Certificate of Analysis

Certificate Number 25-08546 *Issued:* 29-Apr-25

Client Earth Science Partnership
33 Cardiff Road
Taffs Well
Cardiff
CF15 7RB

Our Reference 25-08546

Client Reference ~ 9222

Order No ~ 13384

Contract Title ~ Sandfields Yound Buisness Centre

Description 2 Other Water samples.

Date Received 16-Apr-25

Date Started 16-Apr-25

Date Completed 29-Apr-25

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Reyhan Irfan
Operations Manager

Summary of Chemical Analysis
Water Samples

Our Ref 25-08546
Client Ref ~ 9222
Contract Title ~ Sandfields Yound Buisness Centre

			Lab No	2495985	2495986
			Sample ID ~	CP101A	CP103
			Depth ~	5.00	5.50
			Other ID ~		
			Sample Type ~	WATER OTHER	WATER OTHER
			Sampling Date ~	14/04/2025	14/04/2025
			Sampling Time ~	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Metals					
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	8.6	5.6
Boron, Dissolved	DETSC 2306*	12	ug/l	65.4	120.2
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	1.4
Copper, Dissolved	DETSC 2306	0.4	ug/l	1.1	1.5
Lead, Dissolved	DETSC 2306	0.09	ug/l	< 0.09	< 0.09
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	2.4	1.4
Zinc, Dissolved	DETSC 2306	1.3	ug/l	220	110
Inorganics					
pH	DETSC 2008		pH	7.7	7.9
Cyanide, Total	DETSC 2130	0.04	mg/l	< 0.04	< 0.04
Sulphate as SO4	DETSC 2055	0.1	mg/l	100	63
Petroleum Hydrocarbons					
EPH (C10-C40): EH_1D_Total	DETSC 3311	10	ug/l	43	36
PAHs					
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.02
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.02
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.04
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Naphthalene	DETSC 3304	0.05	ug/l	< 0.05	< 0.05
Phenanthrene	DETSC 3304	0.01	ug/l	< 0.01	0.03
Pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.03
PAH Total	DETSC 3304	0.2	ug/l	< 0.20	< 0.20
Phenols					
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100

Information in Support of the Analytical Results

Our Ref 25-08546
Client Ref ~ 9222
Contract ~ Sandfields Yound Buisness Centre

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2495985	CP101A 5.00 WATER OTHER	14/04/25	GB 1L, GV x2, PB 1L		
2495986	CP103 5.50 WATER OTHER	14/04/25	GB 1L, GV x2, PB 1L		

Key: G-Glass P-Plastic B-Bottle V-Vial

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#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 eg. EH+HS_Total or EH_CU+HS_Total

Det	Acronym
EPH (C10-C40)	EH_1D_Total

Key:
~ Sample details are provided by the client and can affect the validity of the results
***** -not accredited.
# -MCERTS (accreditation only applies if report carries the MCERTS logo).
$ -subcontracted.
n/s -not supplied.
I/S -insufficient sample.
U/S -unsuitable sample.
t/f -to follow.
nd -not detected.

End of Report

Certificate of Analysis

Certificate Number 25-09184 *Issued:* 08-May-25

Client Earth Science Partnership
33 Cardiff Road
Taffs Well
Cardiff
CF15 7RB

Our Reference 25-09184

Client Reference ~ 9222

Order No ~ 13410

Contract Title ~ Sandfields Young Business Park

Description 2 Water No Information Supplied samples.

Date Received 25-Apr-25

Date Started 25-Apr-25

Date Completed 08-May-25

Test Procedures Identified by prefix DETSn (details on request).

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Approved By

Louise Cook
Contracts Manager

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Summary of Chemical Analysis
Water Samples

Our Ref 25-09184
Client Ref ~ 9222
Contract Title ~ Sandfields Young Business Park

			Lab No	2499403	2499404
			Sample ID ~	CP101A	CP103
			Depth ~	5.00	5.50
			Other ID ~	Round 2	Round 2
			Sample Type ~	WATER UNKNOWN	WATER UNKNOWN
			Sampling Date ~	23/04/2025	23/04/2025
			Sampling Time ~	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Metals					
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	12	5.8
Boron, Dissolved	DETSC 2306*	12	ug/l	68.8	90.3
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	1.4
Copper, Dissolved	DETSC 2306	0.4	ug/l	1.1	1.5
Lead, Dissolved	DETSC 2306	0.09	ug/l	< 0.09	< 0.09
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	1.5	1.3
Zinc, Dissolved	DETSC 2306	1.3	ug/l	120	13
Inorganics					
pH	DETSC 2008		pH	7.5	7.7
Cyanide, Total	DETSC 2130	0.04	mg/l	< 0.04	< 0.04
Sulphate as SO4	DETSC 2055	0.1	mg/l	59	49
Petroleum Hydrocarbons					
EPH (C10-C40): EH_1D_Total	DETSC 3311	10	ug/l	78	45
PAHs					
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Anthracene	DETSC 3304	0.01	ug/l	0.02	< 0.01
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.03	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.02	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	0.03	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	0.17	< 0.01
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Naphthalene	DETSC 3304	0.05	ug/l	< 0.05	< 0.05
Phenanthrene	DETSC 3304	0.01	ug/l	0.09	0.02
Pyrene	DETSC 3304	0.01	ug/l	0.20	0.02
PAH Total	DETSC 3304	0.2	ug/l	0.55	< 0.20
Phenols					
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100

Information in Support of the Analytical Results

Our Ref 25-09184
Client Ref ~ 9222
Contract ~ Sandfields Young Business Park

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2499403	CP101A 5.00 WATER UNKNOWN	23/04/25	GB 1L, GV, PB 1L		
2499404	CP103 5.50 WATER UNKNOWN	23/04/25	GB 1L, GV, PB 1L		

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End of Report