

APPENDIX F

LABORATORY CHEMICAL TEST RESULTS - GROUNDWATER



4041



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Analytical Report Number : 25-025222

Project / Site name:	Earlswood Training Centre	Samples received on:	16/05/2025
Your job number:	14050 RJH	Samples instructed on / Analysis started on:	16/05/2025
Your order number:		Analysis completed by:	02/06/2025
Report Issue Number:	1	Report issued on:	02/06/2025
Samples Analysed:	5 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.

Analytical Report Number: 25-025222
Project / Site name: Earlswood Training Centre

Lab Sample Number	547797	547798	547799	547800
Sample Reference	WS 203	WS 205	WS 206	WS 205A
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	14/05/2025	14/05/2025	14/05/2025	14/05/2025
Time Taken	1035	1115	1245	1315
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.5	7.8	7.7	-
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	-
Sulphate as SO ₄	µg/l	45	ISO 17025	14300	16300	16700	-
Total Sulphur	µg/l	15	NONE	4800	5400	5600	-
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	-
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	7.16	9.99	2.14	-
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	7.33	11	2.52	-
Hardness - Total	mgCaCO ₃ /l	1	ISO 17025	91.8	175	216	-

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	-
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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	-
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Time Taken	1035	1115	1245	1315
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	4.32	51.5	13.5	-
Beryllium (dissolved)	µg/l	0.1	ISO 17025	< 0.1	< 0.1	< 0.1	-
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	< 0.02	< 0.02	-
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	< 0.2	-
Copper (dissolved)	µg/l	0.5	ISO 17025	3.2	0.8	1.4	-
Lead (dissolved)	µg/l	0.2	ISO 17025	1.6	15	< 0.2	-
Mercury (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	-
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.6	2.1	1.5	-
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	< 0.6	4.7	-
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.9	1.8	0.8	-
Zinc (dissolved)	µg/l	0.5	ISO 17025	28	3.4	1.9	-

Boron (dissolved)	µg/l	10	ISO 17025	19	110	22	-
Calcium (dissolved)	mg/l	0.012	ISO 17025	32	61	80	-
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	-

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aliphatic >EC6 - EC8 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aliphatic >EC8 - EC10 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aliphatic >EC10 - EC12 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aliphatic >EC12 - EC16 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aliphatic >EC16 - EC21 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aliphatic >EC21 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aliphatic >EC35 - EC35 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aliphatic >EC16 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aliphatic >EC35 - EC44 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-

TPH - Aromatic >EC5 - EC7 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aromatic >EC7 - EC8 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	6.1	< 1.0	-
TPH - Aromatic >EC8 - EC10 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aromatic >EC10 - EC12 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC12 - EC16 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC16 - EC21 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC21 - EC35 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC35 - EC35 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC35 - EC40 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC35 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC40 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC5 - EC44 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-

TPH (>EC5 - EC10) _{HS_1D_TOTAL}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH (>EC10 - EC20) _{EH_1D_TOTAL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH (>EC20 - EC44) _{EH_1D_TOTAL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH Total >EC5 - EC44 _{HS+EH_1D_TOTAL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-



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Analytical Report Number: 25-025222

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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	14/05/2025	14/05/2025	14/05/2025	14/05/2025
Time Taken	1035	1115	1245	1315
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	-
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
Toluene	µg/l	1	ISO 17025	< 1.0	6	< 1.0	-
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	-
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-

PFAS

NetFOSA (ethyl perfluorooctanesulfonamide) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 27619-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitative	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 39108-34-2	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 27619-92-8	µg/l	0.05	NONE	< 0.05	0.38	< 0.05	0.28
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NetFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - CAS No 27619-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NetFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CAS No 375-13-6	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 79780-39-1	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 (Perfluoroheptanesulfonic 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 (Perfluoropentanoic acid) - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	0.13	< 0.05	0.07
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

Analytical Report Number: 25-025222

Project / Site name: Earlswood Training Centre

Lab Sample Number				547797	547798	547799	547800
Sample Reference				WS 203	WS 205	WS 206	WS 205A
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				14/05/2025	14/05/2025	14/05/2025	14/05/2025
Time Taken				1035	1115	1245	1315
Analytical Parameter (Water Analysis)				Units	Test Limit of detection	Test Accreditation Status	
Subcontracted Analysis							
Low Level PFOA (Subcontracted)				N/A	N/A	NONE	See Attached
Low Level PFOS (Subcontracted)				N/A	N/A	NONE	See Attached

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



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Analytical Report Number: 25-025222

Project / Site name: Earlswood Training Centre

Lab Sample Number				547801
Sample Reference				SPF 01
Sample Number				None Supplied
Water Matrix				Potable water (non regulatory)
Depth (m)				None Supplied
Date Sampled				14/05/2025
Time Taken				1335
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

PFAS

NetFOSA (ethyl perfluorooctanesulfonamide) - Semiquantitative	µg/l	0.05	NONE	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 27619-97-9	µg/l	0.05	NONE	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitative	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 39108-34-2	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 27619-97-9	µg/l	0.05	NONE	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
NetFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - CAS No 27619-97-9	µg/l	0.05	NONE	< 0.05
NetFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid) - CAS No 27619-97-9	µg/l	0.05	NONE	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CAS No 375-22-4	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 79780-39-1	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 (Perfluoroheptanesulfonic 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 (Perfluoropentanoic 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

Subcontracted Analysis

Low Level PFOA (Subcontracted)	N/A	N/A	NONE	See Attached
Low Level PFOS (Subcontracted)	N/A	N/A	NONE	See Attached

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

Analytical Report Number : 25-025222

Project / Site name: Earlswood Training Centre

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
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
Sulphide in water	Determination of sulphide in water by ion selective electrode	In-house method	L029-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved 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
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
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
Total Sulphur in water	Determination of total sulphur in water by acidification followed by ICP-OES	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	ISO 17025
Total Petroleum Hydrocarbons with carbon banding in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS with carbon banding aliphatic and aromatic	In-house method	L070B	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
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
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5-diphenylcarbazide, followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method by continuous flow analyser	L080-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Total cyanide in water	Determination of total cyanide in water by distillation 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	L080-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by HS-GC-MS	Determination of total petroleum hydrocarbons in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025

Analytical Report Number : 25-025222
Project / Site name: Earlswood Training Centre

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
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
Subcontracted analysis (water)	Subcontracted analysis - see attached subcon report.	Subcontracted analysis - see attached subcon report.			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 30°C.
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



TEST REPORT

Report Number: 2025-1320

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7743

Additional Reference: 25-025222

Issue : 0

Date of Receipt : 20/05/2025

Date of Analysis : 23/05/2025

Date of Report : 30/05/2025

Sample Type : Groundwater

Customer Sample Identifier : 547799 WS 206 14/05/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater
Test Report Number : 2025-1320
Customer Sample Identifier : 547799 WS 206 14/05/2025
Sample Condition : Conforming
Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	1.39
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	1.39
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	1.02
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	0.95
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	1.98

ND - not detected



TEST REPORT

Report Number: 2025-1319

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7743

Additional Reference: 25-025222

Issue : 0

Date of Receipt : 20/05/2025

Date of Analysis : 23/05/2025

Date of Report : 30/05/2025

Sample Type : Groundwater

Customer Sample Identifier : 547798 WS 205 14/05/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater

Test Report Number : 2025-1319

Customer Sample Identifier : 547798 WS 205 14/05/2025

Sample Condition : Conforming

Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	24.6
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	24.6
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	26.1
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	10.2
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	36.3

ND - not detected



TEST REPORT

Report Number: 2025-1318

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7743

Additional Reference: 25-025222

Issue : 0

Date of Receipt : 20/05/2025

Date of Analysis : 23/05/2025

Date of Report : 30/05/2025

Sample Type : Groundwater

Customer Sample Identifier : 547797 WS 203 14/05/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater
Test Report Number : 2025-1318
Customer Sample Identifier : 547797 WS 203 14/05/2025
Sample Condition : Conforming
Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	8.7
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	8.7
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	2.96
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	2.35
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	5.3

ND - not detected



TEST REPORT

Report Number: 2025-1322

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7743

Additional Reference: 25-025222

Issue : 0

Date of Receipt : 20/05/2025

Date of Analysis : 23/05/2025

Date of Report : 30/05/2025

Sample Type : Water

Customer Sample Identifier : 547801 SPF 01 14/05/2025 Portable Water

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Water

Test Report Number : 2025-1322

Customer Sample Identifier : 547801 SPF 01 14/05/2025 Portable Water

Sample Condition : Conforming

Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	ND
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	ND
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	ND
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	ND
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	ND

ND - not detected



4041



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e: reception@i2analytical.com

Analytical Report Number : 25-029817

Project / Site name:	Earlswood Training Centre	Samples received on:	09/06/2025
Your job number:	14050 RJH	Samples instructed on/ Analysis started on:	09/06/2025
Your order number:		Analysis completed by:	20/06/2025
Report Issue Number:	1	Report issued on:	20/06/2025
Samples Analysed:	5 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.

Analytical Report Number: 25-029817
Project / Site name: Earlswood Training Centre

Lab Sample Number	573568	573569	573570	573571
Sample Reference	WS 203	WS 205	WS 206	WS 203A
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	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Time Taken	1035	1115	1245	1315
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.1	7.5	7.7	-
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	-
Sulphate as SO ₄	µg/l	45	ISO 17025	1620	12000	16200	-
Total Sulphur	µg/l	15	NONE	540	4000	5400	-
Sulphide	µg/l	5	NONE	< 5.0	15	< 5.0	-
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.13	5.2	1.51	-
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	4.35	5.42	1.62	-
Hardness - Total	mgCaCO ₃ /l	1	ISO 17025	302	274	199	-

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	-
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	1.4	< 0.01	-
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	-
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	0.21	< 0.01	-
Fluorene	µg/l	0.01	ISO 17025	0.06	0.08	< 0.01	-
Phenanthrene	µg/l	0.01	ISO 17025	0.2	0.21	0.03	-
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	-
Fluoranthene	µg/l	0.01	ISO 17025	0.11	0.21	< 0.01	-
Pyrene	µg/l	0.01	ISO 17025	0.09	0.22	0.02	-
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.07	< 0.01	< 0.01	-
Chrysene	µg/l	0.01	ISO 17025	0.08	< 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	0.07	< 0.01	-

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	0.61	2.35	< 0.16	-
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	18.4	62.1	5.29	-
Beryllium (dissolved)	µg/l	0.1	ISO 17025	< 0.1	< 0.1	< 0.1	-
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	-
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	-
Copper (dissolved)	µg/l	0.5	ISO 17025	1.8	1.8	1.6	-
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	6.4	< 0.2	-
Mercury (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	-
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.4	1.5	1.4	-
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	2.3	-
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.2	1.1	0.6	-
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.4	2.4	2.6	-

Analytical Report Number: 25-029817
Project / Site name: Earlswood Training Centre

Lab Sample Number	573568	573569	573570	573571
Sample Reference	WS 203	WS 205	WS 206	WS 203A
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	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Time Taken	1035	1115	1245	1315
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Boron (dissolved)	µg/l	10	ISO 17025	99	120	23	-
Calcium (dissolved)	mg/l	0.012	ISO 17025	100	97	74	-
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	-

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aliphatic >EC6 - EC8 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aliphatic >EC8 - EC10 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aliphatic >EC10 - EC12 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	43	< 10	-
TPH - Aliphatic >EC12 - EC16 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	160	< 10	-
TPH - Aliphatic >EC16 - EC21 _{EH_1D_AL_MS}	µg/l	10	NONE	32	170	< 10	-
TPH - Aliphatic >EC21 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	330	130	< 10	-
TPH - Aliphatic >EC35 - EC35 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	370	500	< 10	-
TPH - Aliphatic >EC16 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	370	300	< 10	-
TPH - Aliphatic >EC35 - EC44 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	-

TPH - Aromatic >EC5 - EC7 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aromatic >EC7 - EC8 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aromatic >EC8 - EC10 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
TPH - Aromatic >EC10 - EC12 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC12 - EC16 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC16 - EC21 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC21 - EC35 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC35 - EC35 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC35 - EC40 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC35 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC40 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH - Aromatic >EC5 - EC44 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	-

TPH (>EC5 - EC10) _{HS_1D_TOTAL}	µg/l	10	NONE	< 10	< 10	< 10	-
TPH (>EC10 - EC20) _{EH_1D_TOTAL_MS}	µg/l	10	NONE	< 10	340	< 10	-
TPH (>EC20 - EC44) _{EH_1D_TOTAL_MS}	µg/l	10	NONE	370	160	< 10	-
TPH Total >EC5 - EC44 _{HS+EH_1D_TOTAL_MS}	µg/l	10	NONE	370	500	< 10	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	-
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-
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	-
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	-

Analytical Report Number: 25-029817
Project / Site name: Earlswood Training Centre

Lab Sample Number	573568	573569	573570	573571
Sample Reference	WS 203	WS 205	WS 206	WS 203A
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	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Time Taken	1035	1115	1245	1315
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

PFAS

NetFOSA (ethyl perfluorooctanesulfonamide) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative	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) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitative	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 39108-3	µg/l	0.05	NONE	< 0.05	0.11	< 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 27619-9	µg/l	0.05	NONE	< 0.05	0.75	< 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) -	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 3	µg/l	0.05	NONE	< 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
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 (Perfluorododecanesulfonic 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 (Perfluoroheptanesulfonic 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 (Perfluoronanesulfonic 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 (Perfluoropentanoic 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

Subcontracted Analysis

Low Level PFOA (Subcontracted)	N/A	N/A	NONE	See Attached	See Attached	See Attached	See Attached
Low Level PFOS (Subcontracted)	N/A	N/A	NONE	See Attached	See Attached	See Attached	See Attached

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

Analytical Report Number: 25-029817
Project / Site name: Earlswood Training Centre

Lab Sample Number				573572
Sample Reference				SPF 01
Sample Number				None Supplied
Water Matrix				Potable water (non regulatory)
Depth (m)				None Supplied
Date Sampled				04/06/2025
Time Taken				1335
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

PFAS

NetFOA (ethyl perfluorooctanesulfonamide) - Semiquantitative	µg/l	0.05	NONE	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 27619-91-2	µg/l	0.05	NONE	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitative	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 39108-34-9	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 27619-91-2	µg/l	0.05	NONE	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05
NetFOSA (ethyl perfluorooctanesulfonamidoacetic acid) - CAS No 27619-91-2	µg/l	0.05	NONE	< 0.05
NetFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamido acetic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05
NMeFOA (methyl perfluorooctanesulfonamide) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CAS No 375-13-6	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 79780-39-9	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 (Perfluoroheptanesulfonic 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 (Perfluoronananesulfonic 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 (Perfluoropentanoic 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

Subcontracted Analysis

Low Level PFOA (Subcontracted)	N/A	N/A	NONE	See Attached
Low Level PFOS (Subcontracted)	N/A	N/A	NONE	See Attached

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

Analytical Report Number : 25-029817
Project / Site name: Earlswood Training Centre

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
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
Sulphide in water	Determination of sulphide in water by ion selective electrode	In-house method	L029-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved 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
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
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
Total Sulphur in water	Determination of total sulphur in water by acidification followed by ICP-OES	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	ISO 17025
Total Petroleum Hydrocarbons with carbon banding in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS with carbon banding aliphatic and aromatic	In-house method	L070B	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
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
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5-diphenylcarbazide, followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method by continuous flow analyser	L080-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Total cyanide in water	Determination of total cyanide in water by distillation 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	L080-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by HS-GC-MS	Determination of total petroleum hydrocarbons in water by headspace 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

Analytical Report Number : 25-029817
Project / Site name: Earlswood Training Centre

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
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
Subcontracted analysis (water)	Subcontracted analysis - see attached subcon report.	Subcontracted analysis - see attached subcon report.			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 30°C.
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

Analytical Report Number : 25-029817

Project / Site name: Earlswood Training Centre

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
WS 203	N/A	W	573568	c	BTEX and/or Volatile Organic Compounds in water	L073B	c
WS 203	N/A	W	573568	c	Hexavalent chromium in water	L080-PL	c
WS 203	N/A	W	573568	c	Total Petroleum Hydrocarbons in water by HS-GC-MS	L088-PL	c
WS 203	N/A	W	573568	c	Total cyanide in water	L080-PL	c
WS 203	N/A	W	573568	c	pH of water at 20°C (automated)	L099-PL	c
WS 205	N/A	W	573569	c	BTEX and/or Volatile Organic Compounds in water	L073B	c
WS 205	N/A	W	573569	c	Hexavalent chromium in water	L080-PL	c
WS 205	N/A	W	573569	c	Total Petroleum Hydrocarbons in water by HS-GC-MS	L088-PL	c
WS 205	N/A	W	573569	c	Total cyanide in water	L080-PL	c
WS 205	N/A	W	573569	c	pH of water at 20°C (automated)	L099-PL	c
WS 206	N/A	W	573570	c	BTEX and/or Volatile Organic Compounds in water	L073B	c
WS 206	N/A	W	573570	c	Hexavalent chromium in water	L080-PL	c
WS 206	N/A	W	573570	c	Total Petroleum Hydrocarbons in water by HS-GC-MS	L088-PL	c
WS 206	N/A	W	573570	c	Total cyanide in water	L080-PL	c
WS 206	N/A	W	573570	c	pH of water at 20°C (automated)	L099-PL	c



TEST REPORT

Report Number: 2025-1608

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7804

Additional Reference: 25-029817

Issue : 0

Date of Receipt : 12/06/2025

Date of Analysis : 16/06/2025

Date of Report : 19/06/2025

Sample Type : Groundwater

Customer Sample Identifier : 573570 WS 206 04/06/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater
Test Report Number : 2025-1608
Customer Sample Identifier : 573570 WS 206 04/06/2025
Sample Condition : Conforming
Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	ND
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	ND
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	ND
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	ND
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	ND

ND - not detected



TEST REPORT

Report Number: 2025-1607

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7804

Additional Reference: 25-029817

Issue : 0

Date of Receipt : 12/06/2025

Date of Analysis : 16/06/2025

Date of Report : 19/06/2025

Sample Type : Groundwater

Customer Sample Identifier : 573569 WS 205 04/06/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater

Test Report Number : 2025-1607

Customer Sample Identifier : 573569 WS 205 04/06/2025

Sample Condition : Conforming

Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	24.7
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	24.7
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	16.6
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	6.62
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	23.2

ND - not detected



TEST REPORT

Report Number: 2025-1606

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7804

Additional Reference: 25-029817

Issue : 0

Date of Receipt : 12/06/2025

Date of Analysis : 16/06/2025

Date of Report : 19/06/2025

Sample Type : Groundwater

Customer Sample Identifier : 573568 WS 203 04/06/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater
Test Report Number : 2025-1606
Customer Sample Identifier : 573568 WS 203 04/06/2025
Sample Condition : Conforming
Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	2.37
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	2.37
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	2.67
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	1.41
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	4.08

ND - not detected



TEST REPORT

Report Number: 2025-1610

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7804

Additional Reference: 25-029817

Issue : 0

Date of Receipt : 12/06/2025

Date of Analysis : 16/06/2025

Date of Report : 19/06/2025

Sample Type : Water

Customer Sample Identifier : 573572 SPF 01 Portable Water 04/06/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Water

Test Report Number : 2025-1610

Customer Sample Identifier : 573572 SPF 01 Portable Water 04/06/2025

Sample Condition : Conforming

Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	ND
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	ND
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	ND
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	ND
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	ND

ND - not detected



TEST REPORT

Report Number: 2025-1609

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7804

Additional Reference: 25-029817

Issue : 0

Date of Receipt : 12/06/2025

Date of Analysis : 16/06/2025

Date of Report : 19/06/2025

Sample Type : Groundwater

Customer Sample Identifier : 573571 WS 203A 04/06/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater
Test Report Number : 2025-1609
Customer Sample Identifier : 573571 WS 203A 04/06/2025
Sample Condition : Conforming
Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	2.92
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	2.92
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	3.3
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	0.85
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	4.14

ND - not detected



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i2 Analytical Ltd.
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WD18 8YS

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e: reception@i2analytical.com

Analytical Report Number : 25-031166

Project / Site name:	Earlswood Training Centre	Samples received on:	13/06/2025
Your job number:	14050 RJH	Samples instructed on/ Analysis started on:	13/06/2025
Your order number:		Analysis completed by:	30/06/2025
Report Issue Number:	1	Report issued on:	30/06/2025
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.

Analytical Report Number: 25-031166
Project / Site name: Earlswood Training Centre

Lab Sample Number	581150	581151	581152
Sample Reference	WS 203	WS 205	WS 206
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	11/06/2025	11/06/2025	11/06/2025
Time Taken	1035	1115	1245
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.3	7.6	7.5
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	7700	18200	19100
Total Sulphur	µg/l	15	NONE	2600	6100	6400
Sulphide	µg/l	5	NONE	< 5.0	19	< 5.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.51	4.65	1.41
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	3.53	4.66	1.45
Hardness - Total	mgCaCO ₃ /l	1	ISO 17025	136	179	253

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10
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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	0.11	< 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
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	12.3	35.2	5.76
Beryllium (dissolved)	µg/l	0.1	ISO 17025	< 0.1	< 0.1	< 0.1
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.8	0.4	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	6	1.5	3.4
Lead (dissolved)	µg/l	0.2	ISO 17025	3.8	1.6	< 0.2
Mercury (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.7	1.5	2.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.9	0.6	3.2
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.5	1.2	1.1
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.6	8.6	23

Analytical Report Number: 25-031166
Project / Site name: Earlswood Training Centre

Lab Sample Number	581150	581151	581152
Sample Reference	WS 203	WS 205	WS 206
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	11/06/2025	11/06/2025	11/06/2025
Time Taken	1035	1115	1245
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status

Boron (dissolved)	µg/l	10	ISO 17025	53	110	25
Calcium (dissolved)	mg/l	0.012	ISO 17025	46	63	94
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >EC6 - EC8 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >EC8 - EC10 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >EC10 - EC12 _{EH_1D_AL_MS}	µg/l	10	NONE	16	23	18
TPH - Aliphatic >EC12 - EC16 _{EH_1D_AL_MS}	µg/l	10	NONE	65	150	55
TPH - Aliphatic >EC16 - EC21 _{EH_1D_AL_MS}	µg/l	10	NONE	48	380	20
TPH - Aliphatic >EC21 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	490	1200	< 10
TPH - Aliphatic >EC35 - EC44 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	620	1700	93
TPH - Aliphatic >EC16 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	540	1600	20
TPH - Aliphatic >EC35 - EC44 _{EH_1D_AL_MS}	µg/l	10	NONE	30	40	< 10

TPH - Aromatic >EC5 - EC7 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC12 - EC16 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC16 - EC21 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC21 - EC35 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC35 - EC44 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC35 - EC40 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC35 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC40 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC5 - EC44 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10

TPH (>EC5 - EC10) _{HS_1D_TOTAL}	µg/l	10	NONE	< 10	< 10	< 10
TPH (>EC10 - EC20) _{EH_1D_TOTAL_MS}	µg/l	10	NONE	91	190	78
TPH (>EC20 - EC44) _{EH_1D_TOTAL_MS}	µg/l	10	NONE	530	2000	25
TPH Total >EC5 - EC44 _{HS+EH_1D_TOTAL_MS}	µg/l	10	NONE	620	2200	100

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
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
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0

Analytical Report Number: 25-031166
Project / Site name: Earlswood Training Centre

Lab Sample Number	581150	581151	581152
Sample Reference	WS 203	WS 205	WS 206
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	11/06/2025	11/06/2025	11/06/2025
Time Taken	1035	1115	1245
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status

PFAS

NetFOSA (ethyl perfluorooctanesulfonamide) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative	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) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitative	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	0.09	< 0.05
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 75124-7	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	1.3	< 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) -	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	< 0.05
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	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
PFDS (Perfluorododecanesulfonic 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 (Perfluoroheptanesulfonic 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 (Perfluoropentanoic 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	< 0.05

Subcontracted Analysis

Low Level PFOA (Subcontracted)	N/A	N/A	NONE	See Attached	See Attached	See Attached
Low Level PFOS (Subcontracted)	N/A	N/A	NONE	See Attached	See Attached	See Attached

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

Analytical Report Number : 25-031166
Project / Site name: Earlswood Training Centre

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
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
Sulphide in water	Determination of sulphide in water by ion selective electrode	In-house method	L029-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved 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
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
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
Total Sulphur in water	Determination of total sulphur in water by acidification followed by ICP-OES	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	ISO 17025
Total Petroleum Hydrocarbons with carbon banding in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS with carbon banding aliphatic and aromatic	In-house method	L070B	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
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
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5-diphenylcarbazide, followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method by continuous flow analyser	L080-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Total cyanide in water	Determination of total cyanide in water by distillation 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	L080-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by HS-GC-MS	Determination of total petroleum hydrocarbons in water by headspace 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

Analytical Report Number : 25-031166
Project / Site name: Earlswood Training Centre

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
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
Subcontracted analysis (water)	Subcontracted analysis - see attached subcon report.	Subcontracted analysis - see attached subcon report.			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 30°C.
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



TEST REPORT

Report Number: 2025-1808

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7836

Additional Reference: 25-031166

Issue : 0

Date of Receipt : 18/06/2025

Date of Analysis : 19/06/2025

Date of Report : 25/06/2025

Sample Type : Groundwater

Customer Sample Identifier : 581152 WS 206 11/06/2025

Sample Condition : Non-Conforming*

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS. ***Sample's temperature outside of acceptable range.**

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater
Test Report Number : 2025-1808
Customer Sample Identifier : 581152 WS 206 11/06/2025
Sample Condition : Non-Conforming*
Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	ND
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	ND
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	ND
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	ND
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	ND

ND - not detected



TEST REPORT

Report Number: 2025-1807

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7836

Additional Reference: 25-031166

Issue : 0

Date of Receipt : 18/06/2025

Date of Analysis : 19/06/2025

Date of Report : 25/06/2025

Sample Type : Groundwater

Customer Sample Identifier : 581151 WS 205 11/06/2025

Sample Condition : Non-Conforming*

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS. ***Sample's temperature outside of acceptable range.**

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater
Test Report Number : 2025-1807
Customer Sample Identifier : 581151 WS 205 11/06/2025
Sample Condition : Non-Conforming*
Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	32.4
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	32.4
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	19.1
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	8.9
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	28

ND - not detected



TEST REPORT

Report Number: 2025-1806

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7836

Additional Reference: 25-031166

Issue : 0

Date of Receipt : 18/06/2025

Date of Analysis : 19/06/2025

Date of Report : 25/06/2025

Sample Type : Groundwater

Customer Sample Identifier : 581150 WS 203 11/06/2025

Sample Condition : Non-Conforming*

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS. ***Sample's temperature outside of acceptable range.**

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Groundwater
Test Report Number : 2025-1806
Customer Sample Identifier : 581150 WS 203 11/06/2025
Sample Condition : Non-Conforming*
Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	5.51
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	5.51
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	3.82
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	1.94
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	5.75

ND - not detected

APPENDIX G

LABORATORY CHEMICAL TEST RESULTS – SURFACE WATER



4041



Integral Geotechnique
Integral House
7 Beddau Way
Castlegate Business Park
CF83 2AX

i2 Analytical Ltd.
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t: 2920807991

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e: reception@i2analytical.com

Analytical Report Number : 25-025223

Project / Site name:	Earlswood Training Centre	Samples received on:	16/05/2025
Your job number:	14050 RJH	Samples instructed on / Analysis started on:	16/05/2025
Your order number:		Analysis completed by:	02/06/2025
Report Issue Number:	1	Report issued on:	02/06/2025
Samples Analysed:	2 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: 25-025223

Project / Site name: Earlswood Training Centre

Lab Sample Number	547802	547803
Sample Reference	RSC 01	RMD 01
Sample Number	None Supplied	None Supplied
Water Matrix	Surface water	Surface water
Depth (m)	None Supplied	None Supplied
Date Sampled	14/05/2025	14/05/2025
Time Taken	930	1005
Analytical Parameter (Water Analysis)	Units	Test Limit of detection
		Test Accreditation Status

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	8.1	8.1
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	2470000	2050000 ^{§§}
Total Sulphur	µg/l	15	NONE	820000	680000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	0.78	0.75
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	0.85	0.84
Hardness - Total	mgCaCO ₃ /l	1	ISO 17025	5680	5780

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	230	69
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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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Analytical Report Number: 25-025223
Project / Site name: Earlswood Training Centre

Lab Sample Number				547802	547803
Sample Reference				RSC 01	RMD 01
Sample Number				None Supplied	None Supplied
Water Matrix				Surface water	Surface water
Depth (m)				None Supplied	None Supplied
Date Sampled				14/05/2025	14/05/2025
Time Taken				930	1005
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.86	1.73
Beryllium (dissolved)	µg/l	0.1	ISO 17025	< 0.1	< 0.1
Cadmium (dissolved)	µg/l	0.02	ISO 17025	<0.1 [§]	<0.1 [§]
Chromium (dissolved)	µg/l	0.2	ISO 17025	2.5	<1 [§]
Copper (dissolved)	µg/l	0.5	ISO 17025	8.4	9.2
Lead (dissolved)	µg/l	0.2	ISO 17025	<1 [§]	<1 [§]
Mercury (dissolved)	µg/l	0.05	ISO 17025	<0.25 [§]	<0.25 [§]
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.2	<2.5 [§]
Selenium (dissolved)	µg/l	0.6	ISO 17025	<3 [§]	<3 [§]
Vanadium (dissolved)	µg/l	0.2	ISO 17025	1.4	1.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	9	8.6

Boron (dissolved)	µg/l	10	ISO 17025	3700	3300
Calcium (dissolved)	mg/l	0.012	ISO 17025	370	370
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC6 - EC8 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC8 - EC10 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC10 - EC12 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC12 - EC16 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC16 - EC21 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC21 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC5 - EC35 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC16 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC35 - EC44 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10

TPH - Aromatic >EC5 - EC7 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC12 - EC16 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC16 - EC21 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC21 - EC35 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC5 - EC35 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC35 - EC40 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC35 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC40 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC5 - EC44 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10

TPH (>EC5 - EC10) _{HS_1D_TOTAL}	µg/l	10	NONE	< 10	< 10
TPH (>EC10 - EC20) _{EH_1D_TOTAL_MS}	µg/l	10	NONE	< 10	< 10
TPH (>EC20 - EC44) _{EH_1D_TOTAL_MS}	µg/l	10	NONE	< 10	< 10
TPH Total >EC5 - EC44 _{HS+EH_1D_TOTAL_MS}	µg/l	10	NONE	< 10	< 10



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Analytical Report Number: 25-025223

Project / Site name: Earlswood Training Centre

Lab Sample Number	547802	547803
Sample Reference	RSC 01	RMD 01
Sample Number	None Supplied	None Supplied
Water Matrix	Surface water	Surface water
Depth (m)	None Supplied	None Supplied
Date Sampled	14/05/2025	14/05/2025
Time Taken	930	1005
Analytical Parameter (Water Analysis)	Units	Test Limit of detection
		Test Accreditation Status

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0

PFAS

NetFOSA (ethyl perfluorooctanesulfonamide) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 27619-92-7	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitative	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 39108-34-2	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 27619-92-7	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NetFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - CAS No 27619-92-7	µg/l	0.05	NONE	< 0.05	< 0.05
NetFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CAS No 375-13-6	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 79780-39-1	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 (Perfluoroheptanesulfonic 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 (Perfluoronananesulfonic 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 (Perfluoropentanoic 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



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Analytical Report Number: 25-025223

Project / Site name: Earlswood Training Centre

Lab Sample Number				547802	547803
Sample Reference				RSC 01	RMD 01
Sample Number				None Supplied	None Supplied
Water Matrix				Surface water	Surface water
Depth (m)				None Supplied	None Supplied
Date Sampled				14/05/2025	14/05/2025
Time Taken				930	1005
Analytical Parameter (Water Analysis)				Units	Test Limit of detection
				Test Accreditation Status	
Subcontracted Analysis					
Low Level PFOA (Subcontracted)				N/A	N/A
Low Level PFOS (Subcontracted)				NONE	NONE
				See Attached	See Attached
				See Attached	See Attached

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

Analytical Report Number : 25-025223

Project / Site name: Earlswood Training Centre

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
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
Sulphide in water	Determination of sulphide in water by ion selective electrode	In-house method	L029-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved 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
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
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
Total Sulphur in water	Determination of total sulphur in water by acidification followed by ICP-OES	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	ISO 17025
Total Petroleum Hydrocarbons with carbon banding in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS with carbon banding aliphatic and aromatic	In-house method	L070B	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
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
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5-diphenylcarbazide, followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method by continuous flow analyser	L080-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Total cyanide in water	Determination of total cyanide in water by distillation 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	L080-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by HS-GC-MS	Determination of total petroleum hydrocarbons in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025

Analytical Report Number : 25-025223
Project / Site name: Earlswood Training Centre

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
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
Subcontracted analysis (water)	Subcontracted analysis - see attached subcon report.	Subcontracted analysis - see attached subcon report.			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 30°C.
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

&- 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.

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



TEST REPORT

Report Number: 2025-1317

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7744

Additional Reference: 25-025223

Issue : 0

Date of Receipt : 20/05/2025

Date of Analysis : 23/05/2025

Date of Report : 30/05/2025

Sample Type : Surface water

Customer Sample Identifier : 25-025223 547803 RMD 01

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Surface water

Test Report Number : 2025-1317

Customer Sample Identifier : 25-025223 547803 RMD 01

Sample Condition : Conforming

Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	ND
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	ND
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	ND
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	ND
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	ND

ND - not detected



TEST REPORT

Report Number: 2025-1316

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7744

Additional Reference: 25-025223

Issue : 0

Date of Receipt : 20/05/2025

Date of Analysis : 23/05/2025

Date of Report : 30/05/2025

Sample Type : Surface water

Customer Sample Identifier : 25-025223 547802 RSC 01

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Surface water

Test Report Number : 2025-1316

Customer Sample Identifier : 25-025223 547802 RSC 01

Sample Condition : Conforming

Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	ND
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	ND
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	ND
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	ND
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	ND

ND - not detected



4041



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i2 Analytical Ltd.
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e: reception@i2analytical.com

Analytical Report Number : 25-029793

Project / Site name:	Eastwood Training Centre	Samples received on:	09/06/2025
Your job number:	14050 RJH	Samples instructed on/ Analysis started on:	09/06/2025
Your order number:		Analysis completed by:	20/06/2025
Report Issue Number:	1	Report issued on:	20/06/2025
Samples Analysed:	2 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.

Analytical Report Number: 25-029793
Project / Site name: Eastswood Training Centre

Lab Sample Number	573345	573346
Sample Reference	RSC 01	RMD 01
Sample Number	None Supplied	None Supplied
Water Matrix	Surface water	Surface water
Depth (m)	None Supplied	None Supplied
Date Sampled	04/06/2025	04/06/2025
Time Taken	930	1005
Analytical Parameter (Water Analysis)	Units	Test Limit of detection
		Test Accreditation Status

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	8	8
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	1380000	1390000
Total Sulphur	µg/l	15	NONE	460000	460000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.25	1.79
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	2.44	1.91
Hardness - Total	mgCaCO ₃ /l	1	ISO 17025	3370	3550

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	72	62
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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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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.5	1.51
Beryllium (dissolved)	µg/l	0.1	ISO 17025	< 0.1	< 0.1
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	9.9	9.5
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	0.11	0.06
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.2	1.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6
Vanadium (dissolved)	µg/l	0.2	ISO 17025	1	0.9
Zinc (dissolved)	µg/l	0.5	ISO 17025	9.2	7.7

Analytical Report Number: 25-029793
Project / Site name: Eastwood Training Centre

Lab Sample Number	573345	573346
Sample Reference	RSC 01	RMD 01
Sample Number	None Supplied	None Supplied
Water Matrix	Surface water	Surface water
Depth (m)	None Supplied	None Supplied
Date Sampled	04/06/2025	04/06/2025
Time Taken	930	1005
Analytical Parameter (Water Analysis)	Units	Test Limit of detection
		Test Accreditation Status

Boron (dissolved)	µg/l	10	ISO 17025	1700	1700
Calcium (dissolved)	mg/l	0.012	ISO 17025	210	220
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS 1D AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC6 - EC8 _{HS 1D AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC8 - EC10 _{HS 1D AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC10 - EC12 _{EH 1D AL MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC12 - EC16 _{EH 1D AL MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC16 - EC21 _{EH 1D AL MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC21 - EC35 _{EH 1D AL MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC5 - EC35 _{HS+EH 1D AL MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC16 - EC35 _{EH 1D AL MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC35 - EC44 _{EH 1D AL MS}	µg/l	10	NONE	< 10	< 10

TPH - Aromatic >EC5 - EC7 _{HS 1D AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 _{HS 1D AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 _{HS 1D AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 _{EH 1D AR MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC12 - EC16 _{EH 1D AR MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC16 - EC21 _{EH 1D AR MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC21 - EC35 _{EH 1D AR MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC5 - EC35 _{HS+EH 1D AR MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC35 - EC40 _{EH 1D AR MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC35 - EC44 _{EH 1D AR MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC40 - EC44 _{EH 1D AR MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC5 - EC44 _{HS+EH 1D AR MS}	µg/l	10	NONE	< 10	< 10

TPH (>EC5 - EC10) _{HS 1D TOTAL}	µg/l	10	NONE	< 10	< 10
TPH (>EC10 - EC20) _{EH 1D TOTAL MS}	µg/l	10	NONE	< 10	< 10
TPH (>EC20 - EC44) _{EH 1D TOTAL MS}	µg/l	10	NONE	< 10	< 10
TPH Total >EC5 - EC44 _{HS+EH 1D TOTAL MS}	µg/l	10	NONE	< 10	< 10

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0

Analytical Report Number: 25-029793
Project / Site name: Eastwood Training Centre

Lab Sample Number	573345	573346
Sample Reference	RSC 01	RMD 01
Sample Number	None Supplied	None Supplied
Water Matrix	Surface water	Surface water
Depth (m)	None Supplied	None Supplied
Date Sampled	04/06/2025	04/06/2025
Time Taken	930	1005
Analytical Parameter (Water Analysis)	Units	Test Unit of detection
		Test Accreditation Status

PFAS

NetFOSA (ethyl perfluorooctanesulfonamide) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 27619-91-1	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTCA (8:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquantitative	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantitative	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 39108-34-2	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 27619-91-1	µg/l	0.05	NONE	< 0.05	< 0.05
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NetFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NetFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSAA (methyl perfluorooctanesulfonamido acetic acid) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 375-13-6	µg/l	0.05	NONE	< 0.05	< 0.05
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - CAS No 375-13-6	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 79780-39-9	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 (Perfluorododecanesulfonic 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 (Perfluoroheptanesulfonic 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 (Perfluoronanesulfonic 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 (Perfluoropentanoic 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

Subcontracted Analysis

Low Level PFOA (Subcontracted)	N/A	N/A	NONE	See Attached	See Attached
Low Level PFOS (Subcontracted)	N/A	N/A	NONE	See Attached	See Attached

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

Analytical Report Number : 25-029793
Project / Site name: Eastwood Training Centre

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
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
Sulphide in water	Determination of sulphide in water by ion selective electrode	In-house method	L029-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved 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
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
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
Total Sulphur in water	Determination of total sulphur in water by acidification followed by ICP-OES	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	ISO 17025
Total Petroleum Hydrocarbons with carbon banding in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS with carbon banding aliphatic and aromatic	In-house method	L070B	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
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
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5-diphenylcarbazide, followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method by continuous flow analyser	L080-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Total cyanide in water	Determination of total cyanide in water by distillation 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	L080-PL	W	ISO 17025
Total Petroleum Hydrocarbons in water by HS-GC-MS	Determination of total petroleum hydrocarbons in water by headspace 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

Analytical Report Number : 25-029793
Project / Site name: Eastwood Training Centre

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
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
Subcontracted analysis (water)	Subcontracted analysis - see attached subcon report.	Subcontracted analysis - see attached subcon report.			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 30°C.
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

Analytical Report Number : 25-029793

Project / Site name: Eastwood Training Centre

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
RMD 01	N/A	W	573346	c	pH of water at 20°C (automated)	L099-PL	c
RSC 01	N/A	W	573345	c	pH of water at 20°C (automated)	L099-PL	c



TEST REPORT

Report Number: 2025-1612

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7805

Additional Reference: 25-029793

Issue : 0

Date of Receipt : 12/06/2025

Date of Analysis : 16/06/2025

Date of Report : 19/06/2025

Sample Type : Surface water

Customer Sample Identifier : 573346 RMD 01 04/06/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Surface water

Test Report Number : 2025-1612

Customer Sample Identifier : 573346 RMD 01 04/06/2025

Sample Condition : Conforming

Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	ND
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	ND
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	0.79
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	ND
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	0.79

ND - not detected



TEST REPORT

Report Number: 2025-1611

Customer Name : i2 Analytical UK

Customer Address : 7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 SYS

Order Number : PO_S_C7805

Additional Reference: 25-029793

Issue : 0

Date of Receipt : 12/06/2025

Date of Analysis : 16/06/2025

Date of Report : 19/06/2025

Sample Type : Surface water

Customer Sample Identifier : 573345 RSC 01 04/06/2025

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit
Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Surface water

Test Report Number : 2025-1611

Customer Sample Identifier : 573345 RSC 01 04/06/2025

Sample Condition : Conforming

Test Method : VLS SOP 021

Target Analyte Name	Abbreviation	CAS Reg No	MDLs	Units	Conc.
Linear Perfluorooctanoic acid	PFOA Linear	335-67-1	0.65	ng/l	ND
Branched Perfluorooctanoic acid	PFOA Branched	-	0.65	ng/l	ND
Perfluorooctanoic acid Total	PFOA Total	-	0.65	ng/l	ND
Linear Perfluorooctanesulfonic acid	PFOS Linear	1763-23-1	0.65	ng/l	ND
Branched Perfluorooctanesulfonic acid	PFOS Branched	-	0.65	ng/l	ND
Perfluorooctanesulfonic acid Total	PFOS Total	-	0.65	ng/l	ND

ND - not detected