

Certificate Number 23-30321 Issued:

Client Earth Science Partnership

33 Cardiff Road
Taffs Well
Cardiff
CF15 7RB

Our Reference 23-30321

Client Reference 8711

Order No 12121

Contract Title CLIVE ROAD

Description 10 Soil samples.

Date Received 22-Dec-23

Date Started 22-Dec-23

Date Completed 05-Jan-24

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





Kirk Bridgewood General Manager





05-Jan-24



Summary of Chemical Analysis Matrix Descriptions

Our Ref 23-30321 Client Ref 8711 Contract Title CLIVE ROAD

Sample ID	Depth	Lab No	Completed	Matrix Description
TP101	0.5	2282204	05/01/2024	Brown gravelly, sandy CLAY
TP102	0.5	2282205	05/01/2024	Brown very gravelly, clayey SAND
TP103	0.5	2282206	05/01/2024	Brown sandy CLAY
WS01	0.25	2282207	05/01/2024	Brown sandy CLAY
WS03	0.35	2282208	05/01/2024	Brown very gravelly, clayey SAND
WS04	0.5	2282209	05/01/2024	Brown gravelly, sandy CLAY
WS05	0.30-0.45	2282210	05/01/2024	Brown gravelly, sandy CLAY (Possible made ground - brick)
TP101	1	2282211	05/01/2024	Brown very gravelly, clayey SAND
TP102	1.5	2282212	05/01/2024	Brown very gravelly, clayey SAND
TP103	1	2282213	05/01/2024	Brown very gravelly, clayey SAND



Summary of Chemical Analysis Soil Samples

Our Ref 23-30321 Client Ref 8711 Contract Title CLIVE ROAD

Lab No	2282204	2282205	2282206	2282207	2282208	2282209
.Sample ID	TP101	TP102	TP103	WS01	WS03	WS04
Depth	0.50	0.50	0.50	0.25	0.35	0.50
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	n/s	n/s	n/s	n/s	n/s	n/s
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

			ing rime	11/5	11/5	11/5	11/5	11/5	11/5
Test	Method	LOD	Units						
Metals				1				.	
Arsenic	DETSC 2301#	0.2	mg/kg	10	6.5	7.3	10	8.8	22
Beryllium	DETSC 2301#	0.2	mg/kg	0.5	0.5	0.4	0.5	0.5	0.6
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.7	0.4	1.4	0.9	0.7	1.0
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.4
Chromium	DETSC 2301#	0.15	mg/kg	100	14	17	17	15	16
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	48	12	13	16	19	45
Lead	DETSC 2301#	0.3	mg/kg	51	12	18	33	43	150
Mercury	DETSC 2325#	0.05	mg/kg	0.07	< 0.05	< 0.05	0.07	0.06	0.32
Nickel	DETSC 2301#	1	mg/kg	120	22	16	16	13	20
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	8.0	mg/kg	29	17	22	26	25	27
Zinc	DETSC 2301#	1	mg/kg	140	53	64	71	62	260
Inorganics									
рН	DETSC 2008#		рН	8.5	8.3	8.2	8.5	9.2	7.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1	< 0.1	0.1	0.2	< 0.1	0.5
Organic matter	DETSC 2002#	0.1	%	2.0	0.5	0.2	1.2	1.9	5.5
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l						
Sulphur as S, Total	DETSC 2320	0.01	%						
Sulphate as SO4, Total	DETSC 2321#	0.01	%						
PAHs				·		•			
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03	0.05	< 0.03	0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	0.05	< 0.03	0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.06	< 0.03	< 0.03	0.08	< 0.03	0.06
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.07	< 0.03	< 0.03	0.14	< 0.03	0.09
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.03	< 0.03	< 0.03
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	0.09	< 0.03	0.05
Pyrene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	< 0.03	0.12	< 0.03	0.07
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.26	< 0.10	< 0.10	0.52	< 0.10	0.26
Phenols			5 51						
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	0.7
: :: :::::::::::::::::::::::::::::::::		5.5	3,9	. 0.0	. 0.0		. 0.0	0.0	0.7



Summary of Chemical Analysis Soil Samples

Our Ref 23-30321 Client Ref 8711 Contract Title CLIVE ROAD

Lab No	2282210	2282211	2282212	2282213
.Sample ID	WS05	TP101	TP102	TP103
Depth	0.30-0.45	1.00	1.50	1.00
Other ID				
Sample Type	SOIL	SOIL	SOIL	SOIL
Sampling Date	n/s	n/s	n/s	n/s
Sampling Time	n/s	n/s	n/s	n/s

Sulphur as S, Total DETSC 2320 0.01 % < 0.01	Test	Method	LOD	Units	'	•	'	
Beryllium	Metals							
Boron, Water Soluble (2.5:1) DETSC 2311# 0.2 mg/kg 0.8	Arsenic	DETSC 2301#	0.2	mg/kg	38			
Cadmium DETSC 2301# 0.1 mg/kg 4.3 Chromium Chromium DETSC 2201# 0.15 mg/kg 42 42 Chromium, Hexavalent DETSC 2201# 0.1 mg/kg 240 42 Copper DETSC 2301# 0.2 mg/kg 240 44 Copper DETSC 2301# 0.3 mg/kg 2800 44 Mercury DETSC 2301# 0.5 mg/kg 0.75 Nickel Mercury DETSC 2301# 0.5 mg/kg 44 44 Selenium DETSC 2301# 0.5 mg/kg 43 3 Zinc DETSC 2301# 0.8 mg/kg 43 3 Zinc DETSC 2301# 0.8 mg/kg 43 3 Jinc DETSC 2008# PH 7.9 8.3 8.2 8.4 Cyanide, Total DETSC 2008# PH 7.9 8.3 8.2 8.4 Cyanide, Total DETSC 2008# PH	Beryllium	DETSC 2301#	0.2	mg/kg	1.2			
Chromium DETSC 2301# 0.15 mg/kg 42 Chromium, Hexavalent DETSC 2204* 1 mg/kg 4.0 Copper DETSC 2301# 0.2 mg/kg 240 Lead DETSC 2301# 0.3 mg/kg 2800 Mercury DETSC 2325# 0.05 mg/kg 0.75 Nickel DETSC 2301# 1 mg/kg 44 Selenium DETSC 2301# 0.8 mg/kg 43 Vanadium DETSC 2301# 0.8 mg/kg 43 Zinc DETSC 2301# 1 mg/kg 43 Zinc DETSC 2301# 1 mg/kg 43 Zinc DETSC 2301# 1 mg/kg 43 Zinc DETSC 2301# 0.1 mg/kg 43 Zinc DETSC 2301# 0.1 mg/kg 0.7 Organics PH 7.9 8.3 8.2 8.4 Cyanide, Total DETSC 2302# 0.1 mg/kg	Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.8			
Chromium, Hexavalent	Cadmium	DETSC 2301#	0.1	mg/kg	4.3			
Copper DETSC 2301# 0.2 mg/kg 240 Lead DETSC 2301# 0.3 mg/kg 2800 Mercury DETSC 2301# 1 mg/kg 0.75 Nickel DETSC 2301# 1 mg/kg 44 Selenium DETSC 2301# 0.5 mg/kg 43 Vanadium DETSC 2301# 0.8 mg/kg 43 Zinc DETSC 2301# 0.8 mg/kg 43 Zinc DETSC 2301# 1 mg/kg 1300 Inorganics Inorganics DETSC 2301# 1 mg/kg 0.7 Organic matter DETSC 2130# 0.1 mg/kg 0.7 8 Sulphate Aqueous Extract as SO4 (2:1) DETSC 2002# 0.1 mg/kg 0.7 8 Sulphate as SO4, Total DETSC 2320 0.01 % < 0.01	Chromium	DETSC 2301#	0.15	mg/kg	42			
Lead	Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0			
Mercury DETSC 2325# 0.05 mg/kg 0.75 Nickel DETSC 2301# 1 mg/kg 44 Selenium DETSC 2301# 0.5 mg/kg < 0.5	Copper	DETSC 2301#	0.2	mg/kg	240			
Nickel DETSC 2301# 1 mg/kg 44	Lead	DETSC 2301#	0.3	mg/kg	2800			
Nickel DETSC 2301# 1 mg/kg	Mercury	DETSC 2325#	0.05	mg/kg	0.75			
Selenium DETSC 2301# 0.5 mg/kg < 0.5 Vanadium DETSC 2301# 0.8 mg/kg 43 Zinc DETSC 2301# 1 mg/kg 1300 Inorganics Imag/kg 1300 1300 PH DETSC 2008# pH 7.9 8.3 8.2 8.4 Cyanide, Total DETSC 2130# 0.1 mg/kg 0.7 0.7 0.0 <td< td=""><td>Nickel</td><td>DETSC 2301#</td><td>1</td><td></td><td>44</td><td></td><td></td><td></td></td<>	Nickel	DETSC 2301#	1		44			
Time	Selenium	DETSC 2301#	0.5		< 0.5			
Inorganics PH	Vanadium	DETSC 2301#	0.8	mg/kg	43			
pH DETSC 2008# pH 7.9 8.3 8.2 8.4 Cyanide, Total DETSC 2130# 0.1 mg/kg 0.7 0.7 Organic matter DETSC 2002# 0.1 % 7.8 0.0 Sulphate Aqueous Extract as SO4 (2:1) DETSC 2006# 10 mg/k 0.01 0.02 0.01 0.01 0.02 0.01 0.01 0.02 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03	Zinc	DETSC 2301#	1	mg/kg	1300			
Cyanide, Total DETSC 2130# 0.1 mg/kg 0.7 Organic matter DETSC 2002# 0.1 % 7.8 Sulphate Aqueous Extract as SO4 (2:1) DETSC 2076# 10 mg/l 12 13 33 Sulphur as S, Total DETSC 2320 0.01 % < 0.01	Inorganics		•				•	
Cyanide, Total DETSC 2130# 0.1 mg/kg 0.7 Organic matter DETSC 2002# 0.1 % 7.8 Sulphate Aqueous Extract as SO4 (2:1) DETSC 2076# 10 mg/l 12 13 33 Sulphur as S, Total DETSC 2320 0.01 % < 0.01	рН	DETSC 2008#		рН	7.9	8.3	8.2	8.4
Sulphate Aqueous Extract as SO4 (2:1) DETSC 2076# 10 mg/l 12 13 33 Sulphur as S, Total DETSC 2320 0.01 % < 0.01	Cyanide, Total	DETSC 2130#	0.1		0.7			
Sulphur as S, Total DETSC 2320 0.01 % < 0.01 < 0.01 0.01 Sulphate as SO4, Total DETSC 2321# 0.01 % 0.02 0.01 0.04 PAHS Acenaphthene DETSC 3303# 0.03 mg/kg < 0.03	Organic matter	DETSC 2002#	0.1	%	7.8			
Sulphur as S, Total DETSC 2320 0.01 % < 0.01 < 0.01 0.01 Sulphate as SO4, Total DETSC 2321# 0.01 % 0.02 0.01 0.04 PAHS Acenaphthene DETSC 3303# 0.03 mg/kg < 0.03	Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l		12	13	33
PAHs Acenaphthene DETSC 3303# 0.03 mg/kg < 0.03	Sulphur as S, Total	DETSC 2320	0.01			< 0.01	< 0.01	0.01
Acenaphthene DETSC 3303# 0.03 mg/kg < 0.03 Acenaphthylene DETSC 3303# 0.03 mg/kg < 0.03	Sulphate as SO4, Total	DETSC 2321#	0.01	%		0.02	0.01	0.04
Acenaphthylene DETSC 3303# 0.03 mg/kg < 0.03 Anthracene DETSC 3303 0.03 mg/kg < 0.03	PAHs			-	·		•	
Anthracene DETSC 3303 0.03 mg/kg < 0.03 Benzo(a)anthracene DETSC 3303# 0.03 mg/kg 0.13 Benzo(a)pyrene DETSC 3303# 0.03 mg/kg 0.10 Benzo(b)fluoranthene DETSC 3303# 0.03 mg/kg 0.20 Benzo(g,h,i)perylene DETSC 3303# 0.03 mg/kg 0.06 Benzo(k)fluoranthene DETSC 3303# 0.03 mg/kg 0.07 Chrysene DETSC 3303# 0.03 mg/kg 0.22 Dibenzo(a,h)anthracene DETSC 3303# 0.03 mg/kg 0.03 Fluoranthene DETSC 3303# 0.03 mg/kg 0.03 Fluorene DETSC 3303# 0.03 mg/kg 0.03 Indeno(1,2,3-c,d)pyrene DETSC 3303# 0.03 mg/kg 0.03 Naphthalene DETSC 3303# 0.03 mg/kg 0.03 Phenanthrene DETSC 3303# 0.03 mg/kg 0.16 Pyrene DETSC 3303# 0.03 mg/kg <	Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03			
Benzo(a)anthracene DETSC 3303# 0.03 mg/kg 0.13 Benzo(a)pyrene DETSC 3303# 0.03 mg/kg 0.10 Benzo(b)fluoranthene DETSC 3303# 0.03 mg/kg 0.20 Benzo(g,h,i)perylene DETSC 3303# 0.03 mg/kg 0.06 Benzo(k)fluoranthene DETSC 3303# 0.03 mg/kg 0.07 Chrysene DETSC 3303# 0.03 mg/kg 0.22 Dibenzo(a,h)anthracene DETSC 3303# 0.03 mg/kg < 0.03	Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03			
Benzo(a)anthracene DETSC 3303# 0.03 mg/kg 0.13 Benzo(a)pyrene DETSC 3303# 0.03 mg/kg 0.10 Benzo(b)fluoranthene DETSC 3303# 0.03 mg/kg 0.20 Benzo(g,h,i)perylene DETSC 3303# 0.03 mg/kg 0.06 Benzo(k)fluoranthene DETSC 3303# 0.03 mg/kg 0.07 Chrysene DETSC 3303 0.03 mg/kg 0.22 Dibenzo(a,h)anthracene DETSC 3303# 0.03 mg/kg < 0.03	Anthracene	DETSC 3303	0.03	mg/kg	< 0.03			
Benzo(a)pyrene DETSC 3303# 0.03 mg/kg 0.10 Benzo(b)fluoranthene DETSC 3303# 0.03 mg/kg 0.20 Benzo(g,h,i)perylene DETSC 3303# 0.03 mg/kg 0.06 Benzo(k)fluoranthene DETSC 3303# 0.03 mg/kg 0.07 Chrysene DETSC 3303 0.03 mg/kg 0.22 Dibenzo(a,h)anthracene DETSC 3303# 0.03 mg/kg < 0.03	Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.13			
Benzo(b)fluoranthene DETSC 3303# 0.03 mg/kg 0.20 Benzo(g,h,i)perylene DETSC 3303# 0.03 mg/kg 0.06 Benzo(k)fluoranthene DETSC 3303# 0.03 mg/kg 0.07 Chrysene DETSC 3303 0.03 mg/kg 0.22 Dibenzo(a,h)anthracene DETSC 3303# 0.03 mg/kg < 0.03	Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.10			
Benzo(k)fluoranthene DETSC 3303# 0.03 mg/kg 0.07 Chrysene DETSC 3303 0.03 mg/kg 0.22 Dibenzo(a,h)anthracene DETSC 3303# 0.03 mg/kg < 0.03	Benzo(b)fluoranthene	DETSC 3303#	0.03		0.20			
Chrysene DETSC 3303 0.03 mg/kg 0.22 Dibenzo(a,h)anthracene DETSC 3303# 0.03 mg/kg < 0.03	Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.06			
Chrysene DETSC 3303 0.03 mg/kg 0.22 Dibenzo(a,h)anthracene DETSC 3303# 0.03 mg/kg < 0.03	Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.07			
Fluoranthene DETSC 3303# 0.03 mg/kg 0.36 Fluorene DETSC 3303 0.03 mg/kg < 0.03	Chrysene	DETSC 3303	0.03		0.22			
Fluoranthene DETSC 3303# 0.03 mg/kg 0.36 Fluorene DETSC 3303 0.03 mg/kg < 0.03	Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03			
Fluorene DETSC 3303 0.03 mg/kg < 0.03 Indeno(1,2,3-c,d)pyrene DETSC 3303# 0.03 mg/kg 0.06 Naphthalene DETSC 3303# 0.03 mg/kg < 0.03	Fluoranthene	DETSC 3303#	0.03		0.36			
Indeno(1,2,3-c,d)pyrene DETSC 3303# 0.03 mg/kg 0.06 Naphthalene DETSC 3303# 0.03 mg/kg < 0.03	Fluorene	DETSC 3303	0.03		< 0.03			
Naphthalene DETSC 3303# 0.03 mg/kg < 0.03 Phenanthrene DETSC 3303# 0.03 mg/kg 0.16 Pyrene DETSC 3303# 0.03 mg/kg 0.31 PAH - USEPA 16, Total DETSC 3303 0.1 mg/kg 1.7 Phenols	Indeno(1,2,3-c,d)pyrene				0.06			
Phenanthrene DETSC 3303# 0.03 mg/kg 0.16 Pyrene DETSC 3303# 0.03 mg/kg 0.31 PAH - USEPA 16, Total DETSC 3303 0.1 mg/kg 1.7 Phenols	Naphthalene	DETSC 3303#	0.03		< 0.03			
Pyrene DETSC 3303# 0.03 mg/kg 0.31 PAH - USEPA 16, Total DETSC 3303 0.1 mg/kg 1.7 Phenols	•							
PAH - USEPA 16, Total DETSC 3303 0.1 mg/kg 1.7 Phenols	Pyrene	DETSC 3303#	0.03		0.31			
Phenols		DETSC 3303			1.7			
Phenol - Monohydric DETSC 2130# 0.3 mg/kg 0.7	Phenols							
	Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.7			



Summary of Asbestos Analysis Soil Samples

Our Ref 23-30321 Client Ref 8711 Contract Title CLIVE ROAD

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2282204	TP101 0.50	SOIL	NAD	none	Josh Best
2282205	TP102 0.50	SOIL	NAD	none	Josh Best
2282206	TP103 0.50	SOIL	NAD	none	Josh Best
2282207	WS01 0.25	SOIL	NAD	none	Josh Best
2282208	WS03 0.35	SOIL	NAD	none	Josh Best
2282209	WS04 0.50	SOIL	NAD	none	Josh Best
2282210	WS05 0.30-0.45	SOIL	NAD	none	Josh Best

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * not included in laboratory scope of accreditation.



Information in Support of the Analytical Results

Our Ref 23-30321 Client Ref 8711 Contract CLIVE ROAD

Containers Received & Deviating Samples

		Date		Holding time exceeded for	Inappropriate container for
Lab No	Sample ID	Sampled	Containers Received	tests	tests
2282204	TP101 0.50 SOIL		GJ 250ml, PT 1L	Sample date not supplied, Boron (365 days), Chromium, Hexavalent (365 days), Mercury (28 days), ICP WS Boron (182 days), Metals ICP (182 days), Metals ICP Prep (182 days), Kone Cr6 (30 days), Naphthalene (14 days), Organic Matter (Manual) (28 days), PAH MS (14 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	
2282205	TP102 0.50 SOIL		PT 1L	Sample date not supplied, Boron (365 days), Chromium, Hexavalent (365 days), Mercury (28 days), ICP WS Boron (182 days), Metals ICP (182 days), Metals ICP Prep (182 days), Kone Cr6 (30 days), Naphthalene (14 days), Organic Matter (Manual) (28 days), PAH MS (14 days), PH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	Naphthalene, PAH MS
2282206	TP103 0.50 SOIL		GJ 250ml, PT 1L	Sample date not supplied, Boron (365 days), Chromium, Hexavalent (365 days), Mercury (28 days), ICP WS Boron (182 days), Metals ICP (182 days), Metals ICP Prep (182 days), Kone Cr6 (30 days), Naphthalene (14 days), Organic Matter (Manual) (28 days), PAH MS (14 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	
2282207	WS01 0.25 SOIL		GJ 250ml, PT 1L	Sample date not supplied, Boron (365 days), Chromium, Hexavalent (365 days), Mercury (28 days), ICP WS Boron (182 days), Metals ICP (182 days), Metals ICP Prep (182 days), Kone Cr6 (30 days), Naphthalene (14 days), Organic Matter (Manual) (28 days), PAH MS (14 days), PH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	



Information in Support of the Analytical Results Our Ref 23-30321 Client Ref 8711

Contract CLIVE ROAD

		Date		Holding time exceeded for	Inappropriate container for
Lab No	Sample ID	Sampled	Containers Received	tests	tests
2282208	WS03 0.35 SOIL		GJ 250ml, PT 1L	Sample date not supplied, Boron (365 days), Chromium, Hexavalent (365 days), Mercury (28 days), ICP WS Boron (182 days), Metals ICP (182 days), Metals ICP Prep (182 days), Kone Cr6 (30 days), Naphthalene (14 days), Organic Matter (Manual) (28 days), PAH MS (14 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	
2282209	WS04 0.50 SOIL		GJ 250ml, PT 1L	Sample date not supplied, Boron (365 days), Chromium, Hexavalent (365 days), Mercury (28 days), ICP WS Boron (182 days), Metals ICP (182 days), Metals ICP Prep (182 days), Kone Cr6 (30 days), Naphthalene (14 days), Organic Matter (Manual) (28 days), PAH MS (14 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	
2282210	WS05 0.30-0.45 SOIL		PT 1L	Sample date not supplied, Boron (365 days), Chromium, Hexavalent (365 days), Mercury (28 days), ICP WS Boron (182 days), Metals ICP (182 days), Metals ICP Prep (182 days), Kone Cr6 (30 days), Naphthalene (14 days), Organic Matter (Manual) (28 days), PAH MS (14 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	Naphthalene, PAH MS
2282211	TP101 1.00 SOIL		GJ 250ml, PT 1L	Sample date not supplied, Anions 2:1 (30 days), Total Sulphur ICP (7 days), Total Sulphate ICP (30 days), Metals ICP Prep (182 days), pH + Conductivity (7 days)	
2282212	TP102 1.50 SOIL		PT 1L	Sample date not supplied, Anions 2:1 (30 days), Total Sulphur ICP (7 days), Total Sulphate ICP (30 days), Metals ICP Prep (182 days), pH + Conductivity (7 days)	



Information in Support of the Analytical Results

Our Ref 23-30321 Client Ref 8711 Contract CLIVE ROAD

Contrac	CLIVE NOAD			
2282213	TP103 1.00 SOIL	GJ 250ml, PT 1L	Sample date not supplied, Anions	
			2:1 (30 days), Total Sulphur ICP (7	
			days), Total Sulphate ICP (30 days),	
			Metals ICP Prep (182 days), pH +	
			Conductivity (7 days)	
-				

Key: G-Glass P-Plastic J-Jar T-Tub

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.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

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



Appendix A - Details of Analysis

' '	Idik A Details of A	J	Limit of	Sample			
Method	Parameter	Units	Detection	Preparation	Sub-Contracted	UKAS	MCERTS
DETSC 2002	Organic matter	%	0.1	Air Dried	No	Yes	Yes
DETSC 2003	Loss on ignition	%	0.01	Air Dried	No	Yes	Yes
DETSC 2008	Hq	pH Units	1	Air Dried	No	Yes	Yes
DETSC 2076	Sulphate Aqueous Extract as SO4	mg/l	10	Air Dried	No	Yes	Yes
DETSC 2084	Total Organic Carbon	%	0.5	Air Dried	No	Yes	Yes
DETSC 2119	Ammoniacal Nitrogen as N	mg/kg	0.5	Air Dried	No	Yes	Yes
DETSC 2130	Cyanide free	mg/kg	0.1	Air Dried	No	Yes	Yes
DETSC 2130	Cyanide total	mg/kg	0.1	Air Dried	No	Yes	Yes
DETSC 2130	Phenol - Monohydric	mg/kg	0.3	Air Dried	No	Yes	Yes
DETSC 2130	Thiocyanate	mg/kg	0.6	Air Dried	No	Yes	Yes
DETSC 2301	Arsenic	mg/kg	0.2	Air Dried	No	Yes	Yes
DETSC 2301	Barium	mg/kg	1.5	Air Dried	No	Yes	Yes
DETSC 2301	Beryllium	mg/kg	0.2	Air Dried	No	Yes	Yes
DETSC 2301	Cadmium Available	mg/kg	0.1	Air Dried	No	Yes	Yes
DETSC 2301	Cadmium	mg/kg	0.1	Air Dried	No	Yes	Yes
DETSC 2301	Cobalt	mg/kg	0.7	Air Dried	No	Yes	Yes
DETSC 2301	Chromium	mg/kg	0.15	Air Dried	No	Yes	Yes
DETSC 2301	Copper	mg/kg	0.2	Air Dried	No	Yes	Yes
DETSC 2301	Manganese	mg/kg	20	Air Dried	No	Yes	Yes
DETSC 2301	Molybdenum	mg/kg	0.4	Air Dried	No	Yes	Yes
DETSC 2301	Nickel	mg/kg	1	Air Dried	No	Yes	Yes
DETSC 2301	Lead	mg/kg	0.3	Air Dried	No	Yes	Yes
DETSC 2301	Selenium	mg/kg	0.5	Air Dried	No	Yes	Yes
DETSC 2301	Zinc	mg/kg	1	Air Dried	No	Yes	Yes
DETSC 2301	Boron (water soluble)	mg/kg	0.2	Air Dried	No	Yes	Yes
DETSC 2311	Total Sulphate as SO4	//////////////////////////////////////	0.2	Air Dried	No	Yes	Yes
DETSC 2321	Mercury	mg/kg	0.01	Air Dried	No	Yes	Yes
DETSC 3049	Sulphur (free)	mg/kg	0.05	As Received	No	Yes	Yes
DETSC 3049	Ali/Aro C10-C35	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072			1.5	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C10-C12	mg/kg	1.5	As Received	No	Yes	Yes
	Aliphatic C10-C35	mg/kg					
DETSC 3072	Aliphatic C12-C16	mg/kg	1.2	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C16-C21	mg/kg	1.5	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C21-C35	mg/kg	3.4	As Received	No	Yes	Yes
DETSC 3072	Aromatic C10 C2E	mg/kg	0.9	As Received As Received	No	Yes	Yes
DETSC 3072	Aromatic C10-C35	mg/kg	10		No	Yes	Yes
DETSC 3072	Aromatic C12-C16	mg/kg	0.5	As Received	No	Yes	Yes
DETSC 3072	Aromatic C16-C21	mg/kg	0.6	As Received	No	Yes	Yes
DETSC 3072	Aromatic C21-C35	mg/kg	1.4	As Received	No	Yes	Yes
DETSC 3303	Acenaphthene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Acenaphthylene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(a)pyrene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(a)anthracene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(b)fluoranthene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(k)fluoranthene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(g,h,i)perylene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Dibenzo(a,h)anthracene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Fluoranthene	mg/kg	0.03	As Received	No	Yes	Yes



Appendix A - Details of Analysis

			Limit of	Sample			
Method	Parameter	Units	Detection	Preparation	Sub-Contracted	UKAS	MCERTS
DETSC 3303	Indeno(1,2,3-c,d)pyrene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Naphthalene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Phenanthrene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Pyrene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3311	C10-C24 Diesel Range Organics (DRO)	mg/kg	10	As Received	No	Yes	Yes
DETSC 3311	C24-C40 Lube Oil Range Organics (LORO)	mg/kg	10	As Received	No	Yes	Yes
DETSC 3311	EPH (C10-C40)	mg/kg	10	As Received	No	Yes	Yes
DETSC 3321	Benzene	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3321	Ethylbenzene	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3321	Toluene	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3321	Xylene	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3321	m+p Xylene	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3321	o Xylene	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 28 + PCB 31	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 52	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 101	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 118	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 153	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 138	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 180	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB Total	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3521	Ali/Aro C10-C35	mg/kg	10	As Received	No	Yes	Yes
DETSC 3521	Aliphatic C10-C12	mg/kg	1.5	As Received	No	Yes	Yes
DETSC 3521	Aliphatic C10-C35	mg/kg	10	As Received	No	Yes	Yes
DETSC 3521	Aliphatic C12-C16	mg/kg	1.2	As Received	No	Yes	Yes
DETSC 3521	Aliphatic C16-C21	mg/kg	1.5	As Received	No	Yes	Yes
DETSC 3521	Aliphatic C21-C35	mg/kg	3.4	As Received	No	Yes	Yes
DETSC 3521	Aromatic C10-C12	mg/kg	0.9	As Received	No	Yes	Yes
DETSC 3521	Aromatic C10-C35	mg/kg	10	As Received	No	Yes	Yes
DETSC 3521	Aromatic C12-C16	mg/kg	0.5	As Received	No	Yes	Yes
DETSC 3521	Aromatic C16-C21	mg/kg	0.6	As Received	No	Yes	Yes
DETSC 3521	Aromatic C21-C35	mg/kg	1.4	As Received	No	Yes	Yes

Method details are shown only for those determinands listed in Annex A of the MCERTS standard. Anything not included on this list falls outside the scope of MCERTS. No Recovery Factors are used in the determination of results. Results reported assume 100% recovery. Full method statements are available on request.

End of Report