitrite as NO_2	µg/l	5	NONE	160	8.2	19
Alkalinity as $CaCO_3$	mgCaCO3/l	3	NONE	620	600	540
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	23	< 2.0	12
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	1.5	16	2.3
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.258	0.049	0.111
Total Suspended Solids (L004B)	mg/l	2	NONE	280	1900	2800
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	4100	950	690
Hardness - Total	mgCaCO3/l	1	NONE	648	519	491
Dissolved Oxygen	mg/l	1	NONE	5.6	1.5	2.7
Speciated PAHs						
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	0.07
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	0.03
Phenanthrene	µg/l	0.01	NONE	< 0.01	0.03	0.05
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	0.03	0.06
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	0.08
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	0.07
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	0.05
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Total PAH						
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	0.4

Analytical Report Number: 25-040027
Project / Site name: Liverpool Bay Point of Agg

Your Order No: 701707

Lab Sample Number				628852	628853	628854
Sample Reference				DUPE 1	MW04D	MW04S
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				29/07/2025	29/07/2025	29/07/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**			
Heavy Metals / Metalloids						
Aluminium (dissolved)	µg/l	1	NONE	8.4	220	55
Antimony (dissolved)	µg/l	0.4	NONE	0.6	0.5	1.5
Arsenic (dissolved)	µg/l	0.15	NONE	9.39	10.3	13.2
Barium (dissolved)	µg/l	0.06	NONE	72	140	70
Cadmium (dissolved)	µg/l	0.02	NONE	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	NONE	0.3	0.5	0.3
Copper (dissolved)	µg/l	0.5	NONE	3.6	1	2.4
Lead (dissolved)	µg/l	0.2	NONE	0.4	1	0.3
Manganese (dissolved)	µg/l	0.05	NONE	220	600	240
Molybdenum (dissolved)	µg/l	0.05	NONE	14	7.3	8.9
Nickel (dissolved)	µg/l	0.5	NONE	2.2	5.5	4.6
Selenium (dissolved)	µg/l	0.6	NONE	9.8	1.6	1.1
Zinc (dissolved)	µg/l	0.5	NONE	2.6	7.3	2.9
Boron (dissolved)	µg/l	10	NONE	1200	790	590
Calcium (dissolved)	mg/l	0.012	NONE	72	80	110
Iron (dissolved)	mg/l	0.004	NONE	0.005	0.09	0.02
Magnesium (dissolved)	mg/l	0.005	NONE	110	78	52
Potassium (dissolved)	mg/l	0.025	NONE	62	58	31
Sodium (dissolved)	mg/l	0.01	NONE	1300	110	33
Petroleum Hydrocarbons						
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
VOCs						
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-040027
Project / Site name: Liverpool Bay Point of Agg

Your Order No: 701707

Lab Sample Number				628852	628853	628854
Sample Reference				DUPE 1	MW04D	MW04S
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				29/07/2025	29/07/2025	29/07/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**			
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-040027
Project / Site name: Liverpool Bay Point of Agg

Your Order No: 701707

Lab Sample Number				628852	628853	628854
Sample Reference				DUPE 1	MW04D	MW04S
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				29/07/2025	29/07/2025	29/07/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**			
PFAS						
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acic	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	0.05	0.16
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	0.22	0.75
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	0.15

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-040027
Project / Site name: Liverpool Bay Point of Agg

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	NONE
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	NONE
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	NONE

Analytical Report Number : 25-040027
Project / Site name: Liverpool Bay Point of Agg

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	NONE
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE

Analytical Report Number : 25-040027
Project / Site name: Liverpool Bay Point of Agg

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

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Analytical Report Number : 25-040695

Project / Site name:	Liverpool Bay	**Samples received on:**	01/08/2025
Your job number:		**Samples instructed on/ Analysis started on:**	01/08/2025
Your order number:	701707	**Analysis completed by:**	11/08/2025
Report Issue Number:	1	**Report issued on:**	11/08/2025
Samples Analysed:	9 water samples		

Signed:

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-040695
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				632649	632650	632651	632652	632653
Sample Reference				MW05S	MW05D	MW06S	MW06D	MW07S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/07/2025	30/07/2025	30/07/2025	30/07/2025	30/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	NONE	7.5	7.7	7.2	7.4	7.4
Electrical Conductivity at 20°C	µS/cm	10	NONE	650	3100	3800	4000	3700
Sulphate as SO_4	mg/l	0.045	NONE	56.6	120	129	164	69.3
Chloride	mg/l	0.15	NONE	52	790	1300 $^{\$\$}$	1300 $^{\$\$}$	1100 $^{\$\$}$
Orthophosphate as PO_4	µg/l	62	NONE	130	4300	< 62	140	180
Fluoride	µg/l	50	NONE	530	1400	640	960	810
Ammoniacal Nitrogen as N	µg/l	15	NONE	100	770	790	950	2200
Total Organic Carbon (TOC)	mg/l	0.1	NONE	6.08	9.68	8.15	6.32	6.78
Nitrate as N	mg/l	0.01	NONE	0.64	0.01	< 0.01	< 0.01	< 0.01
Nitrate as NO_3	mg/l	0.05	NONE	2.84	0.05	< 0.05	< 0.05	< 0.05
Nitrite as NO_2	µg/l	5	NONE	120	< 5.0	6.2	< 5.0	< 5.0
Alkalinity as $CaCO_3$	mgCaCO 3/l	3	NONE	240	640	390	520	780
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	9.8	22	21	19	17
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	< 1.0	3.8	1.8	1.5	10
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.678	< 0.020	< 0.020	< 0.020	< 0.020
Total Suspended Solids (L004B)	mg/l	2	NONE	3800	850	2000	350	1100
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	500	2000	2500	2600	2400
Hardness - Total	mgCaCO 3/l	1	NONE	247	320	708	685	673
Dissolved Oxygen	mg/l	1	NONE	8.1	1.4	3.2	3.7	7
Speciated PAHs								
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-040695
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				632649	632650	632651	632652	632653
Sample Reference				MW05S	MW05D	MW06S	MW06D	MW07S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/07/2025	30/07/2025	30/07/2025	30/07/2025	30/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Aluminium (dissolved)	µg/l	1	NONE	41	260	140	16	11
Antimony (dissolved)	µg/l	0.4	NONE	1.3	1.1	1.6	1.1	0.5
Arsenic (dissolved)	µg/l	0.15	NONE	3.33	19.2	3.28	5.35	15.2
Barium (dissolved)	µg/l	0.06	NONE	23	59	230	63	200
Cadmium (dissolved)	µg/l	0.02	NONE	0.02	< 0.02	0.13	0.05	< 0.02
Chromium (dissolved)	µg/l	0.2	NONE	0.7	0.8	0.5	0.4	0.2
Copper (dissolved)	µg/l	0.5	NONE	2.7	2.5	5.1	4.7	< 0.5
Lead (dissolved)	µg/l	0.2	NONE	0.2	0.6	8.1	0.5	0.3
Manganese (dissolved)	µg/l	0.05	NONE	0.93	390	580	360	1400
Molybdenum (dissolved)	µg/l	0.05	NONE	9.7	7.6	19	12	4.5
Nickel (dissolved)	µg/l	0.5	NONE	2.6	8.1	4.2	3.6	2.8
Selenium (dissolved)	µg/l	0.6	NONE	1.7	4	4.7	5.2	3.3
Zinc (dissolved)	µg/l	0.5	NONE	8	9.3	29	13	2.1
Boron (dissolved)	µg/l	10	NONE	170	950	390	770	860
Calcium (dissolved)	mg/l	0.012	NONE	71	55	140	110	99
Iron (dissolved)	mg/l	0.004	NONE	0.024	0.019	0.007	0.036	0.033
Magnesium (dissolved)	mg/l	0.005	NONE	17	44	85	100	100
Potassium (dissolved)	mg/l	0.025	NONE	14	32	41	47	55
Sodium (dissolved)	mg/l	0.01	NONE	42	660	570	710	600
Petroleum Hydrocarbons								
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	< 3.0	5.2	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-040695
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				632649	632650	632651	632652	632653
Sample Reference				MW05S	MW05D	MW06S	MW06D	MW07S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/07/2025	30/07/2025	30/07/2025	30/07/2025	30/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				632649	632650	632651	632652	632653
Sample Reference				MW05S	MW05D	MW06S	MW06D	MW07S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/07/2025	30/07/2025	30/07/2025	30/07/2025	30/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
PFAS								
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	0.13	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	0.17	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	0.96	0.16	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-040695
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				632654	632655	632656	632657
Sample Reference				MW07D	MW08S	MW08D	Stilling Well 3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/07/2025	30/07/2025	30/07/2025	30/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	NONE	7.3	7.2	7.4	7.9
Electrical Conductivity at 20°C	µS/cm	10	NONE	1100	2900	2800	640
Sulphate as SO_4	mg/l	0.045	NONE	19.5	83.3	190	35.4
Chloride	mg/l	0.15	NONE	73	430	400	47
Orthophosphate as PO_4	µg/l	62	NONE	< 62	260	5200	130
Fluoride	µg/l	50	NONE	780	1100	1300	160
Ammoniacal Nitrogen as N	µg/l	15	NONE	410	3800	2400	42
Total Organic Carbon (TOC)	mg/l	0.1	NONE	6.77	17.5	11	2.69
Nitrate as N	mg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	3.32
Nitrate as NO_3	mg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	14.7
Nitrite as NO_2	µg/l	5	NONE	< 5.0	10	< 5.0	110
Alkalinity as $CaCO_3$	mgCaCO3/l	3	NONE	640	1200	1100	240
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	15	42	50	12
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	1.4	2.7	1.7	5.4
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	3.35
Total Suspended Solids (L004B)	mg/l	2	NONE	120	2600	1000	130
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	780	2100	2100	440
Hardness - Total	mgCaCO3/l	1	NONE	474	782	575	307
Dissolved Oxygen	mg/l	1	NONE	8.6	8.5	8.7	9.2
Speciated PAHs							
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH							
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-040695
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				632654	632655	632656	632657
Sample Reference				MW07D	MW08S	MW08D	Stilling Well 3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/07/2025	30/07/2025	30/07/2025	30/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Heavy Metals / Metalloids							
Aluminium (dissolved)	µg/l	1	NONE	2.1	65	3.6	3.2
Antimony (dissolved)	µg/l	0.4	NONE	< 0.4	0.5	< 0.4	< 0.4
Arsenic (dissolved)	µg/l	0.15	NONE	5.39	31.9	9.36	0.84
Barium (dissolved)	µg/l	0.06	NONE	130	78	74	30
Cadmium (dissolved)	µg/l	0.02	NONE	< 0.02	0.06	0.11	0.03
Chromium (dissolved)	µg/l	0.2	NONE	0.3	0.4	0.4	0.2
Copper (dissolved)	µg/l	0.5	NONE	3.2	7.7	5.3	3.4
Lead (dissolved)	µg/l	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	NONE	1100	4100	1800	2.4
Molybdenum (dissolved)	µg/l	0.05	NONE	3.1	6.9	2.8	1.2
Nickel (dissolved)	µg/l	0.5	NONE	4.5	10	6.5	1.3
Selenium (dissolved)	µg/l	0.6	NONE	1.7	6.2	4.3	2.2
Zinc (dissolved)	µg/l	0.5	NONE	13	5.5	7.4	36
Boron (dissolved)	µg/l	10	NONE	630	990	1400	40
Calcium (dissolved)	mg/l	0.012	NONE	97	200	120	100
Iron (dissolved)	mg/l	0.004	NONE	0.007	0.18	0.007	0.012
Magnesium (dissolved)	mg/l	0.005	NONE	56	67	69	13
Potassium (dissolved)	mg/l	0.025	NONE	31	20	38	2.5
Sodium (dissolved)	mg/l	0.01	NONE	55	450	530	29
Petroleum Hydrocarbons							
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-040695
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				632654	632655	632656	632657
Sample Reference				MW07D	MW08S	MW08D	Stilling Well 3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/07/2025	30/07/2025	30/07/2025	30/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-040695
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				632654	632655	632656	632657
Sample Reference				MW07D	MW08S	MW08D	Stilling Well 3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/07/2025	30/07/2025	30/07/2025	30/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
PFAS							
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-040695
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	NONE
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	NONE
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	NONE

Analytical Report Number : 25-040695
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	NONE
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE

Analytical Report Number : 25-040695
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

Sample Deviation Report

Analytical Report Number : 25-040695
Project / Site name: Liverpool Bay

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
MW05D	N/A	W	632650	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW05D	N/A	W	632650	c	Dissolved Oxygen in water	L086B	c
MW05S	N/A	W	632649	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW05S	N/A	W	632649	c	Dissolved Oxygen in water	L086B	c
MW06D	N/A	W	632652	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW06D	N/A	W	632652	c	Dissolved Oxygen in water	L086B	c
MW06S	N/A	W	632651	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW06S	N/A	W	632651	c	Dissolved Oxygen in water	L086B	c
MW07D	N/A	W	632654	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW07D	N/A	W	632654	c	Dissolved Oxygen in water	L086B	c
MW07S	N/A	W	632653	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW07S	N/A	W	632653	c	Dissolved Oxygen in water	L086B	c
MW08D	N/A	W	632656	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW08D	N/A	W	632656	c	Dissolved Oxygen in water	L086B	c
MW08S	N/A	W	632655	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW08S	N/A	W	632655	c	Dissolved Oxygen in water	L086B	c
Stilling Well 3	N/A	W	632657	c	Biochemical Oxygen Demand in water (Total)	L086B	c
Stilling Well 3	N/A	W	632657	c	Dissolved Oxygen in water	L086B	c

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Analytical Report Number : 25-041305

Project / Site name:		**Samples received on:**	06/08/2025
Your job number:		**Samples instructed on/ Analysis started on:**	06/08/2025
Your order number:		**Analysis completed by:**	14/08/2025
Report Issue Number:	1	**Report issued on:**	14/08/2025
Samples Analysed:	4 water samples		

Signed:

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-041305

Lab Sample Number				636470	636471	636472	636473
Sample Reference				FwP Pre Equip TEST	FwP Equip	Pwo/ Equip TEST	PW/ww01 Equip TEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				05/08/2025	05/08/2025	05/08/2025	05/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	NONE	7.1	7.4	7.6	7.4
Electrical Conductivity at 20°C	µS/cm	10	NONE	960	770	21000	3300
Sulphate as SO_4	mg/l	0.045	NONE	5.41	7.36	820	381
Chloride	mg/l	0.15	NONE	130	140	6700 $^{\$\$}$	810
Orthophosphate as PO_4	µg/l	62	NONE	38000	40000	530	< 62
Fluoride	µg/l	50	NONE	81	72	1400	1100
Ammoniacal Nitrogen as N	µg/l	15	NONE	5100 $^{\$\$}$	9900 $^{\$\$}$	4500	< 15
Total Organic Carbon (TOC)	mg/l	0.1	NONE	105	156	4.5	9.07
Nitrate as N	mg/l	0.01	NONE	0.16	0.16	0.2	0.07
Nitrate as NO_3	mg/l	0.05	NONE	0.72	0.72	0.88	0.31
Nitrite as NO_2	µg/l	5	NONE	18	25	< 5.0	15
Alkalinity as $CaCO_3$	mgCaCO 3/l	3	NONE	250	210	760	370
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	470	470	270	23
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	450	150	1	23
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.169	0.171	0.199	0.075
Total Suspended Solids (L004B)	mg/l	2	NONE	19000	17000	260	9200
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	690	630	12000	2100
Hardness - Total	mgCaCO 3/l	1	NONE	215	394	2220	471
Dissolved Oxygen	mg/l	1	NONE	< 1.0	< 1.0	3.7	1
Speciated PAHs							
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH							
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16

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Sample Reference				FwP Pre Equip TEST	FwP Equip	Pwo/ Equip TEST	PW/ww01 Equip TEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				05/08/2025	05/08/2025	05/08/2025	05/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Heavy Metals / Metalloids							
Aluminium (dissolved)	µg/l	1	NONE	51	8.3	1.9	85
Antimony (dissolved)	µg/l	0.4	NONE	< 0.4	< 0.4	< 0.4	0.6
Arsenic (dissolved)	µg/l	0.15	NONE	1.27	1.76	6.16	12.9
Barium (dissolved)	µg/l	0.06	NONE	54	62	31	110
Cadmium (dissolved)	µg/l	0.02	NONE	0.03	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	NONE	0.4	0.5	0.3	0.4
Copper (dissolved)	µg/l	0.5	NONE	1.8	1	12	0.8
Lead (dissolved)	µg/l	0.2	NONE	0.6	< 0.2	<1 [&]	0.7
Manganese (dissolved)	µg/l	0.05	NONE	73	100	1200	1700
Molybdenum (dissolved)	µg/l	0.05	NONE	1.2	0.89	6.7	17
Nickel (dissolved)	µg/l	0.5	NONE	2.1	3.6	7.9	10
Selenium (dissolved)	µg/l	0.6	NONE	< 0.6	0.8	23	5.6
Zinc (dissolved)	µg/l	0.5	NONE	3.3	3.5	28	16
Boron (dissolved)	µg/l	10	NONE	47	65	1900	840
Calcium (dissolved)	mg/l	0.012	NONE	60	100	180	80
Iron (dissolved)	mg/l	0.004	NONE	0.81	2	0.048	0.71
Magnesium (dissolved)	mg/l	0.005	NONE	16	33	430	66
Potassium (dissolved)	mg/l	0.025	NONE	11	12	170	44
Sodium (dissolved)	mg/l	0.01	NONE	100	100	3400	710
Petroleum Hydrocarbons							
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	5.5
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

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Sample Reference				FwP Pre Equip TEST	FwP Equip	Pwo/ Equip TEST	PW/ww01 Equip TEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				05/08/2025	05/08/2025	05/08/2025	05/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-041305

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Sample Reference				FwP Pre Equip TEST	FwP Equip	Pwo/ Equip TEST	PW/ww01 Equip TEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				05/08/2025	05/08/2025	05/08/2025	05/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
PFAS							
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	ng/L	N/A	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
	µg/l	0.05	NONE				

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-041305
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	NONE
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	NONE
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	NONE

Analytical Report Number : 25-041305
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	NONE
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE

Analytical Report Number : 25-041305
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

&- Sample required dilution above the concentration range for the procedure due to matrix effect/ analyte concentration. The method limit of detection has been raised in line with the dilution. The result should be considered deviating and should be interpreted with caution. The result is not accredited.

UKAS TESTING
4041

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Analytical Report Number : 25-041686

Project / Site name:		**Samples received on:**	07/08/2025
Your job number:		**Samples instructed on/ Analysis started on:**	07/08/2025
Your order number:	701707	**Analysis completed by:**	14/08/2025
Report Issue Number:	1	**Report issued on:**	14/08/2025
Samples Analysed:	1 water sample		

Signed:

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-041686

Your Order No: 701707

Lab Sample Number	639041
Sample Reference	MW02D
Sample Number	None Supplied
Water Matrix	Ground water
Depth (m)	None Supplied
Date Sampled	06/08/2025
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	7.8
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	2700
Sulphate as SO_4	mg/l	0.045	ISO 17025	199
Chloride	mg/l	0.15	ISO 17025	660
Orthophosphate as PO_4	µg/l	62	ISO 17025	300
Fluoride	µg/l	50	ISO 17025	1300
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	150
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	8.19
Nitrate as N	mg/l	0.01	ISO 17025	< 0.01
Nitrate as NO_3	mg/l	0.05	ISO 17025	< 0.05
Nitrite as NO_2	µg/l	5	ISO 17025	< 5.0
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	380
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	21
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	7.6
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	< 0.020
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	20
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	1700
Hardness - Total	mgCaCO3/l	1	ISO 17025	275
Dissolved Oxygen	mg/l	1	NONE	3.2
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16

Analytical Report Number: 25-041686

Your Order No: 701707

Lab Sample Number	639041
Sample Reference	MW02D
Sample Number	None Supplied
Water Matrix	Ground water
Depth (m)	None Supplied
Date Sampled	06/08/2025
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Heavy Metals / Metalloids				
Aluminium (dissolved)	µg/l	1	NONE	1.6
Antimony (dissolved)	µg/l	0.4	ISO 17025	2
Arsenic (dissolved)	µg/l	0.15	ISO 17025	7.96
Barium (dissolved)	µg/l	0.06	ISO 17025	77
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.6
Copper (dissolved)	µg/l	0.5	ISO 17025	3.6
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	330
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	23
Nickel (dissolved)	µg/l	0.5	ISO 17025	5.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	4.9
Zinc (dissolved)	µg/l	0.5	ISO 17025	15
Boron (dissolved)	µg/l	10	ISO 17025	930
Calcium (dissolved)	mg/l	0.012	ISO 17025	56
Iron (dissolved)	mg/l	0.004	ISO 17025	0.012
Magnesium (dissolved)	mg/l	0.005	ISO 17025	33
Potassium (dissolved)	mg/l	0.025	ISO 17025	30
Sodium (dissolved)	mg/l	0.01	ISO 17025	570
Petroleum Hydrocarbons				
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10 ** t
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10
VOCs				
Chloromethane	µg/l	3	ISO 17025	< 3.0 ** t
Chloroethane	µg/l	3	ISO 17025	< 3.0 ** t
Bromomethane	µg/l	3	ISO 17025	< 3.0 ** t
Vinyl Chloride	µg/l	3	NONE	< 3.0 ** t
Trichlorofluoromethane	µg/l	3	NONE	< 3.0 ** t
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0 ** t
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0 ** t
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0 ** t
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0 ** t
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0 ** t
2,2-Dichloropropane	µg/l	3	NONE	< 3.0 ** t
Chloroform	µg/l	3	ISO 17025	5.9 ** t
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0 ** t
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0 ** t
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0 ** t
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0 ** t
Benzene	µg/l	1	ISO 17025	< 1.0 ** t
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0 ** t
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0 ** t

Analytical Report Number: 25-041686

Your Order No: 701707

Lab Sample Number				639041
Sample Reference				MW02D
Sample Number				None Supplied
Water Matrix				Ground water
Depth (m)				None Supplied
Date Sampled				06/08/2025
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
Trichloroethene	µg/l	3	ISO 17025	< 3.0 ** t
Dibromomethane	µg/l	3	ISO 17025	< 3.0 ** t
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0 ** t
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0 ** t
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0 ** t
Toluene	µg/l	1	ISO 17025	< 1.0 ** t
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0 ** t
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0 ** t
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0 ** t
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0 ** t
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0 ** t
Chlorobenzene	µg/l	3	ISO 17025	< 3.0 ** t
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0 ** t
Ethylbenzene	µg/l	1	ISO 17025	< 1.0 ** t
p & m-xylene	µg/l	1	ISO 17025	< 1.0 ** t
Styrene	µg/l	3	ISO 17025	< 3.0 ** t
Bromoform	µg/l	3	ISO 17025	< 3.0 ** t
o-xylene	µg/l	1	ISO 17025	< 1.0 ** t
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0 ** t
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0 ** t
Bromobenzene	µg/l	3	ISO 17025	< 3.0 ** t
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0 ** t
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0 ** t
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0 ** t
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0 ** t
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0 ** t
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0 ** t
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0 ** t
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0 ** t
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0 ** t
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0 ** t
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0 ** t
Butylbenzene	µg/l	3	ISO 17025	< 3.0 ** t
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0 ** t
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0 ** t
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0 ** t
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0 ** t

Analytical Report Number: 25-041686

Your Order No: 701707

Lab Sample Number	639041
Sample Reference	MW02D
Sample Number	None Supplied
Water Matrix	Ground water
Depth (m)	None Supplied
Date Sampled	06/08/2025
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
PFAS				
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	ng/L	N/A	NONE	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05
	µg/l	0.05	NONE	

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-041686
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

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Analytical Report Number : 25-041686
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

Analytical Report Number : 25-041686
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

**t- No additional VOC container submitted for provision of repeat/dilution. The result should be considered as deviating and should be interpreted with caution.

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Analytical Report Number : 25-042683

Project / Site name:		**Samples received on:**	13/08/2025
Your job number:		**Samples instructed on/ Analysis started on:**	13/08/2025
Your order number:	701707	**Analysis completed by:**	21/08/2025
Report Issue Number:	1	**Report issued on:**	21/08/2025
Samples Analysed:	4 water samples		

Signed:

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-042683

Your Order No: 701707

Lab Sample Number				644652	644653	644654	644655
Sample Reference				PW01	Discharge Tank	PW01 Duplicate	Discharge Pond
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/08/2025	12/08/2025	12/08/2025	12/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	NONE	7.5	7.4	7.4	7.1
Electrical Conductivity at 20°C	µS/cm	10	NONE	21000	22000	21000	1400
Sulphate as SO_4	mg/l	0.045	NONE	901	887	866	7.25
Chloride	mg/l	0.15	NONE	6500 $^{\$\$}$	6200 $^{\$\$}$	6600 $^{\$\$}$	310
Orthophosphate as PO_4	µg/l	62	NONE	1200	1000	370	59000
Fluoride	µg/l	50	NONE	1000	1100	1100	110
Ammoniacal Nitrogen as N	µg/l	15	NONE	4500	4600	4500	13000
Total Organic Carbon (TOC)	mg/l	0.1	NONE	6.78	7.01	6.45	85.2
Nitrate as N	mg/l	0.01	NONE	0.04	< 0.01	< 0.01	0.09
Nitrate as NO_3	mg/l	0.05	NONE	0.16	< 0.05	< 0.05	0.41
Nitrite as NO_2	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	21
Alkalinity as $CaCO_3$	mgCaCO3/l	3	NONE	710	710	690	280
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	270	650	420	1500
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	1	1.1	< 1.0	310
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.035	< 0.020	< 0.020	0.1
Total Suspended Solids (L004B)	mg/l	2	NONE	130	96	51	9800
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	13000	13000	13000	1100
Hardness - Total	mgCaCO3/l	1	NONE	2140	2190	2140	321
Dissolved Oxygen	mg/l	1	NONE	5.4	1.2	1.1	< 1.0
Speciated PAHs							
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	0.02	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	0.06	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH							
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-042683

Your Order No: 701707

Lab Sample Number				644652	644653	644654	644655
Sample Reference				PW01	Discharge Tank	PW01 Duplicate	Discharge Pond
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/08/2025	12/08/2025	12/08/2025	12/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Heavy Metals / Metalloids							
Aluminium (dissolved)	µg/l	1	NONE	18	<5 [&]	5.8	47
Antimony (dissolved)	µg/l	0.4	NONE	<2 [&]	<2 [&]	<2 [&]	< 0.4
Arsenic (dissolved)	µg/l	0.15	NONE	4.83	5.37	5.15	1.34
Barium (dissolved)	µg/l	0.06	NONE	22	19	21	89
Cadmium (dissolved)	µg/l	0.02	NONE	<0.1 [&]	<0.1 [&]	<0.1 [&]	0.04
Chromium (dissolved)	µg/l	0.2	NONE	<1 [&]	<1 [&]	<1 [&]	0.4
Copper (dissolved)	µg/l	0.5	NONE	24	4.7	6.1	3.1
Lead (dissolved)	µg/l	0.2	NONE	<1 [&]	<1 [&]	<1 [&]	0.8
Manganese (dissolved)	µg/l	0.05	NONE	1100	1200	1200	100
Molybdenum (dissolved)	µg/l	0.05	NONE	5.9	6	6	0.27
Nickel (dissolved)	µg/l	0.5	NONE	23	<2.5 [&]	<2.5 [&]	2
Selenium (dissolved)	µg/l	0.6	NONE	<3 [&]	<3 [&]	<3 [&]	1.6
Zinc (dissolved)	µg/l	0.5	NONE	25	9	13	53
Boron (dissolved)	µg/l	10	NONE	1800	1800	1800	91
Calcium (dissolved)	mg/l	0.012	NONE	170	180	180	96
Iron (dissolved)	mg/l	0.004	NONE	0.012	0.031	0.031	1
Magnesium (dissolved)	mg/l	0.005	NONE	420	430	410	20
Potassium (dissolved)	mg/l	0.025	NONE	140	150	150	16
Sodium (dissolved)	mg/l	0.01	NONE	3800	3500	3800	180
Petroleum Hydrocarbons							
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-042683

Your Order No: 701707

Lab Sample Number				644652	644653	644654	644655
Sample Reference				PW01	Discharge Tank	PW01 Duplicate	Discharge Pond
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/08/2025	12/08/2025	12/08/2025	12/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-042683

Your Order No: 701707

Lab Sample Number				644652	644653	644654	644655
Sample Reference				PW01	Discharge Tank	PW01 Duplicate	Discharge Pond
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/08/2025	12/08/2025	12/08/2025	12/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
PFAS							
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	ng/L	N/A	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
	µg/l	0.05	NONE				

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-042683
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	NONE
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	NONE
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	NONE

Analytical Report Number : 25-042683
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	NONE
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE

Analytical Report Number : 25-042683
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

&- Sample required dilution above the concentration range for the procedure due to matrix effect/ analyte concentration. The method limit of detection has been raised in line with the dilution. The result should be considered deviating and should be interpreted with caution. The result is not accredited.

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Analytical Report Number : 25-042967

Project / Site name:		**Samples received on:**	14/08/2025
Your job number:		**Samples instructed on/ Analysis started on:**	14/08/2025
Your order number:	701707	**Analysis completed by:**	21/08/2025
Report Issue Number:	1	**Report issued on:**	21/08/2025
Samples Analysed:	4 water samples		

Signed:

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-042967

Your Order No: 701707

Lab Sample Number				646070	646071	646072	646073
Sample Reference				PWOI	PWOI DP	DIS TANK	PWOI DI
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				13/08/2025	13/08/2025	13/08/2025	13/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	NONE	7.8	7.9	7.9	6.9
Electrical Conductivity at 20°C	µS/cm	10	NONE	21000	21000	22000	< 10
Sulphate as SO_4	mg/l	0.045	NONE	932	957	963	0.799
Chloride	mg/l	0.15	NONE	6700 $^{\$\$}$	6500 $^{\$\$}$	6800 $^{\$\$}$	0.95
Orthophosphate as PO_4	µg/l	62	NONE	340	260	250	< 62
Fluoride	µg/l	50	NONE	1100	1000	1000	< 50
Ammoniacal Nitrogen as N	µg/l	15	NONE	4700	4700	4800	< 15
Total Organic Carbon (TOC)	mg/l	0.1	NONE	3.75	3.84	3.81	0.75
Nitrate as N	mg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate as NO_3	mg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrite as NO_2	µg/l	5	NONE	16	27	< 5.0	< 5.0
Alkalinity as $CaCO_3$	mgCaCO3/l	3	NONE	690	670	660	< 3
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	370	490	270	< 2.0
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	< 1.0	< 1.0	< 1.0	1
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
Total Suspended Solids (L004B)	mg/l	2	NONE	56	62	54	< 2.0
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	13000	13000	13000	4
Hardness - Total	mgCaCO3/l	1	NONE	2320	2360	2330	2.1
Dissolved Oxygen	mg/l	1	NONE	6	3	2.3	8.6
Speciated PAHs							
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	2.4
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	0.21
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	0.05
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH							
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	2.63

Analytical Report Number: 25-042967

Your Order No: 701707

Lab Sample Number				646070	646071	646072	646073
Sample Reference				PWOI	PWOI DP	DIS TANK	PWOI DI
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				13/08/2025	13/08/2025	13/08/2025	13/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Heavy Metals / Metalloids							
Aluminium (dissolved)	µg/l	1	NONE	8.5	5.8	22	3.6
Antimony (dissolved)	µg/l	0.4	NONE	<2 [&]	<2 [&]	<2 [&]	< 0.4
Arsenic (dissolved)	µg/l	0.15	NONE	4.77	5.31	4.28	0.44
Barium (dissolved)	µg/l	0.06	NONE	22	20	20	1.3
Cadmium (dissolved)	µg/l	0.02	NONE	<0.1 [&]	<0.1 [&]	<0.1 [&]	< 0.02
Chromium (dissolved)	µg/l	0.2	NONE	<1 [&]	<1 [&]	<1 [&]	0.7
Copper (dissolved)	µg/l	0.5	NONE	24	3.9	5.9	1.3
Lead (dissolved)	µg/l	0.2	NONE	<1 [&]	<1 [&]	<1 [&]	< 0.2
Manganese (dissolved)	µg/l	0.05	NONE	1200	1300	1300	0.55
Molybdenum (dissolved)	µg/l	0.05	NONE	5.9	5.8	6	0.16
Nickel (dissolved)	µg/l	0.5	NONE	17	<2.5 [&]	<2.5 [&]	< 0.5
Selenium (dissolved)	µg/l	0.6	NONE	<3 [&]	<3 [&]	<3 [&]	< 0.6
Zinc (dissolved)	µg/l	0.5	NONE	31	8.9	11	3.8
Boron (dissolved)	µg/l	10	NONE	1700	1700	1700	< 10
Calcium (dissolved)	mg/l	0.012	NONE	180	180	160	0.7
Iron (dissolved)	mg/l	0.004	NONE	0.033	0.23	0.18	0.006
Magnesium (dissolved)	mg/l	0.005	NONE	450	460	470	0.082
Potassium (dissolved)	mg/l	0.025	NONE	160	150	140	0.62
Sodium (dissolved)	mg/l	0.01	NONE	3900	3900	3600	2.5
Petroleum Hydrocarbons							
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	9.8
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-042967

Your Order No: 701707

Lab Sample Number				646070	646071	646072	646073
Sample Reference				PWOI	PWOI DP	DIS TANK	PWOI DI
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				13/08/2025	13/08/2025	13/08/2025	13/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	11.8
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	2.3
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	13.8
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	5.2
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-042967

Your Order No: 701707

Lab Sample Number				646070	646071	646072	646073
Sample Reference				PWOI	PWOI DP	DIS TANK	PWOI DI
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Other water	Other water	Other water	Other water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				13/08/2025	13/08/2025	13/08/2025	13/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
PFAS							
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	ng/L	N/A	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	0.12	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
	µg/l	0.05	NONE				

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-042967
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	NONE
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	NONE
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	NONE

Analytical Report Number : 25-042967
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	NONE
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE

Analytical Report Number : 25-042967
Project / Site name:

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

&- Sample required dilution above the concentration range for the procedure due to matrix effect/ analyte concentration. The method limit of detection has been raised in line with the dilution. The result should be considered deviating and should be interpreted with caution. The result is not accredited.

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Analytical Report Number : 25-043273

Project / Site name:	Liverpool Bay	**Samples received on:**	15/08/2025
Your job number:		**Samples instructed on/ Analysis started on:**	15/08/2025
Your order number:	701707	**Analysis completed by:**	25/08/2025
Report Issue Number:	1	**Report issued on:**	25/08/2025
Samples Analysed:	2 water samples		

Signed:

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-043273
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				647385	647386
Sample Reference				PW01	Discharge Tank
Sample Number				None Supplied	None Supplied
Water Matrix				Other water	Other water
Depth (m)				None Supplied	None Supplied
Date Sampled				14/08/2025	14/08/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
General Inorganics					
pH (L099)	pH Units	N/A	NONE	7.6	7.7
Electrical Conductivity at 20°C	µS/cm	10	NONE	23000	22000
Sulphate as SO_4	mg/l	0.045	NONE	990	1050
Chloride	mg/l	0.15	NONE	7800 $^{\$\$}$	7700 $^{\$\$}$
Orthophosphate as PO_4	µg/l	62	NONE	220	1200
Fluoride	µg/l	50	NONE	1000	990
Ammoniacal Nitrogen as N	µg/l	15	NONE	4700	4700
Total Organic Carbon (TOC)	mg/l	0.1	NONE	3.62	3.42
Nitrate as N	mg/l	0.01	NONE	0.05	< 0.01
Nitrate as NO_3	mg/l	0.05	NONE	0.21	< 0.05
Nitrite as NO_2	µg/l	5	NONE	11	6.5
Alkalinity as $CaCO_3$	mgCaCO3/l	3	NONE	660	630
Chemical Oxygen Demand (Settled)	mg/l	2	NONE	140	170
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	NONE	1.2	1.6
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.05	< 0.020
Total Suspended Solids (L004B)	mg/l	2	NONE	34	95
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	NONE	14000	15000
Hardness - Total	mgCaCO3/l	1	NONE	2720	2740
Dissolved Oxygen	mg/l	1	NONE	5.5	1.5
Speciated PAHs					
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16

Analytical Report Number: 25-043273
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				647385	647386
Sample Reference				PW01	Discharge Tank
Sample Number				None Supplied	None Supplied
Water Matrix				Other water	Other water
Depth (m)				None Supplied	None Supplied
Date Sampled				14/08/2025	14/08/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Heavy Metals / Metalloids					
Aluminium (dissolved)	µg/l	1	NONE	6.8	12
Antimony (dissolved)	µg/l	0.4	NONE	< 0.4	< 0.4
Arsenic (dissolved)	µg/l	0.15	NONE	4.98	4.03
Barium (dissolved)	µg/l	0.06	NONE	22	20
Cadmium (dissolved)	µg/l	0.02	NONE	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	NONE	0.3	0.2
Copper (dissolved)	µg/l	0.5	NONE	18	2.7
Lead (dissolved)	µg/l	0.2	NONE	<1 [&]	<1 [&]
Manganese (dissolved)	µg/l	0.05	NONE	1300	1300
Molybdenum (dissolved)	µg/l	0.05	NONE	5.4	5.3
Nickel (dissolved)	µg/l	0.5	NONE	9.8	< 0.5
Selenium (dissolved)	µg/l	0.6	NONE	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	NONE	14	6.2
Boron (dissolved)	µg/l	10	NONE	1700	1700
Calcium (dissolved)	mg/l	0.012	NONE	190	200
Iron (dissolved)	mg/l	0.004	NONE	0.008	0.011
Magnesium (dissolved)	mg/l	0.005	NONE	540	540
Potassium (dissolved)	mg/l	0.025	NONE	170	170
Sodium (dissolved)	mg/l	0.01	NONE	4100	4000
Petroleum Hydrocarbons					
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	NONE	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
VOCs					
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	NONE	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Chloroform	µg/l	3	NONE	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	NONE	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0

Analytical Report Number: 25-043273
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				647385	647386
Sample Reference				PW01	Discharge Tank
Sample Number				None Supplied	None Supplied
Water Matrix				Other water	Other water
Depth (m)				None Supplied	None Supplied
Date Sampled				14/08/2025	14/08/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0
Bromoform	µg/l	3	NONE	< 3.0	< 3.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0

Analytical Report Number: 25-043273
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				647385	647386
Sample Reference				PW01	Discharge Tank
Sample Number				None Supplied	None Supplied
Water Matrix				Other water	Other water
Depth (m)				None Supplied	None Supplied
Date Sampled				14/08/2025	14/08/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
PFAS					
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	ng/L	N/A	NONE	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05
	µg/l	0.05	NONE		

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-043273
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	NONE
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	NONE
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	NONE

Analytical Report Number : 25-043273
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	NONE
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE

Analytical Report Number : 25-043273
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

&- Sample required dilution above the concentration range for the procedure due to matrix effect/ analyte concentration. The method limit of detection has been raised in line with the dilution. The result should be considered deviating and should be interpreted with caution. The result is not accredited.

UKAS TESTING
4041

Environmental Science

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Analytical Report Number : 25-043517

Project / Site name:	Liverpool Bay	**Samples received on:**	18/08/2025
Your job number:		**Samples instructed on/ Analysis started on:**	18/08/2025
Your order number:	701707	**Analysis completed by:**	26/08/2025
Report Issue Number:	1	**Report issued on:**	26/08/2025
Samples Analysed:	2 water samples		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-043517
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				648852	648853
Sample Reference				PW01	Discharge Tank
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				None Supplied	None Supplied
Date Sampled				Deviating	Deviating
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.8	7.8
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	23000	22000
Sulphate as SO_4	mg/l	0.045	ISO 17025	1080	1120
Chloride	mg/l	0.15	ISO 17025	8400 $^{\$\$}$	8700 $^{\$\$}$
Orthophosphate as PO_4	µg/l	62	ISO 17025	240	240
Fluoride	µg/l	50	ISO 17025	1000	1000
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	4700	4700
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	4.12	4.12
Nitrate as N	mg/l	0.01	ISO 17025	0.06	0.14
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.26	0.62
Nitrite as NO_2	µg/l	5	ISO 17025	< 5.0	< 5.0
Alkalinity as $CaCO_3$	mgCaCO 3/l	3	ISO 17025	650	630
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	19	18
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	< 1.0	< 1.0
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.058	0.14
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	47	87
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	15000	14000
Hardness - Total	mgCaCO 3/l	1	ISO 17025	2940	2940
Dissolved Oxygen	mg/l	1	NONE	1.6	1.4

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16

Analytical Report Number: 25-043517
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				648852	648853
Sample Reference				PW01	Discharge Tank
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				None Supplied	None Supplied
Date Sampled				Deviating	Deviating
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Heavy Metals / Metalloids					
Aluminium (dissolved)	µg/l	1	NONE	<5 [&]	9.2
Antimony (dissolved)	µg/l	0.4	ISO 17025	<2 [&]	<2 [&]
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.59	3.56
Barium (dissolved)	µg/l	0.06	ISO 17025	23	23
Cadmium (dissolved)	µg/l	0.02	ISO 17025	<0.1 [&]	<0.1 [&]
Chromium (dissolved)	µg/l	0.2	ISO 17025	<1 [&]	<1 [&]
Copper (dissolved)	µg/l	0.5	ISO 17025	6.8	17
Lead (dissolved)	µg/l	0.2	ISO 17025	<1 [&]	<1 [&]
Manganese (dissolved)	µg/l	0.05	ISO 17025	1400	1300
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	5.7	5.8
Nickel (dissolved)	µg/l	0.5	ISO 17025	<2.5 [&]	2.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	<3 [&]	<3 [&]
Zinc (dissolved)	µg/l	0.5	ISO 17025	11	18
Boron (dissolved)	µg/l	10	ISO 17025	1800	1800
Calcium (dissolved)	mg/l	0.012	ISO 17025	240	230
Iron (dissolved)	mg/l	0.004	ISO 17025	0.017	0.029
Magnesium (dissolved)	mg/l	0.005	ISO 17025	570	570
Potassium (dissolved)	mg/l	0.025	ISO 17025	190	180
Sodium (dissolved)	mg/l	0.01	ISO 17025	3900 [$$]	3900 [$$]
Petroleum Hydrocarbons					
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
VOCs					
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0

Analytical Report Number: 25-043517
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				648852	648853
Sample Reference				PW01	Discharge Tank
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				None Supplied	None Supplied
Date Sampled				Deviating	Deviating
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 25-043517
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				648852	648853
Sample Reference				PW01	Discharge Tank
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				None Supplied	None Supplied
Date Sampled				Deviating	Deviating
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
PFAS					
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-043517
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

Analytical Report Number : 25-043517
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

Analytical Report Number : 25-043517
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

&- Sample required dilution above the concentration range for the procedure due to matrix effect/ analyte concentration. The method limit of detection has been raised in line with the dilution. The result should be considered deviating and should be interpreted with caution. The result is not accredited.

Sample Deviation Report

Analytical Report Number : 25-043517
Project / Site name: Liverpool Bay

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
Discharge Tank	N/A	W	648853	a	Alkalinity of water (discrete analyser)	L082B	a
Discharge Tank	N/A	W	648853	a	Ammoniacal Nitrogen as N in water	L082B	a
Discharge Tank	N/A	W	648853	a	BTEX and/or Volatile Organic Compounds in water	L073B	a
Discharge Tank	N/A	W	648853	a	Biochemical Oxygen Demand in water (Total)	L086B	a
Discharge Tank	N/A	W	648853	a	Chemical Oxygen Demand in water (Settled)	L065-PL	a
Discharge Tank	N/A	W	648853	a	Chloride in water	L082B	a
Discharge Tank	N/A	W	648853	a	Dissolved Oxygen in water	L086B	a
Discharge Tank	N/A	W	648853	a	Electrical Conductivity at 20°C in water	L031B	a
Discharge Tank	N/A	W	648853	a	Fluoride in water	L033B	a
Discharge Tank	N/A	W	648853	a	Metals in water by ICP-MS (dissolved)	L012B	a
Discharge Tank	N/A	W	648853	a	Metals in water by ICP-OES (dissolved)	L039B	a
Discharge Tank	N/A	W	648853	a	Nitrate as N in water	L078-PL	a
Discharge Tank	N/A	W	648853	a	Nitrate in water	L078-PL	a
Discharge Tank	N/A	W	648853	a	Nitrite in water	L082B	a
Discharge Tank	N/A	W	648853	a	Orthophosphate as PO4 in water	L082B	a
Discharge Tank	N/A	W	648853	a	PFAS in water	L117B	a
Discharge Tank	N/A	W	648853	a	Speciated PAHs and/or Semi-volatile organic compounds in water	L102B	a
Discharge Tank	N/A	W	648853	a	Sulphate in water	L039B	a
Discharge Tank	N/A	W	648853	a	Total Dissolved Solids in water (Gravimetric)	L004B	a
Discharge Tank	N/A	W	648853	a	Total Hardness of water	L045B	a
Discharge Tank	N/A	W	648853	a	Total Organic Carbon in water	L037B	a
Discharge Tank	N/A	W	648853	a	Total Petroleum Hydrocarbons in water by GC-MS	L070B	a
Discharge Tank	N/A	W	648853	a	Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	L070B/L088-PL	a
Discharge Tank	N/A	W	648853	a	Total Petroleum Hydrocarbons in water by HS-GC/MS	L088-PL	a
Discharge Tank	N/A	W	648853	a	Total Suspended Solids in water	L004B	a
Discharge Tank	N/A	W	648853	a	Total oxidised nitrogen in water	L078-PL/L082B	a
Discharge Tank	N/A	W	648853	a	pH of water at 20°C (automated)	L099-PL	a
PW01	N/A	W	648852	a	Alkalinity of water (discrete analyser)	L082B	a
PW01	N/A	W	648852	a	Ammoniacal Nitrogen as N in water	L082B	a
PW01	N/A	W	648852	a	BTEX and/or Volatile Organic Compounds in water	L073B	a
PW01	N/A	W	648852	a	Biochemical Oxygen Demand in water (Total)	L086B	a
PW01	N/A	W	648852	a	Chemical Oxygen Demand in water (Settled)	L065-PL	a
PW01	N/A	W	648852	a	Chloride in water	L082B	a
PW01	N/A	W	648852	a	Dissolved Oxygen in water	L086B	a
PW01	N/A	W	648852	a	Electrical Conductivity at 20°C in water	L031B	a
PW01	N/A	W	648852	a	Fluoride in water	L033B	a
PW01	N/A	W	648852	a	Metals in water by ICP-MS (dissolved)	L012B	a
PW01	N/A	W	648852	a	Metals in water by ICP-OES (dissolved)	L039B	a
PW01	N/A	W	648852	a	Nitrate as N in water	L078-PL	a
PW01	N/A	W	648852	a	Nitrate in water	L078-PL	a
PW01	N/A	W	648852	a	Nitrite in water	L082B	a
PW01	N/A	W	648852	a	Orthophosphate as PO4 in water	L082B	a
PW01	N/A	W	648852	a	PFAS in water	L117B	a
PW01	N/A	W	648852	a	Speciated PAHs and/or Semi-volatile organic compounds in water	L102B	a
PW01	N/A	W	648852	a	Sulphate in water	L039B	a
PW01	N/A	W	648852	a	Total Dissolved Solids in water (Gravimetric)	L004B	a
PW01	N/A	W	648852	a	Total Hardness of water	L045B	a
PW01	N/A	W	648852	a	Total Organic Carbon in water	L037B	a
PW01	N/A	W	648852	a	Total Petroleum Hydrocarbons in water by GC-MS	L070B	a
PW01	N/A	W	648852	a	Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	L070B/L088-PL	a
PW01	N/A	W	648852	a	Total Petroleum Hydrocarbons in water by HS-GC/MS	L088-PL	a
PW01	N/A	W	648852	a	Total Suspended Solids in water	L004B	a
PW01	N/A	W	648852	a	Total oxidised nitrogen in water	L078-PL/L082B	a
PW01	N/A	W	648852	a	pH of water at 20°C (automated)	L099-PL	a

UKAS TESTING
4041

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Analytical Report Number : 25-044172

Project / Site name:	Liverpool Bay	**Samples received on:**	20/08/2025
Your job number:		**Samples instructed on/ Analysis started on:**	20/08/2025
Your order number:	701707	**Analysis completed by:**	28/08/2025
Report Issue Number:	1	**Report issued on:**	28/08/2025
Samples Analysed:	4 water samples		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-044172
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				652938	652939	652940	652941
Sample Reference				PW01	Dis Tank	Dis Pond	PW01 D1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/08/2025	19/08/2025	19/08/2025	19/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.6	7.6	8.3	7.4
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	26000	30000	20000	< 10
Sulphate as SO_4	mg/l	0.045	ISO 17025	1040	1110	860	0.173
Chloride	mg/l	0.15	ISO 17025	8700 $^{\$\$}$	8700 $^{\$\$}$	6600 $^{\$\$}$	0.37
Orthophosphate as PO_4	µg/l	62	ISO 17025	400	380	1600	< 62
Fluoride	µg/l	50	ISO 17025	970	940	900	< 50
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	4700	4700	1800	18
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	3.48	3.72	18.1	0.9
Nitrate as N	mg/l	0.01	ISO 17025	0.04	0.04	0.08	0.02
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.16	0.16	0.36	0.1
Nitrite as NO_2	µg/l	5	ISO 17025	< 5.0	< 5.0	12	< 5.0
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	600	590	570	< 3
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	120	190	150	20
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	< 1.0	1.8	9	< 1.0
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.035	0.035	0.085	0.023
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	53	57	91	< 2.0
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	17000	15000	14000	6
Hardness - Total	mgCaCO3/l	1	ISO 17025	2910	2990	2450	< 1.0
Dissolved Oxygen	mg/l	1	NONE	2.3	2.2	6.3	9.2
Speciated PAHs							
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH							
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-044172
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				652938	652939	652940	652941
Sample Reference				PW01	Dis Tank	Dis Pond	PW01 D1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/08/2025	19/08/2025	19/08/2025	19/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Heavy Metals / Metalloids							
Aluminium (dissolved)	µg/l	1	NONE	1.6	2.6	3.1	9.5
Antimony (dissolved)	µg/l	0.4	ISO 17025	< 0.4	< 0.4	< 0.4	< 0.4
Arsenic (dissolved)	µg/l	0.15	ISO 17025	4.01	4.12	3.27	< 0.15
Barium (dissolved)	µg/l	0.06	ISO 17025	23	24	53	0.9
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3	0.5	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	2.7	3.2	5	1.4
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1400	1400	1000	0.87
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	5.6	6.3	5.5	0.13
Nickel (dissolved)	µg/l	0.5	ISO 17025	4.8	1.3	1.9	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	1	1	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.7	7.2	3.3	2.1
Boron (dissolved)	µg/l	10	ISO 17025	1900	1900	1700	< 10
Calcium (dissolved)	mg/l	0.012	ISO 17025	240	250	210	0.21
Iron (dissolved)	mg/l	0.004	ISO 17025	0.029	0.028	0.48	< 0.004
Magnesium (dissolved)	mg/l	0.005	ISO 17025	560	570	470	0.061
Potassium (dissolved)	mg/l	0.025	ISO 17025	160	160	130	< 0.025
Sodium (dissolved)	mg/l	0.01	ISO 17025	4000 $$	3800 $$	3300 $$	1.5
Petroleum Hydrocarbons							
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	7.4
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-044172
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				652938	652939	652940	652941
Sample Reference				PW01	Dis Tank	Dis Pond	PW01 D1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/08/2025	19/08/2025	19/08/2025	19/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	9.2
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	1.6
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	11.4
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	4.2
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-044172
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				652938	652939	652940	652941
Sample Reference				PW01	Dis Tank	Dis Pond	PW01 D1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/08/2025	19/08/2025	19/08/2025	19/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**				
PFAS							
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-044172
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12 - C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

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Analytical Report Number : 25-044172
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

Analytical Report Number : 25-044172
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

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Analytical Report Number : 25-046223

Project / Site name:	Liverpool Bay	**Samples received on:**	01/09/2025
Your job number:		**Samples instructed on/ Analysis started on:**	01/09/2025
Your order number:	701707	**Analysis completed by:**	10/09/2025
Report Issue Number:	1	**Report issued on:**	10/09/2025
Samples Analysed:	7 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING
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Normec i2 Analytical

Analytical Report Number: 25-046223
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				663828	663829	663830	663831	663832
Sample Reference				Stillwell 1	Stillwell 2	Stillwell 3	PW01	PWMW01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	7.7	7.5	7.8	7.8	7.4
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	6900	710	630	6900	2800
Sulphate as SO_4	mg/l	0.045	ISO 17025	185	28	39.4	283	35
Chloride	mg/l	0.15	ISO 17025	1400 $^{\$\$}$	42	47	1600 $^{\$\$}$	560
Orthophosphate as PO_4	µg/l	62	ISO 17025	7900	< 62	240	4000	130
Fluoride	µg/l	50	ISO 17025	800	210	130	1600	1500
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	6300	4900	110	2400	94
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	27.2	2.27	2.9	7.69	23.7
Nitrate as N	mg/l	0.01	ISO 17025	0.09	0.12	3.21	0.06	0.11
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.41	0.52	14.2	0.26	0.47
Nitrite as NO_2	µg/l	5	ISO 17025	19	570	49	< 5.0	< 5.0
Alkalinity as $CaCO_3$	mgCaCO 3/l	3	ISO 17025	610	220	240	750	920
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	210	17	5.9	34	66
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	920	27	8.9	1.5	18
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.099	0.291	3.23	0.058	0.105
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	14000	5900	9.3	29	610
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	4500	480	410	5000	1900
Hardness - Total	mgCaCO 3/l	1	ISO 17025	731	355	307	743	312
Dissolved Oxygen	mg/l	1	NONE	< 1.0	< 1.0	< 1.0	1.7	< 1.0
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

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Normec i2 Analytical

Analytical Report Number: 25-046223
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				663828	663829	663830	663831	663832
Sample Reference				Stillwell 1	Stillwell 2	Stillwell 3	PW01	PWMW01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Heavy Metals / Metalloids								
Aluminium (dissolved)	µg/l	1	NONE	6.9	5.3	2.2	2.8	69
Antimony (dissolved)	µg/l	0.4	ISO 17025	< 0.4	< 0.4	< 0.4	< 0.4	0.4
Arsenic (dissolved)	µg/l	0.15	ISO 17025	18.3	5.37	0.69	4.04	28.8
Barium (dissolved)	µg/l	0.06	ISO 17025	110	44	29	20	77
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.04	0.02	< 0.02	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.8	< 0.2	0.4	0.4	0.6
Copper (dissolved)	µg/l	0.5	ISO 17025	< 0.5	0.6	5.3	4.2	1
Lead (dissolved)	µg/l	0.2	ISO 17025	0.4 #	0.3	< 0.2	< 0.2	0.7
Manganese (dissolved)	µg/l	0.05	ISO 17025	760	1400	1.6	350	1600
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	1.1	74	1.5	43	40
Nickel (dissolved)	µg/l	0.5	ISO 17025	2	1.7	1.4	1.2	7.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	8.4	1.7	2.5	10	3.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	2	5.4	59	2400	9.6
Boron (dissolved)	µg/l	10	ISO 17025	880	50	33	1600	1600
Calcium (dissolved)	mg/l	0.012	ISO 17025	89	120	100	65	50
Iron (dissolved)	mg/l	0.004	ISO 17025	0.089	0.23	0.013	0.021	0.13
Magnesium (dissolved)	mg/l	0.005	ISO 17025	120	14	13	140	46
Potassium (dissolved)	mg/l	0.025	ISO 17025	50	4.9	3.5	71	42
Sodium (dissolved)	mg/l	0.01	ISO 17025	1200	23	33	1300 $$	620
Petroleum Hydrocarbons								
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	60000	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	60000	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Lab Sample Number				663828	663829	663830	663831	663832
Sample Reference				Stillwell 1	Stillwell 2	Stillwell 3	PW01	PWMW01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Lab Sample Number				663828	663829	663830	663831	663832
Sample Reference				Stillwell 1	Stillwell 2	Stillwell 3	PW01	PWMW01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
PFAS								
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-3	µg/l	0.05	NONE	0.16	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-9	µg/l	0.05	NONE	0.76	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acic	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	0.08	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	ng/L	1	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	0.08	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	0.25	< 0.05	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	2.1	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	0.1	< 0.05	< 0.05	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-046223
Project / Site name: Liverpool Bay

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Lab Sample Number				663833	663834
Sample Reference				MW01S	MW01D
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				None Supplied	None Supplied
Date Sampled				29/08/2025	28/08/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		
General Inorganics					
pH (L099)	pH Units	N/A	ISO 17025	7.7	7.9
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	1700	5200
Sulphate as SO_4	mg/l	0.045	ISO 17025	37.8	131
Chloride	mg/l	0.15	ISO 17025	160	1600 $^{\$\$}$
Orthophosphate as PO_4	µg/l	62	ISO 17025	1700	7200
Fluoride	µg/l	50	ISO 17025	910	1900
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	37	2200
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	12.6	11.3
Nitrate as N	mg/l	0.01	ISO 17025	0.07	0.04
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.31	0.16
Nitrite as NO_2	µg/l	5	ISO 17025	10	85
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	790	780
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	36	31
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	2.8	5.5
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.073	0.061
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	27	220
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	1200	3200
Hardness - Total	mgCaCO3/l	1	ISO 17025	272	363
Dissolved Oxygen	mg/l	1	NONE	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16

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Project / Site name: Liverpool Bay

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Lab Sample Number				663833	663834
Sample Reference				MW01S	MW01D
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				None Supplied	None Supplied
Date Sampled				29/08/2025	28/08/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		
Heavy Metals / Metalloids					
Aluminium (dissolved)	µg/l	1	NONE	3.7	4.1
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.9	0.5
Arsenic (dissolved)	µg/l	0.15	ISO 17025	14.1	8.69
Barium (dissolved)	µg/l	0.06	ISO 17025	64	64
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.6	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	4.6	4.1
Lead (dissolved)	µg/l	0.2	ISO 17025	0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	110	160
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	28	16
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.5	1.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	2.7	6.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	6.8	6.1
Boron (dissolved)	µg/l	10	ISO 17025	1600	1600
Calcium (dissolved)	mg/l	0.012	ISO 17025	33	37
Iron (dissolved)	mg/l	0.004	ISO 17025	0.079	0.1
Magnesium (dissolved)	mg/l	0.005	ISO 17025	46	66
Potassium (dissolved)	mg/l	0.025	ISO 17025	59	53
Sodium (dissolved)	mg/l	0.01	ISO 17025	270	1100
Petroleum Hydrocarbons					
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10
VOCs					
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0

Analytical Report Number: 25-046223
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				663833	663834
Sample Reference				MW01S	MW01D
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				None Supplied	None Supplied
Date Sampled				29/08/2025	28/08/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0

Analytical Report Number: 25-046223
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				663833	663834
Sample Reference				MW01S	MW01D
Sample Number				None Supplied	None Supplied
Water Matrix				Ground water	Ground water
Depth (m)				None Supplied	None Supplied
Date Sampled				29/08/2025	28/08/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		
PFAS					
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-3	µg/l	0.05	NONE	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-9	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acic	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/l	0.05	NONE	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/l	0.05	NONE	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	ng/L	1	NONE	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-046223
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12-C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

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Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

Analytical Report Number : 25-046223
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.
#- Quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as deviating and should be interpreted with caution. The result is not accredited.

Analytical Report Number : 25-046223
Project / Site name: Liverpool Bay

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
MW01D	N/A	W	663834	c	Ammoniacal Nitrogen as N in water	L082B	c
MW01D	N/A	W	663834	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW01D	N/A	W	663834	c	Dissolved Oxygen in water	L086B	c
MW01D	N/A	W	663834	c	Electrical Conductivity at 20°C in water	L031B	c
MW01D	N/A	W	663834	c	Nitrite in water	L082B	c
MW01D	N/A	W	663834	c	Total Dissolved Solids in water (Gravimetric)	L004B	c
MW01D	N/A	W	663834	c	pH of water at 20°C (automated)	L099-PL	c
MW01S	N/A	W	663833	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW01S	N/A	W	663833	c	Dissolved Oxygen in water	L086B	c
PW01	N/A	W	663831	c	Biochemical Oxygen Demand in water (Total)	L086B	c
PW01	N/A	W	663831	c	Dissolved Oxygen in water	L086B	c
PWMW01	N/A	W	663832	c	Biochemical Oxygen Demand in water (Total)	L086B	c
PWMW01	N/A	W	663832	c	Dissolved Oxygen in water	L086B	c
Stillwell 1	N/A	W	663828	c	Biochemical Oxygen Demand in water (Total)	L086B	c
Stillwell 1	N/A	W	663828	c	Dissolved Oxygen in water	L086B	c
Stillwell 2	N/A	W	663829	c	Biochemical Oxygen Demand in water (Total)	L086B	c
Stillwell 2	N/A	W	663829	c	Dissolved Oxygen in water	L086B	c
Stillwell 3	N/A	W	663830	c	Biochemical Oxygen Demand in water (Total)	L086B	c
Stillwell 3	N/A	W	663830	c	Dissolved Oxygen in water	L086B	c

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Analytical Report Number : 25-046224

Project / Site name:	Liverpool Bay	**Samples received on:**	01/09/2025
Your job number:		**Samples instructed on/ Analysis started on:**	01/09/2025
Your order number:	701707	**Analysis completed by:**	09/09/2025
Report Issue Number:	1	**Report issued on:**	09/09/2025
Samples Analysed:	5 water samples		

Signed:

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-046224
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				663835	663836	663837	663838	663839
Sample Reference				MW07S	MW07D	MW08S	MW08D	FWP
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	7.4	7.3	7.1	7.3	8.5
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	3300	1200	3100	3700	21000
Sulphate as SO_4	mg/l	0.045	ISO 17025	6.74	12.9	150	245	1030
Chloride	mg/l	0.15	ISO 17025	800	75	400	710	6500 $^{\$\$}$
Orthophosphate as PO_4	µg/l	62	ISO 17025	< 62	630	< 62	4100	930
Fluoride	µg/l	50	ISO 17025	830	730	790	910	860
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	2300	590	4000	2000	95
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	7.56	8.28	17.2	11.2	9.92
Nitrate as N	mg/l	0.01	ISO 17025	0.11	0.02	0.47	0.04	0.11
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.47	0.1	2.07	0.16	0.47
Nitrite as NO_2	µg/l	5	ISO 17025	< 5.0	U/S $^{*U/S}$	550	< 5.0	< 5.0
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	770	550	1100	970	450
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	38	23	51	36	260
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	25	6.8	3.1	1.8	3.7
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.105	U/S	0.633	0.035	0.106
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	130	20	84	51	150
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	2000	770	2100	2300	13000
Hardness - Total	mgCaCO3/l	1	ISO 17025	699	534	1050	811	2630
Dissolved Oxygen	mg/l	1	NONE	< 1.0	1.1	1.1	1.6	15
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-046224
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				663835	663836	663837	663838	663839
Sample Reference				MW07S	MW07D	MW08S	MW08D	FWP
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Heavy Metals / Metalloids								
Aluminium (dissolved)	µg/l	1	NONE	1.5	2.2	2.1	2.1	1.4
Antimony (dissolved)	µg/l	0.4	ISO 17025	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Arsenic (dissolved)	µg/l	0.15	ISO 17025	19.4	13.3	6.9	16.3	3.01
Barium (dissolved)	µg/l	0.06	ISO 17025	120	120	34	73	56
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.2	0.2	0.3	0.3	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	0.9	1.8	4	4.3	2.1
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	810	1100	3300	2000	290
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	15	17	18	7.4	10
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.5	2.5	4.4	4	0.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	2.4	2	5.7	5.5	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.6	4.6	4.3	4.7	3.4
Boron (dissolved)	µg/l	10	ISO 17025	990	710	1000	1400	1600
Calcium (dissolved)	mg/l	0.012	ISO 17025	96	100	270	140	180
Iron (dissolved)	mg/l	0.004	ISO 17025	0.084	0.052	0.083	0.13	0.06
Magnesium (dissolved)	mg/l	0.005	ISO 17025	110	67	88	110	530
Potassium (dissolved)	mg/l	0.025	ISO 17025	65	34	26	48	160
Sodium (dissolved)	mg/l	0.01	ISO 17025	520	81	430	700	3600 $^{\$\$}$
Petroleum Hydrocarbons								
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Normec i2 Analytical

Analytical Report Number: 25-046224
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				663835	663836	663837	663838	663839
Sample Reference				MW07S	MW07D	MW08S	MW08D	FWP
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-046224
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				663835	663836	663837	663838	663839
Sample Reference				MW07S	MW07D	MW08S	MW08D	FWP
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
PFAS								
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	ng/L	1	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	0.07	< 0.05	< 0.05	0.07	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 25-046224
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12-C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

Analytical Report Number : 25-046224
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

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Analytical Report Number : 25-046224
Project / Site name: Liverpool Bay

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

$$- Result was reported from high dilution. The result should be interpreted with caution.

*U/S- Unsuitable for analysis due to sample matrix.

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Analytical Report Number : 25-046224
Project / Site name: Liverpool Bay

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
FWP	N/A	W	663839	c	Biochemical Oxygen Demand in water (Total)	L086B	c
FWP	N/A	W	663839	c	Dissolved Oxygen in water	L086B	c
MW07D	N/A	W	663836	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW07D	N/A	W	663836	c	Dissolved Oxygen in water	L086B	c
MW07S	N/A	W	663835	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW07S	N/A	W	663835	c	Dissolved Oxygen in water	L086B	c
MW08D	N/A	W	663838	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW08D	N/A	W	663838	c	Dissolved Oxygen in water	L086B	c
MW08S	N/A	W	663837	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW08S	N/A	W	663837	c	Dissolved Oxygen in water	L086B	c

UKAS TESTING
4041

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Analytical Report Number : 25-046346

Project / Site name:	Liverpool Bay	**Samples received on:**	01/09/2025
Your job number:		**Samples instructed on/ Analysis started on:**	01/09/2025
Your order number:	701707	**Analysis completed by:**	09/09/2025
Report Issue Number:	1	**Report issued on:**	09/09/2025
Samples Analysed:	8 water samples		

Signed:

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-046346
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				664313	664314	664315	664316	664317
Sample Reference				MW03S	MW03D	MW04S	MW04D	MW05S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	8.4	8.4	8	8	8.3
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	1300	3300	960	1300	820
Sulphate as SO_4	mg/l	0.045	ISO 17025	31.8	68.6	24.3	14.7	51.6
Chloride	mg/l	0.15	ISO 17025	81	750	27	110	46
Orthophosphate as PO_4	µg/l	62	ISO 17025	1100	1100	< 62	130	170
Fluoride	µg/l	50	ISO 17025	1200	880	820	560	580
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	610	340	120	1100	110
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	8.62	9.5	13.5	9.45	7.55
Nitrate as N	mg/l	0.01	ISO 17025	0.07	0.04	0.09	0.08	0.04
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.31	0.16	0.41	0.36	0.16
Nitrite as NO_2	µg/l	5	ISO 17025	750	16	9.4	10	7.6
Alkalinity as $CaCO_3$	mgCaCO 3/l	3	ISO 17025	580	820	510	710	340
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	18	28	31	25	20
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	1.5	4.6	9.3	9.1	2
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	0.297	0.04	0.096	0.085	0.037
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	28	18	24	24	15
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	760	2000	580	800	580
Hardness - Total	mgCaCO 3/l	1	ISO 17025	262	461	488	522	384
Dissolved Oxygen	mg/l	1	NONE	1.5	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-046346
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				664313	664314	664315	664316	664317
Sample Reference				MW03S	MW03D	MW04S	MW04D	MW05S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Heavy Metals / Metalloids								
Aluminium (dissolved)	µg/l	1	NONE	3.4	< 1.0	1.8	2.4	2
Antimony (dissolved)	µg/l	0.4	ISO 17025	< 0.4	0.5	0.9	< 0.4	0.9
Arsenic (dissolved)	µg/l	0.15	ISO 17025	11.4	16.2	14.5	12.1	5.65
Barium (dissolved)	µg/l	0.06	ISO 17025	57	67	45	120	33
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.7	0.4	0.4	0.3	0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	5.8	2.7	0.8	1.1	2.8
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	180	1400	1400	1200	680
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	11	12	8.5	4	15
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.2	5.6	4.3	2.1	4.8
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.9	4.8	1.4	1.1	1.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	4.4	4	4.7	4.8	23
Boron (dissolved)	µg/l	10	ISO 17025	1100	1200	510	750	410
Calcium (dissolved)	mg/l	0.012	ISO 17025	47	76	120	87	94
Iron (dissolved)	mg/l	0.004	ISO 17025	0.009	0.036	0.081	0.046	0.045
Magnesium (dissolved)	mg/l	0.005	ISO 17025	35	66	48	74	36
Potassium (dissolved)	mg/l	0.025	ISO 17025	46	48	22	47	25
Sodium (dissolved)	mg/l	0.01	ISO 17025	180	590	34	120	44
Petroleum Hydrocarbons								
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-046346
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				664313	664314	664315	664316	664317
Sample Reference				MW03S	MW03D	MW04S	MW04D	MW05S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	3.8	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Normec i2 Analytical

Analytical Report Number: 25-046346
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				664313	664314	664315	664316	664317
Sample Reference				MW03S	MW03D	MW04S	MW04D	MW05S
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
PFAS								
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	0.38	0.52	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	0.65	0.49	0.1	0.1	0.11
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	ng/L	1	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	0.21	0.2	< 0.05	< 0.05	0.11
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	0.06	0.06	< 0.05	< 0.05	0.13
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	1	0.65	0.08	0.05	0.16
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	2.2	2.7	0.8	0.23	2.7
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	0.39	0.34	< 0.05	< 0.05	0.27
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	2.3	1.8	< 0.05	0.11	2.6
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	0.36	0.27	< 0.05	< 0.05	0.08
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	0.47	0.5	0.13	0.11	0.24

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-046346
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				664318	664319	664320
Sample Reference				MW05D	MW06S	MW06D
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status			
General Inorganics						
pH (L099)	pH Units	N/A	ISO 17025	8.3	8.1	8.4
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	1700	2000	2200
Sulphate as SO_4	mg/l	0.045	ISO 17025	54.2	95.7	113
Chloride	mg/l	0.15	ISO 17025	280	470	460
Orthophosphate as PO_4	µg/l	62	ISO 17025	150	< 62	< 62
Fluoride	µg/l	50	ISO 17025	1200	530	770
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	150	410	960
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	10.2	9.47	7.71
Nitrate as N	mg/l	0.01	ISO 17025	0.01	0.11	0.06
Nitrate as NO_3	mg/l	0.05	ISO 17025	0.05	0.47	0.26
Nitrite as NO_2	µg/l	5	ISO 17025	< 5.0	37	280
Alkalinity as $CaCO_3$	mgCaCO3/l	3	ISO 17025	550	360	480
Chemical Oxygen Demand (Settled)	mg/l	2	ISO 17025	20	24	21
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	3.1	2.5	2
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	< 0.020	0.116	0.142
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	36	79	190
Total Dissolved Solids (Gravimetric) (L004B)	mg/l	4	ISO 17025	1000	1200	1300
Hardness - Total	mgCaCO3/l	1	ISO 17025	396	614	597
Dissolved Oxygen	mg/l	1	NONE	< 1.0	1.1	1.9
Speciated PAHs						
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Total PAH						
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16

Analytical Report Number: 25-046346
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				664318	664319	664320
Sample Reference				MW05D	MW06S	MW06D
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status			
Heavy Metals / Metalloids						
Aluminium (dissolved)	µg/l	1	NONE	2	3	2.8
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.5	0.9	1.2
Arsenic (dissolved)	µg/l	0.15	ISO 17025	15.4	2.65	5.31
Barium (dissolved)	µg/l	0.06	ISO 17025	54	140	36
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.03	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.2	< 0.2	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	2	3.4	6
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	1	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1900	720	120
Molybdenum (dissolved)	µg/l	0.05	ISO 17025	7	23	9.5
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.9	3.7	4.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	2.2	2	2.3
Zinc (dissolved)	µg/l	0.5	ISO 17025	13	16	12
Boron (dissolved)	µg/l	10	ISO 17025	660	310	760
Calcium (dissolved)	mg/l	0.012	ISO 17025	82	130	95
Iron (dissolved)	mg/l	0.004	ISO 17025	0.017	0.047	< 0.004
Magnesium (dissolved)	mg/l	0.005	ISO 17025	47	68	87
Potassium (dissolved)	mg/l	0.025	ISO 17025	32	35	44
Sodium (dissolved)	mg/l	0.01	ISO 17025	230	190	280
Petroleum Hydrocarbons						
TPH (>EC8 - EC10) $_{HS\_1D\_TOTAL}$	µg/l	10	ISO 17025	< 10	< 10	< 10
TPH Total >EC8 - EC40 $_{HS+EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH (EC10 - EC40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
VOCs						
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-046346
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				664318	664319	664320
Sample Reference				MW05D	MW06S	MW06D
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status			
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0

Analytical Report Number: 25-046346
Project / Site name: Liverpool Bay

Your Order No: 701707

Lab Sample Number				664318	664319	664320
Sample Reference				MW05D	MW06S	MW06D
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				29/08/2025	29/08/2025	29/08/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status			
PFAS						
NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 28	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquanti	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitat	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
8:2FTOH (8:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
10:2FTOH (10:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4:2FTOH (4:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTOH (6:2 Fluorotelomer alcohol)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - C	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 31	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CA	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	ng/L	1	NONE	< 0.05	< 0.05	< 0.05
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/l	0.05	NONE	0.06	0.06	0.06

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Dissolved Solids in water (Gravimetric)	Determination of total dissolved solids in water by gravimetry. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on BS1377-3:2018 + A1:2021, and BSEN15216:227	L004B	W	ISO 17025
Total Suspended Solids in water	Determined gravimetrically with GFC filtration papers. Accredited matrices: SW, PW, GW, PrW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	ISO 17025
Chemical Oxygen Demand in water (Settled)	Determination of settled COD in water by reflux oxidation with acidified K2Cr2O7 followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	HACH DR/890 Colorimeter Procedures Manual (48470-22) (Ref 0170.2)	L065-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS. Accredited matrices (TPH C12-C35): SW, PW, GW	In-house method	L070B	W	NONE
Total Petroleum Hydrocarbons in water by GC-MS/GC-MS HS	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total oxidised nitrogen in water	Calculation from nitrate and nitrite	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton & Polish Standard Method PN-82/C-04579.08	L078-PL/L082B	W	NONE
Alkalinity of water (discrete analyser)	Determination of alkalinity of water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on MEWAM & USEPA Method 310.2	L082B	W	ISO 17025

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Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Orthophosphate as PO4 in water	Determination of orthophosphate in water by addition of ammonium molybdate, potassium antimonyl tartrate and ascorbic acid followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton, analysis by discreet analyser	L082B	W	ISO 17025
Biochemical Oxygen Demand in water (Total)	Determination of biochemical oxygen demand in water (5 days). Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on standard method 5210B	L086B	W	ISO 17025
Dissolved Oxygen in water	Determination of dissolved oxygen in water	In-house method	L086B	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC/MS	Determination of total petroleum hydrocarbons in water by headspace HS-GC/MS . Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE
Ammoniacal Nitrogen as N in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025

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Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
MW03D	N/A	W	664314	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW03D	N/A	W	664314	c	Dissolved Oxygen in water	L086B	c
MW03S	N/A	W	664313	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW03S	N/A	W	664313	c	Dissolved Oxygen in water	L086B	c
MW04D	N/A	W	664316	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW04D	N/A	W	664316	c	Dissolved Oxygen in water	L086B	c
MW04S	N/A	W	664315	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW04S	N/A	W	664315	c	Dissolved Oxygen in water	L086B	c
MW05D	N/A	W	664318	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW05D	N/A	W	664318	c	Dissolved Oxygen in water	L086B	c
MW05S	N/A	W	664317	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW05S	N/A	W	664317	c	Dissolved Oxygen in water	L086B	c
MW06D	N/A	W	664320	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW06D	N/A	W	664320	c	Dissolved Oxygen in water	L086B	c
MW06S	N/A	W	664319	c	Biochemical Oxygen Demand in water (Total)	L086B	c
MW06S	N/A	W	664319	c	Dissolved Oxygen in water	L086B	c