



Certificate of Analysis

Certificate Number 15-40518

22-Jul-15

Client EGEO Solutions Ltd
Oak House
Groes Lwyd
Abergele
LL22 7SU

Our Reference 15-40518

Client Reference E0500

Contract Title GLAN GORS SOILS

Description 18 Soil samples.

Date Received 17-Jul-15

Date Started 17-Jul-15

Date Completed 22-Jul-15

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

Notes Opinions and interpretations are outside the scope of UKAS 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. Observations and interpretations are outside the scope of ISO 17025. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

A handwritten signature in blue ink, appearing to read 'Mark Hughes'.

Mark Hughes
Operations Manager



Summary of Chemical Analysis

Soil Samples

Our Ref 15-40518

Client Ref E0500

Contract Title GLAN GORS SOILS

Lab No	840505	840506	840507	840508	840509	840510
Sample ID	P1 T/S	P1 S/S	P3 T/S	P3 S/S	P4 T/S	P4 S/S
Depth	0.10	0.50	0.10	0.40	0.10	0.50
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	6.2	22	7.1	3.8	6.3	17
Barium	DETSC 2301#	1.5	mg/kg	59	110	59	60	59	120
Beryllium	DETSC 2301#	0.2	mg/kg	0.5	0.5	0.5	0.4	0.4	0.5
Boron (water soluble)	DETSC 2123#	0.2	mg/kg	2.1	3.8	2.0	2.0	2.6	4.1
Cadmium	DETSC 2301#	0.1	mg/kg	0.6	0.4	0.5	0.2	0.4	0.5
Chromium	DETSC 2301#	0.15	mg/kg	22	15	23	15	17	16
Hexavalent Chromium	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	18	13	16	9.9	22	14
Lead	DETSC 2301#	0.3	mg/kg	33	29	36	6.1	73	40
Mercury	DETSC 2325#	0.05	mg/kg	0.09	< 0.05	0.10	< 0.05	0.08	0.06
Nickel	DETSC 2301#	1	mg/kg	13	16	15	13	13	16
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301	0.8	mg/kg	27	13	33	17	22	15
Zinc	DETSC 2301#	1	mg/kg	44	47	44	27	52	56
Inorganics									
pH	DETSC 2008#			6.7	7.2	6.7	8.2	7.0	7.4
Cyanide Total	DETSC 2130#	0.1	mg/kg	0.5	0.3	0.6	< 0.1	0.5	0.4
Cyanide Free	DETSC 2130#	0.1	mg/kg	0.3	0.1	0.4	< 0.1	0.3	0.2
Cyanide complex	DETSC 2130*	0.2	mg/kg	0.2	< 0.2	0.2	< 0.2	< 0.2	0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg	1.3	2.7	2.3	< 0.6	1.7	2.5
Total Organic Carbon	DETSC 2002	0.1	%	1.6	3.9	1.4	0.6	1.7	3.5

Summary of Chemical Analysis

Soil Samples

Our Ref 15-40518

Client Ref E0500

Contract Title GLAN GORS SOILS

Lab No	840505	840506	840507	840508	840509	840510
Sample ID	P1 T/S	P1 S/S	P3 T/S	P3 S/S	P4 T/S	P4 S/S
Depth	0.10	0.50	0.10	0.40	0.10	0.50
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Petroleum Hydrocarbons									
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	22
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	44
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	66
TPH Ali/Aro	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	66
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAHs									
Naphthalene	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
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	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	< 0.03	0.05	< 0.03	< 0.03	< 0.03	0.09
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	0.10	0.05	< 0.03	0.07	0.31
Pyrene	DETSC 3303#	0.03	mg/kg	0.06	0.08	0.04	< 0.03	0.08	0.30
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.05	0.05	< 0.03	< 0.03	0.04	0.13
Chrysene	DETSC 3303	0.03	mg/kg	0.05	0.05	< 0.03	< 0.03	0.04	0.13
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.06	< 0.03	< 0.03	0.07	0.19
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.07
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	< 0.03	< 0.03	0.04	0.13
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.04	0.08
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 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	0.08
Total PAH - USEPA 16	DETSC 3303	0.1	mg/kg	0.22	0.42	< 0.10	< 0.10	0.41	1.5

Summary of Chemical Analysis

Soil Samples

Our Ref 15-40518
 Client Ref E0500
 Contract Title GLAN GORS SOILS

Lab No	840505	840506	840507	840508	840509	840510
Sample ID	P1 T/S	P1 S/S	P3 T/S	P3 S/S	P4 T/S	P4 S/S
Depth	0.10	0.50	0.10	0.40	0.10	0.50
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref 15-40518

Client Ref E0500

Contract Title GLAN GORS SOILS

Lab No	840511	840512	840513	840514	840515	840516
Sample ID	P6 T/S	P6 S/S	P8 T/S	P8 S/S	P9 S/S	P11 S/S
Depth	0.10	0.40	0.10	0.40	0.40	0.40
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	11	21	6.8	30	17	14
Barium	DETSC 2301#	1.5	mg/kg	95	89	58	130	180	140
Beryllium	DETSC 2301#	0.2	mg/kg	0.6	0.5	0.5	0.6	0.8	0.6
Boron (water soluble)	DETSC 2123#	0.2	mg/kg	2.8	2.7	2.3	2.9	4.4	2.9
Cadmium	DETSC 2301#	0.1	mg/kg	0.7	0.7	0.5	7.6	1.3	1.0
Chromium	DETSC 2301#	0.15	mg/kg	23	13	20	24	31	16
Hexavalent Chromium	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	28	14	20	29	30	28
Lead	DETSC 2301#	0.3	mg/kg	57	45	40	54	110	88
Mercury	DETSC 2325#	0.05	mg/kg	0.14	0.05	0.08	0.07	0.13	0.19
Nickel	DETSC 2301#	1	mg/kg	16	15	14	20	19	17
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301	0.8	mg/kg	24	13	25	20	25	18
Zinc	DETSC 2301#	1	mg/kg	85	76	47	110	170	160
Inorganics									
pH	DETSC 2008#			6.8	7.9	6.1	7.5	7.7	7.2
Cyanide Total	DETSC 2130#	0.1	mg/kg	0.7	0.2	0.6	0.4	0.7	0.5
Cyanide Free	DETSC 2130#	0.1	mg/kg	0.4	< 0.1	0.4	0.1	0.3	0.2
Cyanide complex	DETSC 2130*	0.2	mg/kg	0.3	< 0.2	< 0.2	0.3	0.5	0.3
Thiocyanate	DETSC 2130#	0.6	mg/kg	2.2	1.2	1.8	< 0.6	1.2	1.5
Total Organic Carbon	DETSC 2002	0.1	%	1.9	1.7	1.5	1.6	2.6	3.2

Summary of Chemical Analysis

Soil Samples

Our Ref 15-40518

Client Ref E0500

Contract Title GLAN GORS SOILS

Lab No	840511	840512	840513	840514	840515	840516
Sample ID	P6 T/S	P6 S/S	P8 T/S	P8 S/S	P9 S/S	P11 S/S
Depth	0.10	0.40	0.10	0.40	0.40	0.40
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Petroleum Hydrocarbons									
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	9.4	5.7	< 0.6	8.6	5.9	6.8
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	5.3	38	< 1.4	36	12	3.2
Aromatic C5-C35	DETSC 3072*	10	mg/kg	15	44	< 10	44	18	< 10
TPH Ali/Aro	DETSC 3072*	10	mg/kg	15	44	< 10	44	18	< 10
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAHs									
Naphthalene	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
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	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	0.05	< 0.03	< 0.03	0.13	0.07	0.07
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.04	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.14	0.09	< 0.03	0.25	0.21	0.15
Pyrene	DETSC 3303#	0.03	mg/kg	0.15	0.08	< 0.03	0.24	0.21	0.14
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.07	0.04	< 0.03	0.12	0.08	0.06
Chrysene	DETSC 3303	0.03	mg/kg	0.08	0.04	< 0.03	0.12	0.10	0.06
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.11	0.07	< 0.03	0.18	0.11	0.08
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	< 0.03	0.07	0.06	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.09	0.06	< 0.03	0.12	0.10	0.05
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.06	0.03	< 0.03	0.08	0.05	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.06	0.03	< 0.03	0.08	0.05	< 0.03
Total PAH - USEPA 16	DETSC 3303	0.1	mg/kg	0.84	0.44	< 0.10	1.4	1.0	0.61

Summary of Chemical Analysis Soil Samples

Our Ref 15-40518

Client Ref E0500

Contract Title GLAN GORS SOILS

Lab No	840511	840512	840513	840514	840515	840516
Sample ID	P6 T/S	P6 S/S	P8 T/S	P8 S/S	P9 S/S	P11 S/S
Depth	0.10	0.40	0.10	0.40	0.40	0.40
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref 15-40518

Client Ref E0500

Contract Title GLAN GORS SOILS

Lab No	840517	840518	840519	840520	840521	840522
Sample ID	P12 S/S	P15 S/S	P17 S/S	P19 S/S	P21 S/S	P23 S/S
Depth	0.50	0.50	0.50	0.50	0.50	0.40
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	11	15	16	9.6	16	4.9
Barium	DETSC 2301#	1.5	mg/kg	100	110	68	63	150	94
Beryllium	DETSC 2301#	0.2	mg/kg	0.5	0.5	0.7	0.5	0.5	0.5
Boron (water soluble)	DETSC 2123#	0.2	mg/kg	3.1	2.7	2.6	2.0	2.4	2.0
Cadmium	DETSC 2301#	0.1	mg/kg	0.6	0.6	0.4	0.4	1.0	0.4
Chromium	DETSC 2301#	0.15	mg/kg	18	18	22	15	16	15
Hexavalent Chromium	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	25	19	18	17	11	17
Lead	DETSC 2301#	0.3	mg/kg	56	45	23	28	28	25
Mercury	DETSC 2325#	0.05	mg/kg	0.82	< 0.05	0.13	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	15	17	27	22	16	22
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301	0.8	mg/kg	19	16	21	15	16	15
Zinc	DETSC 2301#	1	mg/kg	98	69	56	48	53	46
Inorganics									
pH	DETSC 2008#			9.3	7.5	7.8	7.9	7.5	7.7
Cyanide Total	DETSC 2130#	0.1	mg/kg	0.4	0.3	0.1	< 0.1	0.1	< 0.1
Cyanide Free	DETSC 2130#	0.1	mg/kg	0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cyanide complex	DETSC 2130*	0.2	mg/kg	0.3	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg	61	< 0.6	< 0.6	1.5	< 0.6	< 0.6
Total Organic Carbon	DETSC 2002	0.1	%	1.3	1.2	0.6	0.7	0.8	0.7

Summary of Chemical Analysis

Soil Samples

Our Ref 15-40518

Client Ref E0500

Contract Title GLAN GORS SOILS

Lab No	840517	840518	840519	840520	840521	840522
Sample ID	P12 S/S	P15 S/S	P17 S/S	P19 S/S	P21 S/S	P23 S/S
Depth	0.50	0.50	0.50	0.50	0.50	0.40
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Petroleum Hydrocarbons									
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	7.2	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	6.9	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	14	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro	DETSC 3072*	10	mg/kg	14	< 10	< 10	< 10	< 10	< 10
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAHs									
Naphthalene	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
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.06	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.55	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	0.13	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.70	< 0.03	< 0.03	< 0.03	0.04	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	0.60	< 0.03	< 0.03	< 0.03	0.04	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.30	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.30	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.35	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.14	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.29	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.15	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.17	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Total PAH - USEPA 16	DETSC 3303	0.1	mg/kg	3.8	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Summary of Chemical Analysis

Soil Samples

Our Ref 15-40518
 Client Ref E0500
 Contract Title GLAN GORS SOILS

Lab No	840517	840518	840519	840520	840521	840522
Sample ID	P12 S/S	P15 S/S	P17 S/S	P19 S/S	P21 S/S	P23 S/S
Depth	0.50	0.50	0.50	0.50	0.50	0.40
Other ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15	16/07/15
Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Information in Support of the Analytical Results

Our Ref 15-40518
 Client Ref E0500
 Contract GLAN GORS SOILS

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
840505	P1 T/S 0.10 SOIL	16/07/15	GJ 250ml		
840506	P1 S/S 0.50 SOIL	16/07/15	GJ 250ml		
840507	P3 T/S 0.10 SOIL	16/07/15	GJ 250ml		
840508	P3 S/S 0.40 SOIL	16/07/15	GJ 250ml		
840509	P4 T/S 0.10 SOIL	16/07/15	GJ 250ml		
840510	P4 S/S 0.50 SOIL	16/07/15	GJ 250ml		
840511	P6 T/S 0.10 SOIL	16/07/15	GJ 250ml		
840512	P6 S/S 0.40 SOIL	16/07/15	GJ 250ml		
840513	P8 T/S 0.10 SOIL	16/07/15	GJ 250ml		
840514	P8 S/S 0.40 SOIL	16/07/15	GJ 250ml		
840515	P9 S/S 0.40 SOIL	16/07/15	GJ 250ml		
840516	P11 S/S 0.40 SOIL	16/07/15	GJ 250ml		
840517	P12 S/S 0.50 SOIL	16/07/15	GJ 250ml		
840518	P15 S/S 0.50 SOIL	16/07/15	GJ 250ml		
840519	P17 S/S 0.50 SOIL	16/07/15	GJ 250ml		
840520	P19 S/S 0.50 SOIL	16/07/15	GJ 250ml		
840521	P21 S/S 0.50 SOIL	16/07/15	GJ 250ml		
840522	P23 S/S 0.40 SOIL	16/07/15	GJ 250ml		

Key: G-Glass J-Jar

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 and/or inappropriate containers 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