

FINAL ANALYTICAL TEST REPORT SUPPLEMENT TO TEST REPORT 17/08592/2

Envirolab Job Number: 17/08592

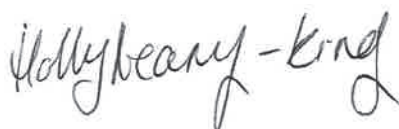
Issue Number: 3

Date: 12 February, 2018

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK
WF10 1NJ

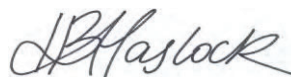
Project Manager: Alex Jones/Philip Rowlay
Project Name: Project Blue
Project Ref: 764393
Order No: N/A
Date Samples Received: 12/12/17
Date Instructions Received: 19/12/17
Date Analysis Completed: 12/02/18

Prepared by:



Holly Neary-King
Administrative Assistant

Approved by:



Iain Haslock
Analytical Consultant

Envirolab Job Number: 17/08592

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08592/3	17/08592/6	17/08592/8	17/08592/13	17/08592/14	17/08592/21	17/08592/22	17/08592/24	Units	Method ref
Client Sample No	103	106	103	111	103	104	108	101		
Client Sample ID	BH101	BH101	P102.1	BH101	P105	P101	P101	BH102		
Depth to Top	1.50	4.00	0.70	9.00	0.50	1.00	1.75	0.50		
Depth To Bottom										
Date Sampled	13-Dec-17	13-Dec-17	13-Dec-17	14-Dec-17	14-Dec-17	11-Dec-17	12-Dec-17	11-Dec-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5A	5A	4A	5A	4A	4A	5A	4A		
% Stones >10mm _A	19.1	1.5	22.2	5.2	6.1	3.5	7.6	6.3	% w/w	A-T-044
pH _D	8.93	8.43	8.65	8.95	10.05	9.23	8.66	9.13	pH	A-T-031s
Cyanide (free) _A ^{M#}	<1	<1	<1	-	<1	<1	<1	<1	mg/kg	A-T-042sFCN
Cyanide (total) _A ^{M#}	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	A-T-050s
Organic matter _D ^{M#}	1.1	<0.1	5.8	-	0.4	0.8	1.0	<0.1	% w/w	A-T-032 OM
Arsenic _D ^{M#}	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	A-T-024s
Barium _D	52	62	153	21	44	28	60	120	mg/kg	A-T-024s
Beryllium _D [#]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	A-T-024s
Boron (water soluble) _D ^{M#}	<1.0	1.1	4.5	1.3	<1.0	1.6	4.0	<1.0	mg/kg	A-T-027s
Cadmium _D ^{M#}	<0.5	0.6	0.8	<0.5	<0.5	<0.5	0.6	<0.5	mg/kg	A-T-024s
Copper _D ^{M#}	20	16	42	142	8	38	30	7	mg/kg	A-T-024s
Chromium _D ^{M#}	11	24	11	8	7	10	33	7	mg/kg	A-T-024s
Lead _D ^{M#}	43	22	353	8	20	20	63	15	mg/kg	A-T-024s
Mercury _D	<0.17	<0.17	0.22	<0.17	<0.17	<0.17	0.47	<0.17	mg/kg	A-T-024s
Nickel _D ^{M#}	11	27	16	8	7	9	21	9	mg/kg	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	<1	<1	<1	2	<1	mg/kg	A-T-024s
Vanadium _D ^{M#}	13	25	26	9	12	14	30	11	mg/kg	A-T-024s
Zinc _D ^{M#}	23	40	140	12	19	24	65	15	mg/kg	A-T-024s

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Client Sample No	103	106	103	111	103	104	108	101		
Client Sample ID	BH101	BH101	P102.1	BH101	P105	P101	P101	BH102		
Depth to Top	1.50	4.00	0.70	9.00	0.50	1.00	1.75	0.50		
Depth To Bottom										
Date Sampled	13-Dec-17	13-Dec-17	13-Dec-17	14-Dec-17	14-Dec-17	11-Dec-17	12-Dec-17	11-Dec-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5A	5A	4A	5A	4A	4A	5A	4A		
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD	NAD	-	NAD	NAD	NAD	NAD		A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A		
Glycol Suite 1										
1,2-Butanediol _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,2-Propylene glycol (1,2-propanediol) _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,3-Butanediol _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,3-Propylene glycol (1,3-propanediol) _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,4-Butanediol _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,5-Pentanediol _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
Diethylene glycol _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
Ethylene glycol _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
Triethylene glycol _A	<10.0	<10.0	-	-	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon

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Client Sample ID	BH101	BH101	P102.1	BH101	P105	P101	P101	BH102		
Depth to Top	1.50	4.00	0.70	9.00	0.50	1.00	1.75	0.50		
Depth To Bottom										
Date Sampled	13-Dec-17	13-Dec-17	13-Dec-17	14-Dec-17	14-Dec-17	11-Dec-17	12-Dec-17	11-Dec-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5A	5A	4A	5A	4A	4A	5A	4A		
PAH 16										
Acenaphthene _A ^{M#}	<0.01	<0.01	11.8	<0.01	0.02	2.11	<0.13	<0.01	mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	0.23	<0.01	<0.01	<0.14	<0.05	<0.01	mg/kg	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	17	<0.02	0.07	0.67	<0.10	0.05	mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	<0.04	23.9	<0.04	0.16	<0.40	<0.20	0.05	mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	<0.04	16.7	<0.04	0.14	<0.40	<0.20	0.04	mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	<0.05	19.3	<0.05	0.14	<0.50	<0.25	<0.05	mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	7.12	<0.05	0.08	<0.50	<0.25	<0.05	mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	7.73	<0.07	<0.07	<0.70	<0.35	<0.07	mg/kg	A-T-019s
Chrysene _A ^{M#}	<0.06	<0.06	27.6	<0.06	0.18	<0.60	<0.30	<0.06	mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	1.91	<0.04	<0.04	<0.40	<0.20	<0.04	mg/kg	A-T-019s
Fluoranthene _A ^{M#}	<0.08	<0.08	49.1	<0.08	0.30	<0.80	<0.40	0.15	mg/kg	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	10.9	<0.01	0.02	4.43	0.39	<0.01	mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	<0.03	8.01	<0.03	0.08	<0.30	<0.15	<0.03	mg/kg	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	28.1	<0.03	<0.03	<0.30	<0.15	<0.03	mg/kg	A-T-019s
Phenanthrene _A ^{M#}	<0.03	<0.03	79.4	<0.03	0.24	4.03	0.78	0.12	mg/kg	A-T-019s
Pyrene _A ^{M#}	<0.07	<0.07	47.5	<0.07	0.32	1.71	<0.35	0.13	mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	<0.08	<0.08	356	<0.08	1.75	12.8	1.17	0.55	mg/kg	A-T-019s

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Client Sample ID	BH101	BH101	P102.1	BH101	P105	P101	P101	BH102		
Depth to Top	1.50	4.00	0.70	9.00	0.50	1.00	1.75	0.50		
Depth To Bottom										
Date Sampled	13-Dec-17	13-Dec-17	13-Dec-17	14-Dec-17	14-Dec-17	11-Dec-17	12-Dec-17	11-Dec-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5A	5A	4A	5A	4A	4A	5A	4A		
SVOC										
Hexachlorobenzene _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Diethyl phthalate _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Dimethyl phthalate _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Dibenzofuran _A	-	-	4410	-	-	<1000	<100	-	µg/kg	A-T-052s
Carbazole _A	-	-	3490	-	-	<1000	<100	-	µg/kg	A-T-052s
Butylbenzyl phthalate _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Bis(2-ethylhexyl)phthalate _A	-	-	<5000	-	-	<5000	<500	-	µg/kg	A-T-052s
Bis(2-chloroethoxy)methane _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Bis(2-chloroethyl)ether _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
4-Nitrophenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
4-Methylphenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
4-Chloro-3-methylphenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2-Nitrophenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2-Methylphenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2-Chlorophenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2,6-Dinitrotoluene _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2,4-Dinitrotoluene _A	-	-	<1000	-	-	6890	<100	-	µg/kg	A-T-052s
2,4-Dimethylphenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2,4-Dichlorophenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2,4,6-Trichlorophenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2,4,5-Trichlorophenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2-Chloronaphthalene _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
2-Methylnaphthalene _A	-	-	4350	-	-	<1000	<100	-	µg/kg	A-T-052s
Bis(2-chloroisopropyl)ether _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Phenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Pentachlorophenol _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
n-Nitroso-n-dipropylamine _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
n-Dioctylphthalate _A	-	-	<5000	-	-	<5000	<500	-	µg/kg	A-T-052s
n-Dibutylphthalate _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Nitrobenzene _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Isophorone _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Hexachloroethane _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s

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Client Sample No	103	106	103	111	103	104	108	101		
Client Sample ID	BH101	BH101	P102.1	BH101	P105	P101	P101	BH102		
Depth to Top	1.50	4.00	0.70	9.00	0.50	1.00	1.75	0.50		
Depth To Bottom										
Date Sampled	13-Dec-17	13-Dec-17	13-Dec-17	14-Dec-17	14-Dec-17	11-Dec-17	12-Dec-17	11-Dec-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5A	5A	4A	5A	4A	4A	5A	4A		
Hexachlorocyclopentadiene _A	-	-	<1000	-	-	<1000	<100	-	µg/kg	A-T-052s
Perylene _A	-	-	5560	-	-	<1000	<100	-	µg/kg	A-T-052s

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Client Sample No	103	106	103	111	103	104	108	101		
Client Sample ID	BH101	BH101	P102.1	BH101	P105	P101	P101	BH102		
Depth to Top	1.50	4.00	0.70	9.00	0.50	1.00	1.75	0.50		
Depth To Bottom										
Date Sampled	13-Dec-17	13-Dec-17	13-Dec-17	14-Dec-17	14-Dec-17	11-Dec-17	12-Dec-17	11-Dec-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5A	5A	4A	5A	4A	4A	5A	4A		
VOC										
Dichlorodifluoromethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Chloromethane _A [#]	-	-	<10	-	-	<10	<10	-	µg/kg	A-T-006s
Vinyl Chloride _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Bromomethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Chloroethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Trichlorofluoromethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,1-Dichloroethene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Carbon Disulphide _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Dichloromethane _A	-	-	<5	-	-	<5	<5	-	µg/kg	A-T-006s
trans 1,2-Dichloroethene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,1-Dichloroethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
cis 1,2-Dichloroethene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
2,2-Dichloropropane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Bromochloromethane _A [#]	-	-	<5	-	-	<5	<5	-	µg/kg	A-T-006s
Chloroform _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,1,1-Trichloroethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,1-Dichloropropene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Carbon Tetrachloride _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,2-Dichloroethane _A [#]	-	-	<2	-	-	<2	<2	-	µg/kg	A-T-006s
Benzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Trichloroethene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,2-Dichloropropane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Dibromomethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Bromodichloromethane _A [#]	-	-	<10	-	-	<10	<10	-	µg/kg	A-T-006s
cis 1,3-Dichloropropene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Toluene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
trans 1,3-Dichloropropene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,1,2-Trichloroethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,3-Dichloropropane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Tetrachloroethene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Dibromochloromethane _A [#]	-	-	<3	-	-	<3	<3	-	µg/kg	A-T-006s
1,2-Dibromoethane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s

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Client Sample ID	BH101	BH101	P102.1	BH101	P105	P101	P101	BH102		
Depth to Top	1.50	4.00	0.70	9.00	0.50	1.00	1.75	0.50		
Depth To Bottom										
Date Sampled	13-Dec-17	13-Dec-17	13-Dec-17	14-Dec-17	14-Dec-17	11-Dec-17	12-Dec-17	11-Dec-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5A	5A	4A	5A	4A	4A	5A	4A		
Chlorobenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,1,1,2-Tetrachloroethane _A	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Ethylbenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
m & p Xylene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
o-Xylene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Styrene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Bromoform _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Isopropylbenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,1,2,2-Tetrachloroethane _A	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,2,3-Trichloropropane _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
Bromobenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
n-Propylbenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
2-Chlorotoluene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,3,5-Trimethylbenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
4-Chlorotoluene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
tert-Butylbenzene _A [#]	-	-	<2	-	-	<2	<2	-	µg/kg	A-T-006s
1,2,4-Trimethylbenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
sec-Butylbenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
4-Isopropyltoluene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,3-Dichlorobenzene _A	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,4-Dichlorobenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
n-Butylbenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,2-Dichlorobenzene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,2-Dibromo-3-chloropropane _A	-	-	<2	-	-	<2	<2	-	µg/kg	A-T-006s
1,2,4-Trichlorobenzene _A	-	-	<3	-	-	<3	<3	-	µg/kg	A-T-006s
Hexachlorobutadiene _A [#]	-	-	<1	-	-	<1	<1	-	µg/kg	A-T-006s
1,2,3-Trichlorobenzene _A	-	-	<3	-	-	<3	<3	-	µg/kg	A-T-006s

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Lab Sample ID	17/08592/3	17/08592/6	17/08592/8	17/08592/13	17/08592/14	17/08592/21	17/08592/22	17/08592/24	Units	Method ref
Client Sample No	103	106	103	111	103	104	108	101		
Client Sample ID	BH101	BH101	P102.1	BH101	P105	P101	P101	BH102		
Depth to Top	1.50	4.00	0.70	9.00	0.50	1.00	1.75	0.50		
Depth To Bottom										
Date Sampled	13-Dec-17	13-Dec-17	13-Dec-17	14-Dec-17	14-Dec-17	11-Dec-17	12-Dec-17	11-Dec-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5A	5A	4A	5A	4A	4A	5A	4A		
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Ali >C8-C10 _A [#]	<0.01	0.07	<0.01	0.13	<0.01	0.25	0.04	<0.01	mg/kg	A-T-022s
Ali >C10-C12 _A [#]	2.7	<0.1	<0.1	1.9	<0.1	51.8	9.2	<0.1	mg/kg	A-T-023s
Ali >C12-C16 _A [#]	<0.1	<0.1	4.4	<0.1	<0.1	455	98.3	<0.1	mg/kg	A-T-023s
Ali >C16-C21 _A [#]	<0.1	4.1	13.6	<0.1	<0.1	572	128	<0.1	mg/kg	A-T-023s
Ali >C21-C35 _A [#]	<0.1	79.3	34.5	<0.1	<0.1	341	72.0	<0.1	mg/kg	A-T-023s
Total Aliphatics _A	2.7	83.5	52.4	2.0	<0.1	1420	307	<0.1	mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C8-C9 _A [#]	<0.01	<0.01	0.03	<0.01	<0.01	0.02	<0.01	<0.01	mg/kg	A-T-022s
Aro >C9-C10 _A [#]	<0.01	<0.01	0.05	<0.01	<0.01	0.27	0.12	<0.01	mg/kg	A-T-022s
Aro >C10-C12 _A [#]	<0.1	<0.1	5.2	<0.1	<0.1	17.5	2.9	<0.1	mg/kg	A-T-023s
Aro >C12-C16 _A [#]	<0.1	<0.1	23.1	<0.1	<0.1	245	59.2	<0.1	mg/kg	A-T-023s
Aro >C16-C21 _A [#]	<0.1	0.4	81.6	<0.1	1.3	328	75.8	<0.1	mg/kg	A-T-023s
Aro >C21-C35 _A [#]	<0.1	3.3	139	<0.1	0.9	156	25.8	<0.1	mg/kg	A-T-023s
Total Aromatics _A	<0.1	3.6	249	<0.1	2.2	747	164	<0.1	mg/kg	A-T-023s
TPH (Ali & Aro) _A	2.7	87.2	302	2.0	2.2	2170	471	<0.1	mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s

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Lab Sample ID	17/08592/29	17/08592/31	17/08592/35	17/08592/42	17/08592/45	17/08592/46	17/08592/48		Units	Method ref
Client Sample No	106	108	103	110	101	102	102			
Client Sample ID	BH102	BH102	BH111	BH111	P102	P102	P106			
Depth to Top	4.00	6.00	1.50	8.25	0.10	0.50	1.00			
Depth To Bottom										
Date Sampled	11-Dec-17	11-Dec-17	11-Dec-17	12-Dec-17	12-Dec-17	12-Dec-17	15-Dec-17			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4A	4A	4A	5	4A	4AE	5			
% Stones >10mm _A	52.4	17.2	5.3	<0.1	1.9	12.1	<0.1		% w/w	A-T-044
pH _D	8.84	8.77	8.64	8.65	8.99	8.66	8.62		pH	A-T-031s
Cyanide (free) _A ^{M#}	<1	<1	<1	<1	<1	<1	<1		mg/kg	A-T-042sFCN
Cyanide (total) _A ^{M#}	<1	<1	<1	<1	<1	<1	<1		mg/kg	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2	<0.2	3.4	<0.2		mg/kg	A-T-050s
Organic matter _D ^{M#}	1.4	0.6	0.2	<0.1	2.7	8.8	0.4		% w/w	A-T-032 OM
Arsenic _D ^{M#}	<1	<1	<1	<1	<1	<1	2		mg/kg	A-T-024s
Barium _D	50	60	33	90	72	133	60		mg/kg	A-T-024s
Beryllium _D [#]	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5		mg/kg	A-T-024s
Boron (water soluble) _D ^{M#}	<1.0	1.7	2.3	2.0	7.5	6.8	2.9		mg/kg	A-T-027s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5	0.6	0.7	1.3	<0.5		mg/kg	A-T-024s
Copper _D ^{M#}	32	31	72	11	51	100	14		mg/kg	A-T-024s
Chromium _D ^{M#}	5	11	13	29	13	11	17		mg/kg	A-T-024s
Lead _D ^{M#}	45	43	25	4	67	304	38		mg/kg	A-T-024s
Mercury _D	0.24	<0.17	<0.17	0.37	0.30	<0.17	<0.17		mg/kg	A-T-024s
Nickel _D ^{M#}	10	12	11	33	19	25	15		mg/kg	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	2	<1	<1	<1		mg/kg	A-T-024s
Vanadium _D ^{M#}	10	14	20	32	34	40	20		mg/kg	A-T-024s
Zinc _D ^{M#}	19	26	31	50	184	183	29		mg/kg	A-T-024s

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Client Sample No	106	108	103	110	101	102	102			
Client Sample ID	BH102	BH102	BH111	BH111	P102	P102	P106			
Depth to Top	4.00	6.00	1.50	8.25	0.10	0.50	1.00			
Depth To Bottom										
Date Sampled	11-Dec-17	11-Dec-17	11-Dec-17	12-Dec-17	12-Dec-17	12-Dec-17	15-Dec-17			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4A	4A	4A	5	4A	4AE	5			
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD	NAD	NAD	NAD	NAD	NAD			A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Glycol Suite 1										
1,2-Butanediol _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon
1,2-Propylene glycol (1,2-propanediol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon
1,3-Butanediol _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon
1,3-Propylene glycol (1,3-propanediol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon
1,4-Butanediol _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon
1,5-Pentanediol _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon
Diethylene glycol _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon
Ethylene glycol _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon
Triethylene glycol _A	<10.0	<10.0	<10.0	<10.0	<10.0	-	<10.0		mg/kg	Subcon

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Lab Sample ID	17/08592/29	17/08592/31	17/08592/35	17/08592/42	17/08592/45	17/08592/46	17/08592/48		Units	Method ref
Client Sample No	106	108	103	110	101	102	102			
Client Sample ID	BH102	BH102	BH111	BH111	P102	P102	P106			
Depth to Top	4.00	6.00	1.50	8.25	0.10	0.50	1.00			
Depth To Bottom										
Date Sampled	11-Dec-17	11-Dec-17	11-Dec-17	12-Dec-17	12-Dec-17	12-Dec-17	15-Dec-17			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4A	4A	4A	5	4A	4AE	5			
PAH 16										
Acenaphthene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	2.95	204	<0.01		mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	0.10	0.72	<0.01		mg/kg	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	<0.02	<0.02	5.31	234	<0.02		mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	8.21	224	<0.04		mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	5.75	141	<0.04		mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	6.04	143	<0.05		mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	2.52	53.6	<0.05		mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	2.58	67.7	<0.07		mg/kg	A-T-019s
Chrysene _A ^{M#}	<0.06	<0.06	<0.06	<0.06	7.05	232	<0.06		mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	0.67	13	<0.04		mg/kg	A-T-019s
Fluoranthene _A ^{M#}	<0.08	<0.08	<0.08	<0.08	18.3	487	<0.08		mg/kg	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	2.74	181	<0.01		mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	2.91	68.5	<0.03		mg/kg	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	3.92	1230	<0.03		mg/kg	A-T-019s
Phenanthrene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	16.6	856	<0.03		mg/kg	A-T-019s
Pyrene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	17	444	<0.07		mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	<0.08	<0.08	<0.08	<0.08	103	4580	<0.08		mg/kg	A-T-019s

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Lab Sample ID	17/08592/29	17/08592/31	17/08592/35	17/08592/42	17/08592/45	17/08592/46	17/08592/48		Units	Method ref
Client Sample No	106	108	103	110	101	102	102			
Client Sample ID	BH102	BH102	BH111	BH111	P102	P102	P106			
Depth to Top	4.00	6.00	1.50	8.25	0.10	0.50	1.00			
Depth To Bottom										
Date Sampled	11-Dec-17	11-Dec-17	11-Dec-17	12-Dec-17	12-Dec-17	12-Dec-17	15-Dec-17			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4A	4A	4A	5	4A	4AE	5			
SVOC										
Hexachlorobenzene _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Diethyl phthalate _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Dimethyl phthalate _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Dibenzofuran _A	-	-	-	-	-	58300	-		µg/kg	A-T-052s
Carbazole _A	-	-	-	-	-	25000	-		µg/kg	A-T-052s
Butylbenzyl phthalate _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Bis(2-ethylhexyl)phthalate _A	-	-	-	-	-	<5000	-		µg/kg	A-T-052s
Bis(2-chloroethoxy)methane _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Bis(2-chloroethyl)ether _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
4-Nitrophenol _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
4-Methylphenol _A	-	-	-	-	-	6890	-		µg/kg	A-T-052s
4-Chloro-3-methylphenol _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2-Nitrophenol _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2-Methylphenol _A	-	-	-	-	-	5130	-		µg/kg	A-T-052s
2-Chlorophenol _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2,6-Dinitrotoluene _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2,4-Dinitrotoluene _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2,4-Dimethylphenol _A	-	-	-	-	-	8110	-		µg/kg	A-T-052s
2,4-Dichlorophenol _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2,4,6-Trichlorophenol _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2,4,5-Trichlorophenol _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2-Chloronaphthalene _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
2-Methylnaphthalene _A	-	-	-	-	-	50800	-		µg/kg	A-T-052s
Bis(2-chloroisopropyl)ether _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Phenol _A	-	-	-	-	-	6130	-		µg/kg	A-T-052s
Pentachlorophenol _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
n-Nitroso-n-dipropylamine _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
n-Diethylphthalate _A	-	-	-	-	-	<5000	-		µg/kg	A-T-052s
n-Dibutylphthalate _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Nitrobenzene _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Isophorone _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Hexachloroethane _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s

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Client Sample No	106	108	103	110	101	102	102			
Client Sample ID	BH102	BH102	BH111	BH111	P102	P102	P106			
Depth to Top	4.00	6.00	1.50	8.25	0.10	0.50	1.00			
Depth To Bottom										
Date Sampled	11-Dec-17	11-Dec-17	11-Dec-17	12-Dec-17	12-Dec-17	12-Dec-17	15-Dec-17			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4A	4A	4A	5	4A	4AE	5			
Hexachlorocyclopentadiene _A	-	-	-	-	-	<1000	-		µg/kg	A-T-052s
Perylene _A	-	-	-	-	-	37400	-		µg/kg	A-T-052s

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Lab Sample ID	17/08592/29	17/08592/31	17/08592/35	17/08592/42	17/08592/45	17/08592/46	17/08592/48		Units	Method ref
Client Sample No	106	108	103	110	101	102	102			
Client Sample ID	BH102	BH102	BH111	BH111	P102	P102	P106			
Depth to Top	4.00	6.00	1.50	8.25	0.10	0.50	1.00			
Depth To Bottom										
Date Sampled	11-Dec-17	11-Dec-17	11-Dec-17	12-Dec-17	12-Dec-17	12-Dec-17	15-Dec-17			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4A	4A	4A	5	4A	4AE	5			
VOC										
Dichlorodifluoromethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Chloromethane _A [#]	-	-	-	-	-	<10	-		µg/kg	A-T-006s
Vinyl Chloride _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Bromomethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Chloroethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Trichlorofluoromethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,1-Dichloroethene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Carbon Disulphide _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Dichloromethane _A	-	-	-	-	-	<5	-		µg/kg	A-T-006s
trans 1,2-Dichloroethene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,1-Dichloroethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
cis 1,2-Dichloroethene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
2,2-Dichloropropane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Bromochloromethane _A [#]	-	-	-	-	-	<5	-		µg/kg	A-T-006s
Chloroform _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,1,1-Trichloroethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,1-Dichloropropene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Carbon Tetrachloride _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,2-Dichloroethane _A [#]	-	-	-	-	-	<2	-		µg/kg	A-T-006s
Benzene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Trichloroethene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,2-Dichloropropane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Dibromomethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Bromodichloromethane _A [#]	-	-	-	-	-	<10	-		µg/kg	A-T-006s
cis 1,3-Dichloropropene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Toluene _A [#]	-	-	-	-	-	6	-		µg/kg	A-T-006s
trans 1,3-Dichloropropene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,1,2-Trichloroethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,3-Dichloropropane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Tetrachloroethene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Dibromochloromethane _A [#]	-	-	-	-	-	<3	-		µg/kg	A-T-006s
1,2-Dibromoethane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s

Envirolab Job Number: 17/08592

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08592/29	17/08592/31	17/08592/35	17/08592/42	17/08592/45	17/08592/46	17/08592/48		Units	Method ref
Client Sample No	106	108	103	110	101	102	102			
Client Sample ID	BH102	BH102	BH111	BH111	P102	P102	P106			
Depth to Top	4.00	6.00	1.50	8.25	0.10	0.50	1.00			
Depth To Bottom										
Date Sampled	11-Dec-17	11-Dec-17	11-Dec-17	12-Dec-17	12-Dec-17	12-Dec-17	15-Dec-17			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4A	4A	4A	5	4A	4AE	5			
Chlorobenzene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,1,1,2-Tetrachloroethane _A	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Ethylbenzene _A [#]	-	-	-	-	-	6	-		µg/kg	A-T-006s
m & p Xylene _A [#]	-	-	-	-	-	5	-		µg/kg	A-T-006s
o-Xylene _A [#]	-	-	-	-	-	3	-		µg/kg	A-T-006s
Styrene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Bromoform _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Isopropylbenzene _A [#]	-	-	-	-	-	1	-		µg/kg	A-T-006s
1,1,2,2-Tetrachloroethane _A	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,2,3-Trichloropropane _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
Bromobenzene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
n-Propylbenzene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
2-Chlorotoluene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,3,5-Trimethylbenzene _A [#]	-	-	-	-	-	1	-		µg/kg	A-T-006s
4-Chlorotoluene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
tert-Butylbenzene _A [#]	-	-	-	-	-	<2	-		µg/kg	A-T-006s
1,2,4-Trimethylbenzene _A [#]	-	-	-	-	-	5	-		µg/kg	A-T-006s
sec-Butylbenzene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
4-Isopropyltoluene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,3-Dichlorobenzene _A	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,4-Dichlorobenzene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
n-Butylbenzene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,2-Dichlorobenzene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,2-Dibromo-3-chloropropane _A	-	-	-	-	-	<2	-		µg/kg	A-T-006s
1,2,4-Trichlorobenzene _A	-	-	-	-	-	<3	-		µg/kg	A-T-006s
Hexachlorobutadiene _A [#]	-	-	-	-	-	<1	-		µg/kg	A-T-006s
1,2,3-Trichlorobenzene _A	-	-	-	-	-	<3	-		µg/kg	A-T-006s

Envirolab Job Number: 17/08592

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08592/29	17/08592/31	17/08592/35	17/08592/42	17/08592/45	17/08592/46	17/08592/48		Units	Method ref
Client Sample No	106	108	103	110	101	102	102			
Client Sample ID	BH102	BH102	BH111	BH111	P102	P102	P106			
Depth to Top	4.00	6.00	1.50	8.25	0.10	0.50	1.00			
Depth To Bottom										
Date Sampled	11-Dec-17	11-Dec-17	11-Dec-17	12-Dec-17	12-Dec-17	12-Dec-17	15-Dec-17			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4A	4A	4A	5	4A	4AE	5			
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	A-T-022s
Ali >C8-C10 _A [#]	<0.01	0.05	<0.01	<0.01	<0.01	0.01	<0.01		mg/kg	A-T-022s
Ali >C10-C12 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	14.8	<0.1		mg/kg	A-T-023s
Ali >C12-C16 _A [#]	<0.1	<0.1	<0.1	<0.1	14.6	63.5	<0.1		mg/kg	A-T-023s
Ali >C16-C21 _A [#]	<0.1	<0.1	<0.1	<0.1	91.9	79.3	<0.1		mg/kg	A-T-023s
Ali >C21-C35 _A [#]	<0.1	<0.1	<0.1	<0.1	215	179	<0.1		mg/kg	A-T-023s
Total Aliphatics _A	<0.1	<0.1	<0.1	<0.1	322	336	<0.1		mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01		mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	<0.01		mg/kg	A-T-022s
Aro >C8-C9 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.46	<0.01		mg/kg	A-T-022s
Aro >C9-C10 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.58	<0.01		mg/kg	A-T-022s
Aro >C10-C12 _A [#]	<0.1	<0.1	<0.1	<0.1	1.7	144	<0.1		mg/kg	A-T-023s
Aro >C12-C16 _A [#]	<0.1	<0.1	<0.1	<0.1	7.3	265	<0.1		mg/kg	A-T-023s
Aro >C16-C21 _A [#]	<0.1	<0.1	<0.1	<0.1	36.4	729	<0.1		mg/kg	A-T-023s
Aro >C21-C35 _A [#]	<0.1	<0.1	<0.1	<0.1	64.0	944	<0.1		mg/kg	A-T-023s
Total Aromatics _A	<0.1	<0.1	<0.1	<0.1	109	2080	<0.1		mg/kg	A-T-023s
TPH (Ali & Aro) _A	<0.1	<0.1	<0.1	<0.1	431	2420	<0.1		mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01		mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	<0.01		mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.17	<0.01		mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.17	<0.01		mg/kg	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.12	<0.01		mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	A-T-022s

REPORT NOTES

General:

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure and there is insufficient sample to repeat the analysis. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 17/08686
Issue Number: 1

Date: 11 January, 2018

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK
WF10 1NJ

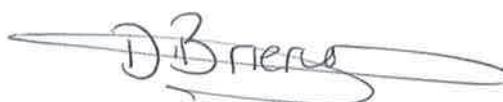
Project Manager: Alex Jones
Project Name: Project Blue
Project Ref: 764393
Order No: N/A
Date Samples Received: 21/12/17
Date Instructions Received: 22/12/17
Date Analysis Completed: 10/01/18

Prepared by:



Richard Wong
Client Manager

Approved by:



Danielle Brierley
Client Manager

Envirolab Job Number: 17/08686

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08686/1	17/08686/2	17/08686/4						Units	Method ref
Client Sample No	101	102	104							
Client Sample ID	BH109	BH109	BH109							
Depth to Top	0.50	3.00	5.00							
Depth To Bottom										
Date Sampled	20-Dec-17	20-Dec-17	20-Dec-17							
Sample Type	Soil - ES	Soil - ES	Soil - ES							
Sample Matrix Code	5A	5A	5A							
% Stones >10mm _A	11.3	34.2	12.9						% w/w	A-T-044
pH _D	12.19	12.07	12.25						pH	A-T-031s
Cyanide (free) _A ^{M#}	<1	<1	<1						mg/kg	A-T-042sFCN
Cyanide (total) _A ^{M#}	<1	<1	<1						mg/kg	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2						mg/kg	A-T-050s
Organic matter _D ^{M#}	1.6	0.3	0.3						% w/w	A-T-032 OM
Arsenic _D ^{M#}	3	3	2						mg/kg	A-T-024s
Barium _D	69	30	17						mg/kg	A-T-024s
Beryllium _D [#]	0.6	<0.5	<0.5						mg/kg	A-T-024s
Boron (water soluble) _D ^{M#}	2.5	1.4	1.4						mg/kg	A-T-027s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5						mg/kg	A-T-024s
Copper _D ^{M#}	34	8	81						mg/kg	A-T-024s
Chromium _D ^{M#}	15	9	7						mg/kg	A-T-024s
Lead _D ^{M#}	43	18	123						mg/kg	A-T-024s
Mercury _D	0.32	<0.17	<0.17						mg/kg	A-T-024s
Nickel _D ^{M#}	15	9	5						mg/kg	A-T-024s
Selenium _D ^{M#}	<1	<1	<1						mg/kg	A-T-024s
Vanadium _D ^{M#}	22	11	8						mg/kg	A-T-024s
Zinc _D ^{M#}	41	17	17						mg/kg	A-T-024s

Envirolab Job Number: 17/08686

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08686/1	17/08686/2	17/08686/4						Units	Method ref
Client Sample No	101	102	104							
Client Sample ID	BH109	BH109	BH109							
Depth to Top	0.50	3.00	5.00							
Depth To Bottom										
Date Sampled	20-Dec-17	20-Dec-17	20-Dec-17							
Sample Type	Soil - ES	Soil - ES	Soil - ES							
Sample Matrix Code	5A	5A	5A							
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD	NAD							A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A	N/A							
Glycol Suite 1										
1,2-Butanediol _A	<10.0	<10.0	<10.0						mg/kg	Subcon
1,2-Propylene glycol (1,2-propanediol) _A	<10.0	<10.0	<10.0						mg/kg	Subcon
1,3-Butanediol _A	<10.0	<10.0	<10.0						mg/kg	Subcon
1,3-Propylene glycol (1,3-propanediol) _A	<10.0	<10.0	<10.0						mg/kg	Subcon
1,4-Butanediol _A	<10.0	<10.0	<10.0						mg/kg	Subcon
1,5-Pentanediol _A	<10.0	<10.0	<10.0						mg/kg	Subcon
Diethylene glycol _A	<10.0	<10.0	<10.0						mg/kg	Subcon
Ethylene glycol _A	<10.0	<10.0	<10.0						mg/kg	Subcon
Triethylene glycol _A	<10.0	<10.0	<10.0						mg/kg	Subcon

Envirolab Job Number: 17/08686

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08686/1	17/08686/2	17/08686/4						Units	Method ref
Client Sample No	101	102	104							
Client Sample ID	BH109	BH109	BH109							
Depth to Top	0.50	3.00	5.00							
Depth To Bottom										
Date Sampled	20-Dec-17	20-Dec-17	20-Dec-17							
Sample Type	Soil - ES	Soil - ES	Soil - ES							
Sample Matrix Code	5A	5A	5A							
PAH 16										
Acenaphthene _A ^{M#}	0.45	<0.01	<0.01						mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01						mg/kg	A-T-019s
Anthracene _A ^{M#}	0.49	<0.02	<0.02						mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	1.66	0.20	<0.04						mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	1.46	0.11	<0.04						mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	1.47	0.11	<0.05						mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	0.75	<0.05	<0.05						mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	0.55	<0.07	<0.07						mg/kg	A-T-019s
Chrysene _A ^{M#}	1.82	0.15	<0.06						mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	0.21	<0.04	<0.04						mg/kg	A-T-019s
Fluoranthene _A ^{M#}	3.09	0.18	<0.08						mg/kg	A-T-019s
Fluorene _A ^{M#}	0.34	<0.01	<0.01						mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	0.81	0.05	<0.03						mg/kg	A-T-019s
Naphthalene _A ^{M#}	0.36	<0.03	<0.03						mg/kg	A-T-019s
Phenanthrene _A ^{M#}	3.00	0.05	<0.03						mg/kg	A-T-019s
Pyrene _A ^{M#}	3.16	0.15	<0.07						mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	19.6	1.00	<0.08						mg/kg	A-T-019s

Envirolab Job Number: 17/08686

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08686/1	17/08686/2	17/08686/4						Units	Method ref
Client Sample No	101	102	104							
Client Sample ID	BH109	BH109	BH109							
Depth to Top	0.50	3.00	5.00							
Depth To Bottom										
Date Sampled	20-Dec-17	20-Dec-17	20-Dec-17							
Sample Type	Soil - ES	Soil - ES	Soil - ES							
Sample Matrix Code	5A	5A	5A							
SVOC										
Hexachlorobenzene _A	-	-	<100						µg/kg	A-T-052s
Diethyl phthalate _A	-	-	<100						µg/kg	A-T-052s
Dimethyl phthalate _A	-	-	<100						µg/kg	A-T-052s
Dibenzofuran _A	-	-	<100						µg/kg	A-T-052s
Carbazole _A	-	-	<100						µg/kg	A-T-052s
Butylbenzyl phthalate _A	-	-	<100						µg/kg	A-T-052s
Bis(2-ethylhexyl)phthalate _A	-	-	<500						µg/kg	A-T-052s
Bis(2-chloroethoxy)methane _A	-	-	<100						µg/kg	A-T-052s
Bis(2-chloroethyl)ether _A	-	-	<100						µg/kg	A-T-052s
4-Nitrophenol _A	-	-	<100						µg/kg	A-T-052s
4-Methylphenol _A	-	-	<100						µg/kg	A-T-052s
4-Chloro-3-methylphenol _A	-	-	<100						µg/kg	A-T-052s
2-Nitrophenol _A	-	-	<100						µg/kg	A-T-052s
2-Methylphenol _A	-	-	<100						µg/kg	A-T-052s
2-Chlorophenol _A	-	-	<100						µg/kg	A-T-052s
2,6-Dinitrotoluene _A	-	-	<100						µg/kg	A-T-052s
2,4-Dinitrotoluene _A	-	-	<100						µg/kg	A-T-052s
2,4-Dimethylphenol _A	-	-	<100						µg/kg	A-T-052s
2,4-Dichlorophenol _A	-	-	<100						µg/kg	A-T-052s
2,4,6-Trichlorophenol _A	-	-	<100						µg/kg	A-T-052s
2,4,5-Trichlorophenol _A	-	-	<100						µg/kg	A-T-052s
2-Chloronaphthalene _A	-	-	<100						µg/kg	A-T-052s
2-Methylnaphthalene _A	-	-	<100						µg/kg	A-T-052s
Bis(2-chloroisopropyl)ether _A	-	-	<100						µg/kg	A-T-052s
Phenol _A	-	-	<100						µg/kg	A-T-052s
Pentachlorophenol _A	-	-	<100						µg/kg	A-T-052s
n-Nitroso-n-dipropylamine _A	-	-	<100						µg/kg	A-T-052s
n-Diethylphthalate _A	-	-	<500						µg/kg	A-T-052s
n-Dibutylphthalate _A	-	-	<100						µg/kg	A-T-052s
Nitrobenzene _A	-	-	<100						µg/kg	A-T-052s
Isophorone _A	-	-	<100						µg/kg	A-T-052s
Hexachloroethane _A	-	-	<100						µg/kg	A-T-052s

Envirolab Job Number: 17/08686

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08686/1	17/08686/2	17/08686/4						Units	Method ref
Client Sample No	101	102	104							
Client Sample ID	BH109	BH109	BH109							
Depth to Top	0.50	3.00	5.00							
Depth To Bottom										
Date Sampled	20-Dec-17	20-Dec-17	20-Dec-17							
Sample Type	Soil - ES	Soil - ES	Soil - ES							
Sample Matrix Code	5A	5A	5A							
Hexachlorocyclopentadiene _A	-	-	<100						µg/kg	A-T-052s
Perylene _A	-	-	<100						µg/kg	A-T-052s

Envirolab Job Number: 17/08686

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08686/1	17/08686/2	17/08686/4						Units	Method ref
Client Sample No	101	102	104							
Client Sample ID	BH109	BH109	BH109							
Depth to Top	0.50	3.00	5.00							
Depth To Bottom										
Date Sampled	20-Dec-17	20-Dec-17	20-Dec-17							
Sample Type	Soil - ES	Soil - ES	Soil - ES							
Sample Matrix Code	5A	5A	5A							
VOC										
Dichlorodifluoromethane _A [#]	-	-	<1						µg/kg	A-T-006s
Chloromethane _A [#]	-	-	<10						µg/kg	A-T-006s
Vinyl Chloride _A [#]	-	-	<1						µg/kg	A-T-006s
Bromomethane _A [#]	-	-	<1						µg/kg	A-T-006s
Chloroethane _A [#]	-	-	<1						µg/kg	A-T-006s
Trichlorofluoromethane _A [#]	-	-	<1						µg/kg	A-T-006s
1,1-Dichloroethene _A [#]	-	-	<1						µg/kg	A-T-006s
Carbon Disulphide _A [#]	-	-	<1						µg/kg	A-T-006s
Dichloromethane _A	-	-	<5						µg/kg	A-T-006s
trans 1,2-Dichloroethene _A [#]	-	-	<1						µg/kg	A-T-006s
1,1-Dichloroethane _A [#]	-	-	<1						µg/kg	A-T-006s
cis 1,2-Dichloroethene _A [#]	-	-	<1						µg/kg	A-T-006s
2,2-Dichloropropane _A [#]	-	-	<1						µg/kg	A-T-006s
Bromochloromethane _A [#]	-	-	<5						µg/kg	A-T-006s
Chloroform _A [#]	-	-	<1						µg/kg	A-T-006s
1,1,1-Trichloroethane _A [#]	-	-	<1						µg/kg	A-T-006s
1,1-Dichloropropene _A [#]	-	-	<1						µg/kg	A-T-006s
Carbon Tetrachloride _A [#]	-	-	<1						µg/kg	A-T-006s
1,2-Dichloroethane _A [#]	-	-	<2						µg/kg	A-T-006s
Benzene _A [#]	-	-	<1						µg/kg	A-T-006s
Trichloroethene _A [#]	-	-	<1						µg/kg	A-T-006s
1,2-Dichloropropane _A [#]	-	-	<1						µg/kg	A-T-006s
Dibromomethane _A [#]	-	-	<1						µg/kg	A-T-006s
Bromodichloromethane _A [#]	-	-	<10						µg/kg	A-T-006s
cis 1,3-Dichloropropene _A [#]	-	-	<1						µg/kg	A-T-006s
Toluene _A [#]	-	-	<1						µg/kg	A-T-006s
trans 1,3-Dichloropropene _A [#]	-	-	<1						µg/kg	A-T-006s
1,1,2-Trichloroethane _A [#]	-	-	<1						µg/kg	A-T-006s
1,3-Dichloropropane _A [#]	-	-	<1						µg/kg	A-T-006s
Tetrachloroethene _A [#]	-	-	<1						µg/kg	A-T-006s
Dibromochloromethane _A [#]	-	-	<3						µg/kg	A-T-006s
1,2-Dibromoethane _A [#]	-	-	<1						µg/kg	A-T-006s

Envirolab Job Number: 17/08686

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08686/1	17/08686/2	17/08686/4						Units	Method ref
Client Sample No	101	102	104							
Client Sample ID	BH109	BH109	BH109							
Depth to Top	0.50	3.00	5.00							
Depth To Bottom										
Date Sampled	20-Dec-17	20-Dec-17	20-Dec-17							
Sample Type	Soil - ES	Soil - ES	Soil - ES							
Sample Matrix Code	5A	5A	5A							
Chlorobenzene _A [#]	-	-	<1						µg/kg	A-T-006s
1,1,1,2-Tetrachloroethane _A	-	-	<1						µg/kg	A-T-006s
Ethylbenzene _A [#]	-	-	<1						µg/kg	A-T-006s
m & p Xylene _A [#]	-	-	<1						µg/kg	A-T-006s
o-Xylene _A [#]	-	-	<1						µg/kg	A-T-006s
Styrene _A [#]	-	-	<1						µg/kg	A-T-006s
Bromoform _A [#]	-	-	<1						µg/kg	A-T-006s
Isopropylbenzene _A [#]	-	-	<1						µg/kg	A-T-006s
1,1,2,2-Tetrachloroethane _A	-	-	<1						µg/kg	A-T-006s
1,2,3-Trichloropropane _A [#]	-	-	<1						µg/kg	A-T-006s
Bromobenzene _A [#]	-	-	<1						µg/kg	A-T-006s
n-Propylbenzene _A [#]	-	-	<1						µg/kg	A-T-006s
2-Chlorotoluene _A [#]	-	-	<1						µg/kg	A-T-006s
1,3,5-Trimethylbenzene _A [#]	-	-	<1						µg/kg	A-T-006s
4-Chlorotoluene _A [#]	-	-	<1						µg/kg	A-T-006s
tert-Butylbenzene _A [#]	-	-	<2						µg/kg	A-T-006s
1,2,4-Trimethylbenzene _A [#]	-	-	<1						µg/kg	A-T-006s
sec-Butylbenzene _A [#]	-	-	<1						µg/kg	A-T-006s
4-Isopropyltoluene _A [#]	-	-	<1						µg/kg	A-T-006s
1,3-Dichlorobenzene _A	-	-	<1						µg/kg	A-T-006s
1,4-Dichlorobenzene _A [#]	-	-	<1						µg/kg	A-T-006s
n-Butylbenzene _A [#]	-	-	<1						µg/kg	A-T-006s
1,2-Dichlorobenzene _A [#]	-	-	<1						µg/kg	A-T-006s
1,2-Dibromo-3-chloropropane _A	-	-	<2						µg/kg	A-T-006s
1,2,4-Trichlorobenzene _A	-	-	<3						µg/kg	A-T-006s
Hexachlorobutadiene _A [#]	-	-	<1						µg/kg	A-T-006s
1,2,3-Trichlorobenzene _A	-	-	<3						µg/kg	A-T-006s

Envirolab Job Number: 17/08686

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	17/08686/1	17/08686/2	17/08686/4						Units	Method ref
Client Sample No	101	102	104							
Client Sample ID	BH109	BH109	BH109							
Depth to Top	0.50	3.00	5.00							
Depth To Bottom										
Date Sampled	20-Dec-17	20-Dec-17	20-Dec-17							
Sample Type	Soil - ES	Soil - ES	Soil - ES							
Sample Matrix Code	5A	5A	5A							
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
Ali >C8-C10 _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
Ali >C10-C12 _A [#]	<0.1	<0.1	<0.1						mg/kg	A-T-023s
Ali >C12-C16 _A [#]	<0.1	<0.1	<0.1						mg/kg	A-T-023s
Ali >C16-C21 _A [#]	<0.1	<0.1	<0.1						mg/kg	A-T-023s
Ali >C21-C35 _A [#]	<0.1	<0.1	<0.1						mg/kg	A-T-023s
Total Aliphatics _A	<0.1	<0.1	<0.1						mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
Aro >C8-C9 _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
Aro >C9-C10 _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
Aro >C10-C12 _A [#]	3.7	<0.1	<0.1						mg/kg	A-T-023s
Aro >C12-C16 _A [#]	8.8	<0.1	<0.1						mg/kg	A-T-023s
Aro >C16-C21 _A [#]	12.6	<0.1	<0.1						mg/kg	A-T-023s
Aro >C21-C35 _A [#]	16.3	<0.1	<0.1						mg/kg	A-T-023s
Total Aromatics _A	41.4	<0.1	<0.1						mg/kg	A-T-023s
TPH (Ali & Aro) _A	41.4	<0.1	<0.1						mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01						mg/kg	A-T-022s

REPORT NOTES

General:

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure and there is insufficient sample to repeat the analysis. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 18/00159

Issue Number: 1

Date: 24 January, 2018

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK
WF10 1NJ

Project Manager: Alex Jones
Project Name: Project Blue
Project Ref: 764393
Order No: N/A
Date Samples Received: 05/01/18
Date Instructions Received: 10/01/18
Date Analysis Completed: 24/01/18

Prepared by:



Melanie Marshall
Laboratory Coordinator

Approved by:



Gill Walker
Laboratory Manager

Envirolab Job Number: 18/00159

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00159/1	18/00159/3							Units	Method ref
Client Sample No	101	103								
Client Sample ID	BH114	BH114								
Depth to Top	0.50	1.50								
Depth To Bottom										
Date Sampled	03-Jan-18	03-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	5								
% Stones >10mm _A	10.4	<0.1							% w/w	A-T-044
pH _D	9.44	8.47							pH	A-T-031s
Cyanide (free) _A ^{M#}	<1	<1							mg/kg	A-T-042sFCN
Cyanide (total) _A ^{M#}	<1	<1							mg/kg	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2							mg/kg	A-T-050s
Organic matter _D ^{M#}	1.8	1.0							% w/w	A-T-032 OM
Arsenic _D ^{M#}	4	9							mg/kg	A-T-024s
Barium _D	64	49							mg/kg	A-T-024s
Beryllium _D [#]	<0.5	<0.5							mg/kg	A-T-024s
Boron (water soluble) _D ^{M#}	2.2	3.5							mg/kg	A-T-027s
Cadmium _D ^{M#}	0.8	0.9							mg/kg	A-T-024s
Copper _D ^{M#}	298	25							mg/kg	A-T-024s
Chromium _D ^{M#}	22	27							mg/kg	A-T-024s
Lead _D ^{M#}	48	59							mg/kg	A-T-024s
Mercury _D	<0.17	<0.17							mg/kg	A-T-024s
Nickel _D ^{M#}	29	22							mg/kg	A-T-024s
Selenium _D ^{M#}	<1	<1							mg/kg	A-T-024s
Vanadium _D ^{M#}	25	28							mg/kg	A-T-024s
Zinc _D ^{M#}	47	57							mg/kg	A-T-024s

Envirolab Job Number: 18/00159

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00159/1	18/00159/3							Units	Method ref
Client Sample No	101	103								
Client Sample ID	BH114	BH114								
Depth to Top	0.50	1.50								
Depth To Bottom										
Date Sampled	03-Jan-18	03-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	5								
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD								A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A								
Glycol Suite 1										
1,2-Butanediol _A	<10.0	<10.0							mg/kg	Subcon
1,2-Propylene glycol (1,2-propanediol) _A	<10.0	<10.0							mg/kg	Subcon
1,3-Butanediol _A	<10.0	<10.0							mg/kg	Subcon
1,3-Propylene glycol (1,3-propanediol) _A	<10.0	<10.0							mg/kg	Subcon
1,4-Butanediol _A	<10.0	<10.0							mg/kg	Subcon
1,5-Pentanediol _A	<10.0	<10.0							mg/kg	Subcon
Diethylene glycol _A	<10.0	<10.0							mg/kg	Subcon
Ethylene glycol _A	<10.0	<10.0							mg/kg	Subcon
Triethylene glycol _A	<10.0	<10.0							mg/kg	Subcon

Envirolab Job Number: 18/00159

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00159/1	18/00159/3							Units	Method ref
Client Sample No	101	103								
Client Sample ID	BH114	BH114								
Depth to Top	0.50	1.50								
Depth To Bottom										
Date Sampled	03-Jan-18	03-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	5								
PAH 16										
Acenaphthene _A ^{M#}	1.39	<0.01							mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	0.01	<0.01							mg/kg	A-T-019s
Anthracene _A ^{M#}	1.68	<0.02							mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	2.88	<0.04							mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	3.58	<0.04							mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	3.14	<0.05							mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	2.12	<0.05							mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	1.12	<0.07							mg/kg	A-T-019s
Chrysene _A ^{M#}	3.27	<0.06							mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	0.50	<0.04							mg/kg	A-T-019s
Fluoranthene _A ^{M#}	10.2	<0.08							mg/kg	A-T-019s
Fluorene _A ^{M#}	1.18	<0.01							mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	2.48	<0.03							mg/kg	A-T-019s
Naphthalene _A ^{M#}	1.29	<0.03							mg/kg	A-T-019s
Phenanthrene _A ^{M#}	11.8	<0.03							mg/kg	A-T-019s
Pyrene _A ^{M#}	9.12	<0.07							mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	55.8	<0.08							mg/kg	A-T-019s

Envirolab Job Number: 18/00159

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00159/1	18/00159/3							Units	Method ref
Client Sample No	101	103								
Client Sample ID	BH114	BH114								
Depth to Top	0.50	1.50								
Depth To Bottom										
Date Sampled	03-Jan-18	03-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	5								
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Ali >C8-C10 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Ali >C10-C12 _A [#]	<0.1	<0.1							mg/kg	A-T-023s
Ali >C12-C16 _A [#]	<0.1	<0.1							mg/kg	A-T-023s
Ali >C16-C21 _A [#]	<0.1	<0.1							mg/kg	A-T-023s
Ali >C21-C35 _A [#]	<0.1	<0.1							mg/kg	A-T-023s
Total Aliphatics _A	<0.1	<0.1							mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Aro >C8-C9 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Aro >C9-C10 _A [#]	0.02	<0.01							mg/kg	A-T-022s
Aro >C10-C12 _A [#]	1.1	<0.1							mg/kg	A-T-023s
Aro >C12-C16 _A [#]	5.4	<0.1							mg/kg	A-T-023s
Aro >C16-C21 _A [#]	18.7	<0.1							mg/kg	A-T-023s
Aro >C21-C35 _A [#]	26.9	<0.1							mg/kg	A-T-023s
Total Aromatics _A	52.1	<0.1							mg/kg	A-T-023s
TPH (Ali & Aro) _A	52.1	<0.1							mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01							mg/kg	A-T-022s

REPORT NOTES

General:

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure and there is insufficient sample to repeat the analysis. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

FINAL ANALYTICAL TEST REPORT SUPPLEMENT TO TEST REPORT 18/00300/1

Envirolab Job Number: 18/00300
Issue Number: 2

Date: 28 February, 2018

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK
WF10 1NJ

Project Manager: Alex Jones/Philip Rowlay
Project Name: Project Blue
Project Ref: 764393
Order No: N/A
Date Samples Received: 19/12/17
Date Instructions Received: 16/01/18
Date Analysis Completed: 27/02/18

Prepared by:



Holly Neary-King
Administrative Assistant

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 18/00300

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00300/1	18/00300/3	18/00300/4	18/00300/5	18/00300/7	18/00300/8	18/00300/9	18/00300/11	Units	Method ref
Client Sample No	101	101			101	101	101	101		
Client Sample ID	PAC01A	PAC02A	PAC02B	PAC03A	PAC04A	PAC04B	PAC05A	PAC06A		
Depth to Top	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Depth To Bottom										
Date Sampled	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	11-Jan-18		
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid		
Sample Matrix Code	7	7	7	7	7	7	7	7		
% Stones >10mm _A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	% w/w	A-T-044
pH _D	7.56	7.69	7.78	7.85	8.11	8.18	7.97	7.75	pH	A-T-031s
Cyanide (free) _A ^{M#}	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	A-T-042sFCN
Cyanide (total) _A ^{M#}	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	A-T-050s
Organic matter _D ^{M#}	1.7	3.9	4.6	3.7	1.3	1.3	3.3	4.8	% w/w	A-T-032 OM
Arsenic _D ^{M#}	2	8	8	9	5	5	5	9	mg/kg	A-T-024s
Barium _D	69	183	174	169	88	74	162	172	mg/kg	A-T-024s
Beryllium _D [#]	<0.5	1.0	1.0	0.8	<0.5	<0.5	0.7	0.6	mg/kg	A-T-024s
Boron (water soluble) _D ^{M#}	7.7	18.5	16.7	12.2	8.8	7.8	13.7	14.6	mg/kg	A-T-027s
Cadmium _D ^{M#}	0.6	1.6	1.6	1.4	0.6	0.5	1.3	1.6	mg/kg	A-T-024s
Copper _D ^{M#}	41	118	118	93	55	47	125	120	mg/kg	A-T-024s
Chromium _D ^{M#}	27	63	67	60	34	28	76	68	mg/kg	A-T-024s
Lead _D ^{M#}	46	124	128	135	64	54	122	232	mg/kg	A-T-024s
Mercury _D	0.39	1.19	1.46	1.58	0.80	0.51	1.17	1.43	mg/kg	A-T-024s
Nickel _D ^{M#}	15	34	34	27	18	15	28	27	mg/kg	A-T-024s
Selenium _D ^{M#}	<1	2	2	1	<1	1	2	2	mg/kg	A-T-024s
Vanadium _D ^{M#}	23	52	51	45	30	24	47	47	mg/kg	A-T-024s
Zinc _D ^{M#}	144	337	344	318	160	137	315	365	mg/kg	A-T-024s
Leachate Prep BS EN 12457-2 (10:1) _A	*	*	*	*	*	*	*	*		A-T-001
Arsenic (leachable) _A [#]	37	64	42	40	31	12	42	6	µg/l	A-T-025w
Boron (leachable) _A [#]	712	1080	1040	706	631	485	828	861	µg/l	A-T-025w
Barium (leachable) _A [#]	41	26	29	35	30	26	32	26	µg/l	A-T-025w
Beryllium (leachable) _A [#]	<1	<1	<1	<1	<1	<1	<1	<1	µg/l	A-T-025w
Cadmium (leachable) _A [#]	<1	<1	<1	<1	<1	<1	<1	<1	µg/l	A-T-025w
Copper (leachable) _A [#]	<1	2	1	<1	<1	2	<1	<1	µg/l	A-T-025w
Chromium (leachable) _A [#]	<1	1	<1	<1	<1	<1	<1	<1	µg/l	A-T-025w
Lead (leachable) _A [#]	<1	<1	1	<1	1	2	<1	<1	µg/l	A-T-025w
Magnesium (leachable) _A	81	129	113	94	50	41	83	123	mg/l	A-T-049w
Mercury (leachable) _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	µg/l	A-T-025w
Nickel (leachable) _A [#]	1	1	2	<1	1	1	<1	<1	µg/l	A-T-025w
Selenium (leachable) _A [#]	<1	<1	<1	<1	<1	<1	<1	<1	µg/l	A-T-025w
Vanadium (leachable) _A [#]	5	5	8	8	11	11	10	<1	µg/l	A-T-025w

Envirolab Job Number: 18/00300

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00300/1	18/00300/3	18/00300/4	18/00300/5	18/00300/7	18/00300/8	18/00300/9	18/00300/11	Units	Method ref
Client Sample No	101	101			101	101	101	101		
Client Sample ID	PAC01A	PAC02A	PAC02B	PAC03A	PAC04A	PAC04B	PAC05A	PAC06A		
Depth to Top	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Depth To Bottom										
Date Sampled	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	11-Jan-18		
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid		
Sample Matrix Code	7	7	7	7	7	7	7	7		
Zinc (leachable) _A [#]	16	14	14	5	7	15	10	3	µg/l	A-T-025w
TPH total (>C6-C40) (leachable) _A	214	277	332	321	411	418	340	340	µg/l	A-T-007w
Tributyltin (leachable) _A	<10	<10	<10	<10	<10	<10	<10	<10	ng/l	Subcon

Envirolab Job Number: 18/00300

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00300/1	18/00300/3	18/00300/4	18/00300/5	18/00300/7	18/00300/8	18/00300/9	18/00300/11	Units	Method ref
Client Sample No	101	101			101	101	101	101		
Client Sample ID	PAC01A	PAC02A	PAC02B	PAC03A	PAC04A	PAC04B	PAC05A	PAC06A		
Depth to Top	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Depth To Bottom										
Date Sampled	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	11-Jan-18		
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid		
Sample Matrix Code	7	7	7	7	7	7	7	7		
Asbestos in Soil (inc. matrix)										
Asbestos in soil _A [#]	Chrysotile	NAD	NAD	NAD	NAD	NAD	NAD	NAD		A-T-045
Asbestos Matrix (microscope) _A	Loose Fibres	-	-	-	-	-	-	-		A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Asbestos in Soil Quantification % (Hand Picking & Weighing)										
Asbestos in soil % composition (hand picking and weighing) ₀	0.002	-	-	-	-	-	-	-	% w/w	A-T-054
Glycols (Suite 1)										
1,2-Butanediol (1,2-Butylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,2-Propanediol (1,2-Propylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,3-Butanediol (1,3-Butylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,3-Propanediol (1,3-Propylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,4-Butanediol (1,4-Butylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
1,5-Pentanediol _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
Diethylene glycol _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
Ethylene glycol (Monoethylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
Triethylene glycol _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	mg/kg	Subcon
Organotins										
Dibutyltin _A	<10	14	-	-	<10	-	<10	-	µg/kg	Subcon
Tributyltin _A	10	14	-	-	27	-	220	-	µg/kg	Subcon
Triphenyltin _A	<10	<10	-	-	<10	-	<10	-	µg/kg	Subcon
Tetrabutyltin _A	<10	<10	-	-	<10	-	<10	-	µg/kg	Subcon

Envirolab Job Number: 18/00300

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00300/1	18/00300/3	18/00300/4	18/00300/5	18/00300/7	18/00300/8	18/00300/9	18/00300/11	Units	Method ref
Client Sample No	101	101			101	101	101	101		
Client Sample ID	PAC01A	PAC02A	PAC02B	PAC03A	PAC04A	PAC04B	PAC05A	PAC06A		
Depth to Top	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Depth To Bottom										
Date Sampled	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	11-Jan-18		
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid		
Sample Matrix Code	7	7	7	7	7	7	7	7		
PAH 16										
Acenaphthene _A ^{M#}	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	0.18	<0.04	0.16	0.16	0.15	0.12	0.16	<0.04	mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	0.18	<0.05	0.14	0.14	0.11	0.10	0.14	<0.05	mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	0.16	<0.05	0.14	0.14	0.13	0.10	0.14	<0.05	mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	A-T-019s
Chrysene _A ^{M#}	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	A-T-019s
Fluoranthene _A ^{M#}	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	mg/kg	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	0.21	<0.03	0.19	0.19	0.16	0.13	0.16	0.10	mg/kg	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	A-T-019s
Phenanthrene _A ^{M#}	0.09	<0.03	0.16	<0.03	<0.03	0.05	0.07	<0.03	mg/kg	A-T-019s
Pyrene _A ^{M#}	0.18	<0.07	<0.07	<0.07	<0.07	<0.07	0.23	<0.07	mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	0.98	<0.08	0.90	0.65	0.55	0.51	0.94	<0.08	mg/kg	A-T-019s

Envirolab Job Number: 18/00300

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00300/1	18/00300/3	18/00300/4	18/00300/5	18/00300/7	18/00300/8	18/00300/9	18/00300/11	Units	Method ref
Client Sample No	101	101			101	101	101	101		
Client Sample ID	PAC01A	PAC02A	PAC02B	PAC03A	PAC04A	PAC04B	PAC05A	PAC06A		
Depth to Top	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Depth To Bottom										
Date Sampled	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	11-Jan-18		
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid		
Sample Matrix Code	7	7	7	7	7	7	7	7		
PAH 16MS (leachable)										
Acenaphthene (leachable) _A	<0.02	<0.02	0.14	0.13	0.11	0.14	<0.02	<0.02	µg/l	A-T-019w
Acenaphthylene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Anthracene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Benzo(a)anthracene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Benzo(a)pyrene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Benzo(b)fluoranthene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Benzo(ghi)perylene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Benzo(k)fluoranthene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Chrysene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Dibenzo(ah)anthracene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Fluoranthene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	µg/l	A-T-019w
Fluorene (leachable) _A	<0.02	<0.02	0.03	0.02	0.03	0.04	<0.02	<0.02	µg/l	A-T-019w
Indeno(123-cd)pyrene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Naphthalene (leachable) _A	0.22	0.07	0.06	0.09	<0.02	0.14	0.04	<0.02	µg/l	A-T-019w
Phenanthrene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	µg/l	A-T-019w
Pyrene (leachable) _A	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	µg/l	A-T-019w
PAH (total 16) (leachable) _A	0.22	0.07	0.23	0.24	0.14	0.32	0.10	<0.02	µg/l	A-T-019w

Envirolab Job Number: 18/00300

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00300/1	18/00300/3	18/00300/4	18/00300/5	18/00300/7	18/00300/8	18/00300/9	18/00300/11	Units	Method ref
Client Sample No	101	101			101	101	101	101		
Client Sample ID	PAC01A	PAC02A	PAC02B	PAC03A	PAC04A	PAC04B	PAC05A	PAC06A		
Depth to Top	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Depth To Bottom										
Date Sampled	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	10-Jan-18	11-Jan-18		
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid		
Sample Matrix Code	7	7	7	7	7	7	7	7		
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Ali >C8-C10 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Ali >C10-C12 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	A-T-023s
Ali >C12-C16 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	9.8	<0.1	mg/kg	A-T-023s
Ali >C16-C21 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	22.0	<0.1	mg/kg	A-T-023s
Ali >C21-C35 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	40.5	<0.1	mg/kg	A-T-023s
Total Aliphatics _A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	72.4	<0.1	mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C8-C9 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C9-C10 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C10-C12 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	A-T-023s
Aro >C12-C16 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.4	7.3	mg/kg	A-T-023s
Aro >C16-C21 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	18.3	29.5	mg/kg	A-T-023s
Aro >C21-C35 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	12.3	35.6	56.7	mg/kg	A-T-023s
Total Aromatics _A	<0.1	<0.1	<0.1	<0.1	<0.1	12.3	55.3	93.5	mg/kg	A-T-023s
TPH (Ali & Aro) _A	<0.1	<0.1	<0.1	<0.1	<0.1	12.3	128	93.5	mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s

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Lab Sample ID	18/00300/12	18/00300/13	18/00300/15	18/00300/16	18/00300/24	18/00300/26			Units	Method ref
Client Sample No	101	101	101	101	102	104				
Client Sample ID	PAC06B	PAC07A	PAC08A	PAC08B	BH108	BH108				
Depth to Top	0.00	0.00	0.00	0.00	1.00	2.00				
Depth To Bottom										
Date Sampled	11-Jan-18	11-Jan-18	11-Jan-18	11-Jan-18	18-Dec-17	18-Dec-17				
Sample Type	Solid	Solid	Solid	Solid	Soil - ES	Soil - ES				
Sample Matrix Code	7	7	7	7	5A	5A				
% Stones >10mm _A	<0.1	<0.1	<0.1	<0.1	5.7	3.4			% w/w	A-T-044
pH _D	7.93	8.03	8.05	8.09	8.45	8.43			pH	A-T-031s
Cyanide (free) _A ^{M#}	<1	<1	<1	<1	<1	<1			mg/kg	A-T-042sFCN
Cyanide (total) _A ^{M#}	<1	<1	<1	<1	<1	<1			mg/kg	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2			mg/kg	A-T-050s
Organic matter _D ^{M#}	3.9	6.3	4.5	5.6	0.8	1.4			% w/w	A-T-032 OM
Arsenic _D ^{M#}	24	9	6	16	3	3			mg/kg	A-T-024s
Barium _D	201	132	328	247	56	42			mg/kg	A-T-024s
Beryllium _D [#]	0.7	0.5	0.6	0.8	<0.5	<0.5			mg/kg	A-T-024s
Boron (water soluble) _D ^{M#}	11.4	14.4	10.0	12.0	1.2	<1.0			mg/kg	A-T-027s
Cadmium _D ^{M#}	2.4	1.0	1.6	2.6	<0.5	<0.5			mg/kg	A-T-024s
Copper _D ^{M#}	122	87	138	165	20	22			mg/kg	A-T-024s
Chromium _D ^{M#}	83	52	59	90	14	12			mg/kg	A-T-024s
Lead _D ^{M#}	248	107	500	193	39	44			mg/kg	A-T-024s
Mercury _D	2.48	0.93	1.43	2.88	<0.17	0.17			mg/kg	A-T-024s
Nickel _D ^{M#}	32	25	27	34	12	14			mg/kg	A-T-024s
Selenium _D ^{M#}	2	2	2	2	<1	<1			mg/kg	A-T-024s
Vanadium _D ^{M#}	51	39	52	53	17	14			mg/kg	A-T-024s
Zinc _D ^{M#}	520	249	340	549	25	31			mg/kg	A-T-024s
Leachate Prep BS EN 12457-2 (10:1) _A	*	*	*	*	-	-				A-T-001
Arsenic (leachable) _A [#]	19	47	8	33	-	-			µg/l	A-T-025w
Boron (leachable) _A [#]	616	824	614	675	-	-			µg/l	A-T-025w
Barium (leachable) _A [#]	48	27	61	53	-	-			µg/l	A-T-025w
Beryllium (leachable) _A [#]	<1	<1	<1	<1	-	-			µg/l	A-T-025w
Cadmium (leachable) _A [#]	<1	<1	<1	<1	-	-			µg/l	A-T-025w
Copper (leachable) _A [#]	<1	2	<1	<1	-	-			µg/l	A-T-025w
Chromium (leachable) _A [#]	<1	<1	<1	1	-	-			µg/l	A-T-025w
Lead (leachable) _A [#]	<1	1	<1	<1	-	-			µg/l	A-T-025w
Magnesium (leachable) _A	85	91	75	80	-	-			mg/l	A-T-049w
Mercury (leachable) _A [#]	<0.1	<0.1	<0.1	<0.1	-	-			µg/l	A-T-025w
Nickel (leachable) _A [#]	<1	2	<1	<1	-	-			µg/l	A-T-025w
Selenium (leachable) _A [#]	<1	<1	<1	<1	-	-			µg/l	A-T-025w
Vanadium (leachable) _A [#]	2	4	1	12	-	-			µg/l	A-T-025w

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Lab Sample ID	18/00300/12	18/00300/13	18/00300/15	18/00300/16	18/00300/24	18/00300/26			Units	Method ref
Client Sample No	101	101	101	101	102	104				
Client Sample ID	PAC06B	PAC07A	PAC08A	PAC08B	BH108	BH108				
Depth to Top	0.00	0.00	0.00	0.00	1.00	2.00				
Depth To Bottom										
Date Sampled	11-Jan-18	11-Jan-18	11-Jan-18	11-Jan-18	18-Dec-17	18-Dec-17				
Sample Type	Solid	Solid	Solid	Solid	Soil - ES	Soil - ES				
Sample Matrix Code	7	7	7	7	5A	5A				
Zinc (leachable) _A [#]	6	13	13	8	-	-			µg/l	A-T-025w
TPH total (>C6-C40) (leachable) _A	206	220	235	143	-	-			µg/l	A-T-007w
Tributyltin (leachable) _A	<10	<10	<10	<10	-	-			ng/l	Subcon

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Lab Sample ID	18/00300/12	18/00300/13	18/00300/15	18/00300/16	18/00300/24	18/00300/26			Units	Method ref
Client Sample No	101	101	101	101	102	104				
Client Sample ID	PAC06B	PAC07A	PAC08A	PAC08B	BH108	BH108				
Depth to Top	0.00	0.00	0.00	0.00	1.00	2.00				
Depth To Bottom										
Date Sampled	11-Jan-18	11-Jan-18	11-Jan-18	11-Jan-18	18-Dec-17	18-Dec-17				
Sample Type	Solid	Solid	Solid	Solid	Soil - ES	Soil - ES				
Sample Matrix Code	7	7	7	7	5A	5A				
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD	NAD	NAD	NAD	NAD				A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A	N/A	N/A	N/A	N/A				
Glycols (Suite 1)										
1,2-Butanediol (1,2-Butylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
1,2-Propanediol (1,2-Propylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
1,3-Butanediol (1,3-Butylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
1,3-Propanediol (1,3-Propylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
1,4-Butanediol (1,4-Butylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
1,5-Pentanediol _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
Diethylene glycol _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
Ethylene glycol (Monoethylene glycol) _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
Triethylene glycol _A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0			mg/kg	Subcon
Organotins										
Dibutyltin _A	-	<10	<10	-	-	-			µg/kg	Subcon
Tributyltin _A	-	16	34	-	-	-			µg/kg	Subcon
Triphenyltin _A	-	<10	<10	-	-	-			µg/kg	Subcon
Tetrabutyltin _A	-	<10	<10	-	-	-			µg/kg	Subcon

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Lab Sample ID	18/00300/12	18/00300/13	18/00300/15	18/00300/16	18/00300/24	18/00300/26			Units	Method ref
Client Sample No	101	101	101	101	102	104				
Client Sample ID	PAC06B	PAC07A	PAC08A	PAC08B	BH108	BH108				
Depth to Top	0.00	0.00	0.00	0.00	1.00	2.00				
Depth To Bottom										
Date Sampled	11-Jan-18	11-Jan-18	11-Jan-18	11-Jan-18	18-Dec-17	18-Dec-17				
Sample Type	Solid	Solid	Solid	Solid	Soil - ES	Soil - ES				
Sample Matrix Code	7	7	7	7	5A	5A				
PAH 16										
Acenaphthene _A ^{M#}	<0.01	<0.01	0.11	0.02	0.34	<0.01			mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	0.09	0.05	<0.01	0.01			mg/kg	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	0.29	0.05	0.50	0.07			mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	<0.04	1.23	0.17	0.67	0.20			mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	0.11	<0.04	1.43	0.45	0.53	0.13			mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	<0.05	1.12	0.41	0.59	0.11			mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	1.34	0.33	0.37	<0.05			mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	0.46	<0.07	0.25	<0.07			mg/kg	A-T-019s
Chrysene _A ^{M#}	<0.06	<0.06	1.41	0.24	0.73	0.22			mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	0.26	<0.04	0.09	<0.04			mg/kg	A-T-019s
Fluoranthene _A ^{M#}	<0.08	<0.08	3.77	0.36	1.95	0.47			mg/kg	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	0.11	0.02	0.26	0.03			mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	0.09	<0.03	1.63	0.41	0.45	0.07			mg/kg	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	0.18	<0.03	0.04	<0.03			mg/kg	A-T-019s
Phenanthrene _A ^{M#}	<0.03	<0.03	0.37	0.12	2.23	0.53			mg/kg	A-T-019s
Pyrene _A ^{M#}	<0.07	<0.07	2.60	0.48	1.55	0.42			mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	0.19	<0.08	16.4	3.13	10.6	2.26			mg/kg	A-T-019s

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Lab Sample ID	18/00300/12	18/00300/13	18/00300/15	18/00300/16	18/00300/24	18/00300/26			Units	Method ref
Client Sample No	101	101	101	101	102	104				
Client Sample ID	PAC06B	PAC07A	PAC08A	PAC08B	BH108	BH108				
Depth to Top	0.00	0.00	0.00	0.00	1.00	2.00				
Depth To Bottom										
Date Sampled	11-Jan-18	11-Jan-18	11-Jan-18	11-Jan-18	18-Dec-17	18-Dec-17				
Sample Type	Solid	Solid	Solid	Solid	Soil - ES	Soil - ES				
Sample Matrix Code	7	7	7	7	5A	5A				
PAH 16MS (leachable)										
Acenaphthene (leachable) _A	<0.02	0.03	0.03	0.02	-	-			µg/l	A-T-019w
Acenaphthylene (leachable) _A	<0.02	<0.02	<0.02	<0.02	-	-			µg/l	A-T-019w
Anthracene (leachable) _A	<0.02	0.16	0.03	0.05	-	-			µg/l	A-T-019w
Benzo(a)anthracene (leachable) _A	<0.02	0.13	0.02	<0.02	-	-			µg/l	A-T-019w
Benzo(a)pyrene (leachable) _A	<0.02	0.12	<0.02	<0.02	-	-			µg/l	A-T-019w
Benzo(b)fluoranthene (leachable) _A	<0.02	0.10	<0.02	<0.02	-	-			µg/l	A-T-019w
Benzo(ghi)perylene (leachable) _A	<0.02	0.07	<0.02	<0.02	-	-			µg/l	A-T-019w
Benzo(k)fluoranthene (leachable) _A	<0.02	0.09	<0.02	<0.02	-	-			µg/l	A-T-019w
Chrysene (leachable) _A	<0.02	0.17	0.04	<0.02	-	-			µg/l	A-T-019w
Dibenzo(ah)anthracene (leachable) _A	<0.02	0.05	<0.02	<0.02	-	-			µg/l	A-T-019w
Fluoranthene (leachable) _A	0.02	0.18	0.08	<0.02	-	-			µg/l	A-T-019w
Fluorene (leachable) _A	<0.02	0.03	<0.02	<0.02	-	-			µg/l	A-T-019w
Indeno(123-cd)pyrene (leachable) _A	<0.02	0.09	<0.02	<0.02	-	-			µg/l	A-T-019w
Naphthalene (leachable) _A	<0.02	0.12	0.06	<0.02	-	-			µg/l	A-T-019w
Phenanthrene (leachable) _A	<0.02	0.17	0.06	<0.02	-	-			µg/l	A-T-019w
Pyrene (leachable) _A	0.02	0.16	0.07	<0.02	-	-			µg/l	A-T-019w
PAH (total 16) (leachable) _A	0.04	1.67	0.39	0.07	-	-			µg/l	A-T-019w

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Lab Sample ID	18/00300/12	18/00300/13	18/00300/15	18/00300/16	18/00300/24	18/00300/26			Units	Method ref
Client Sample No	101	101	101	101	102	104				
Client Sample ID	PAC06B	PAC07A	PAC08A	PAC08B	BH108	BH108				
Depth to Top	0.00	0.00	0.00	0.00	1.00	2.00				
Depth To Bottom										
Date Sampled	11-Jan-18	11-Jan-18	11-Jan-18	11-Jan-18	18-Dec-17	18-Dec-17				
Sample Type	Solid	Solid	Solid	Solid	Soil - ES	Soil - ES				
Sample Matrix Code	7	7	7	7	5A	5A				
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
Ali >C8-C10 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
Ali >C10-C12 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			mg/kg	A-T-023s
Ali >C12-C16 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			mg/kg	A-T-023s
Ali >C16-C21 _A [#]	<0.1	<0.1	7.0	<0.1	1.8	<0.1			mg/kg	A-T-023s
Ali >C21-C35 _A [#]	<0.1	<0.1	70.7	<0.1	7.7	<0.1			mg/kg	A-T-023s
Total Aliphatics _A	<0.1	<0.1	77.8	<0.1	9.6	<0.1			mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
Aro >C8-C9 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
Aro >C9-C10 _A [#]	<0.01	<0.01	<0.01	<0.01	0.01	<0.01			mg/kg	A-T-022s
Aro >C10-C12 _A [#]	<0.1	<0.1	<0.1	<0.1	0.9	<0.1			mg/kg	A-T-023s
Aro >C12-C16 _A [#]	1.7	<0.1	3.3	<0.1	1.8	0.6			mg/kg	A-T-023s
Aro >C16-C21 _A [#]	7.6	0.7	26.9	4.5	7.9	4.1			mg/kg	A-T-023s
Aro >C21-C35 _A [#]	5.0	1.6	77.5	6.5	22.9	12.2			mg/kg	A-T-023s
Total Aromatics _A	14.3	2.5	108	11.0	33.6	16.8			mg/kg	A-T-023s
TPH (Ali & Aro) _A	14.3	2.5	185	11.0	43.0	16.8			mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	A-T-022s

REPORT NOTES

General:

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure and there is insufficient sample to repeat the analysis. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 18/00452
Issue Number: 1

Date: 02 February, 2018

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK
WF10 1NJ

Project Manager: Alex Jones
Project Name: Project Blue
Project Ref: 764393
Order No: N/A
Date Samples Received: 15/01/18
Date Instructions Received: 23/01/18
Date Analysis Completed: 02/02/18

Prepared by:



Holly Neary-King
Administrative Assistant

Approved by:



Georgia King
Admin & Client Services Supervisor

Envirolab Job Number: 18/00452

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00452/1	18/00452/2							Units	Method ref
Client Sample No	101	101								
Client Sample ID	SS1.3	SS1.4								
Depth to Top	1.50	0.0								
Depth To Bottom		1.0								
Date Sampled	10-Jan-18	11-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	1A								
% Stones >10mm _A	<0.1	25.1							% w/w	A-T-044
Cyanide (free) _A ^{M#}	<1	<1							mg/kg	A-T-042sFCN
Cyanide (total) _A ^{M#}	<1	<1							mg/kg	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2							mg/kg	A-T-050s
Organic matter _D ^{M#}	0.5	1.2							% w/w	A-T-032 OM
Arsenic _D ^{M#}	<1	<1							mg/kg	A-T-024s
Barium _D	69	40							mg/kg	A-T-024s
Beryllium _D [#]	1.1	<0.5							mg/kg	A-T-024s
Boron (water soluble) _D ^{M#}	1.5	<1.0							mg/kg	A-T-027s
Cadmium _D ^{M#}	1.1	<0.5							mg/kg	A-T-024s
Copper _D ^{M#}	12	13							mg/kg	A-T-024s
Chromium _D ^{M#}	31	7							mg/kg	A-T-024s
Lead _D ^{M#}	9	100							mg/kg	A-T-024s
Mercury _D	<0.17	<0.17							mg/kg	A-T-024s
Nickel _D ^{M#}	29	7							mg/kg	A-T-024s
Selenium _D ^{M#}	<1	<1							mg/kg	A-T-024s
Vanadium _D ^{M#}	34	10							mg/kg	A-T-024s
Zinc _D ^{M#}	41	25							mg/kg	A-T-024s

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Client Project Ref: 764393

Lab Sample ID	18/00452/1	18/00452/2							Units	Method ref
Client Sample No	101	101								
Client Sample ID	SS1.3	SS1.4								
Depth to Top	1.50	0.0								
Depth To Bottom		1.0								
Date Sampled	10-Jan-18	11-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	1A								
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD								A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A								
Glycol Suite 1										
1,2-Butanediol _A	<10.0	<10.0							mg/kg	Subcon
1,2-Propylene glycol (1,2-propanediol) _A	<10.0	<10.0							mg/kg	Subcon
1,3-Butanediol _A	<10.0	<10.0							mg/kg	Subcon
1,3-Propylene glycol (1,3-propanediol) _A	<10.0	<10.0							mg/kg	Subcon
1,4-Butanediol _A	<10.0	<10.0							mg/kg	Subcon
1,5-Pentanediol _A	<10.0	<10.0							mg/kg	Subcon
Diethylene glycol _A	<10.0	<10.0							mg/kg	Subcon
Ethylene glycol _A	<10.0	<10.0							mg/kg	Subcon
Triethylene glycol _A	<10.0	<10.0							mg/kg	Subcon

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Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00452/1	18/00452/2							Units	Method ref
Client Sample No	101	101								
Client Sample ID	SS1.3	SS1.4								
Depth to Top	1.50	0.0								
Depth To Bottom		1.0								
Date Sampled	10-Jan-18	11-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	1A								
PAH 16										
Acenaphthene _A ^{M#}	1.39	2.90							mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	0.04	0.02							mg/kg	A-T-019s
Anthracene _A ^{M#}	0.42	2.27							mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	0.25	3.24							mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	0.11	2.70							mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	0.15	2.92							mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	1.02							mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	1.04							mg/kg	A-T-019s
Chrysene _A ^{M#}	0.22	3.70							mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	0.33							mg/kg	A-T-019s
Fluoranthene _A ^{M#}	1.68	7.33							mg/kg	A-T-019s
Fluorene _A ^{M#}	0.47	2.55							mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	0.04	1.08							mg/kg	A-T-019s
Naphthalene _A ^{M#}	0.05	12.9							mg/kg	A-T-019s
Phenanthrene _A ^{M#}	1.78	10.2							mg/kg	A-T-019s
Pyrene _A ^{M#}	1.57	7.73							mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	8.16	62							mg/kg	A-T-019s

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Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00452/1	18/00452/2							Units	Method ref
Client Sample No	101	101								
Client Sample ID	SS1.3	SS1.4								
Depth to Top	1.50	0.0								
Depth To Bottom		1.0								
Date Sampled	10-Jan-18	11-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	1A								
SVOC										
Hexachlorobenzene _A	<100	<100							µg/kg	A-T-052s
Diethyl phthalate _A	<100	<100							µg/kg	A-T-052s
Dimethyl phthalate _A	<100	<100							µg/kg	A-T-052s
Dibenzofuran _A	1100	2200							µg/kg	A-T-052s
Carbazole _A	<100	1360							µg/kg	A-T-052s
Butylbenzyl phthalate _A	<100	<100							µg/kg	A-T-052s
Bis(2-ethylhexyl)phthalate _A	<500	<500							µg/kg	A-T-052s
Bis(2-chloroethoxy)methane _A	<100	<100							µg/kg	A-T-052s
Bis(2-chloroethyl)ether _A	<100	<100							µg/kg	A-T-052s
4-Nitrophenol _A	<100	<100							µg/kg	A-T-052s
4-Methylphenol _A	<100	2460							µg/kg	A-T-052s
4-Chloro-3-methylphenol _A	<100	<100							µg/kg	A-T-052s
2-Nitrophenol _A	<100	<100							µg/kg	A-T-052s
2-Methylphenol _A	<100	2160							µg/kg	A-T-052s
2-Chlorophenol _A	<100	<100							µg/kg	A-T-052s
2,6-Dinitrotoluene _A	<100	<100							µg/kg	A-T-052s
2,4-Dinitrotoluene _A	<100	<100							µg/kg	A-T-052s
2,4-Dimethylphenol _A	<100	2610							µg/kg	A-T-052s
2,4-Dichlorophenol _A	<100	<100							µg/kg	A-T-052s
2,4,6-Trichlorophenol _A	<100	<100							µg/kg	A-T-052s
2,4,5-Trichlorophenol _A	<100	<100							µg/kg	A-T-052s
2-Chloronaphthalene _A	<100	<100							µg/kg	A-T-052s
2-Methylnaphthalene _A	126	10300							µg/kg	A-T-052s
Bis(2-chloroisopropyl)ether _A	<100	<100							µg/kg	A-T-052s
Phenol _A	<100	3690							µg/kg	A-T-052s
Pentachlorophenol _A	<100	<100							µg/kg	A-T-052s
n-Nitroso-n-dipropylamine _A	<100	<100							µg/kg	A-T-052s
n-Dioctylphthalate _A	<500	<500							µg/kg	A-T-052s
n-Dibutylphthalate _A	<100	<100							µg/kg	A-T-052s
Nitrobenzene _A	<100	<100							µg/kg	A-T-052s
Isophorone _A	<100	<100							µg/kg	A-T-052s
Hexachloroethane _A	<100	<100							µg/kg	A-T-052s

Envirolab Job Number: 18/00452

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00452/1	18/00452/2							Units	Method ref
Client Sample No	101	101								
Client Sample ID	SS1.3	SS1.4								
Depth to Top	1.50	0.0								
Depth To Bottom		1.0								
Date Sampled	10-Jan-18	11-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	1A								
Hexachlorocyclopentadiene _A	<100	<100							µg/kg	A-T-052s
Perylene _A	<100	1290							µg/kg	A-T-052s

Envirolab Job Number: 18/00452

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00452/1	18/00452/2							Units	Method ref
Client Sample No	101	101								
Client Sample ID	SS1.3	SS1.4								
Depth to Top	1.50	0.0								
Depth To Bottom		1.0								
Date Sampled	10-Jan-18	11-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	1A								
VOC										
Dichlorodifluoromethane _A [#]	<1	<1							µg/kg	A-T-006s
Chloromethane _A [#]	<10	<10							µg/kg	A-T-006s
Vinyl Chloride _A [#]	<1	<1							µg/kg	A-T-006s
Bromomethane _A [#]	<1	<1							µg/kg	A-T-006s
Chloroethane _A [#]	<1	<1							µg/kg	A-T-006s
Trichlorofluoromethane _A [#]	<1	<1							µg/kg	A-T-006s
1,1-Dichloroethene _A [#]	<1	<1							µg/kg	A-T-006s
Carbon Disulphide _A [#]	4	<1							µg/kg	A-T-006s
Dichloromethane _A	<5	<5							µg/kg	A-T-006s
trans 1,2-Dichloroethene _A [#]	<1	<1							µg/kg	A-T-006s
1,1-Dichloroethane _A [#]	<1	<1							µg/kg	A-T-006s
cis 1,2-Dichloroethene _A [#]	<1	<1							µg/kg	A-T-006s
2,2-Dichloropropane _A [#]	<1	<1							µg/kg	A-T-006s
Bromochloromethane _A [#]	<5	<5							µg/kg	A-T-006s
Chloroform _A [#]	<1	<1							µg/kg	A-T-006s
1,1,1-Trichloroethane _A [#]	<1	<1							µg/kg	A-T-006s
1,1-Dichloropropene _A [#]	<1	<1							µg/kg	A-T-006s
Carbon Tetrachloride _A [#]	<1	<1							µg/kg	A-T-006s
1,2-Dichloroethane _A [#]	<2	<2							µg/kg	A-T-006s
Benzene _A [#]	<1	<1							µg/kg	A-T-006s
Trichloroethene _A [#]	<1	<1							µg/kg	A-T-006s
1,2-Dichloropropane _A [#]	<1	<1							µg/kg	A-T-006s
Dibromomethane _A [#]	<1	<1							µg/kg	A-T-006s
Bromodichloromethane _A [#]	<10	<10							µg/kg	A-T-006s
cis 1,3-Dichloropropene _A [#]	<1	<1							µg/kg	A-T-006s
Toluene _A [#]	<1	<1							µg/kg	A-T-006s
trans 1,3-Dichloropropene _A [#]	<1	<1							µg/kg	A-T-006s
1,1,2-Trichloroethane _A [#]	<1	<1							µg/kg	A-T-006s
1,3-Dichloropropane _A [#]	<1	<1							µg/kg	A-T-006s
Tetrachloroethene _A [#]	<1	<1							µg/kg	A-T-006s
Dibromochloromethane _A [#]	<3	<3							µg/kg	A-T-006s
1,2-Dibromoethane _A [#]	<1	<1							µg/kg	A-T-006s

Envirolab Job Number: 18/00452

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00452/1	18/00452/2							Units	Method ref
Client Sample No	101	101								
Client Sample ID	SS1.3	SS1.4								
Depth to Top	1.50	0.0								
Depth To Bottom		1.0								
Date Sampled	10-Jan-18	11-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	1A								
Chlorobenzene _A [#]	<1	<1							µg/kg	A-T-006s
1,1,1,2-Tetrachloroethane _A	<1	<1							µg/kg	A-T-006s
Ethylbenzene _A [#]	<1	<1							µg/kg	A-T-006s
m & p Xylene _A [#]	<1	<1							µg/kg	A-T-006s
o-Xylene _A [#]	<1	<1							µg/kg	A-T-006s
Styrene _A [#]	<1	<1							µg/kg	A-T-006s
Bromoform _A [#]	<1	<1							µg/kg	A-T-006s
Isopropylbenzene _A [#]	<1	<1							µg/kg	A-T-006s
1,1,2,2-Tetrachloroethane _A	23	<1							µg/kg	A-T-006s
1,2,3-Trichloropropane _A [#]	<1	<1							µg/kg	A-T-006s
Bromobenzene _A [#]	<1	<1							µg/kg	A-T-006s
n-Propylbenzene _A [#]	<1	<1							µg/kg	A-T-006s
2-Chlorotoluene _A [#]	<1	<1							µg/kg	A-T-006s
1,3,5-Trimethylbenzene _A [#]	<1	<1							µg/kg	A-T-006s
4-Chlorotoluene _A [#]	<1	<1							µg/kg	A-T-006s
tert-Butylbenzene _A [#]	<2	<2							µg/kg	A-T-006s
1,2,4-Trimethylbenzene _A [#]	<1	<1							µg/kg	A-T-006s
sec-Butylbenzene _A [#]	<1	<1							µg/kg	A-T-006s
4-Isopropyltoluene _A [#]	<1	<1							µg/kg	A-T-006s
1,3-Dichlorobenzene _A	<1	<1							µg/kg	A-T-006s
1,4-Dichlorobenzene _A [#]	<1	<1							µg/kg	A-T-006s
n-Butylbenzene _A [#]	<1	<1							µg/kg	A-T-006s
1,2-Dichlorobenzene _A [#]	5	<1							µg/kg	A-T-006s
1,2-Dibromo-3-chloropropane _A	<2	<2							µg/kg	A-T-006s
1,2,4-Trichlorobenzene _A	<3	<3							µg/kg	A-T-006s
Hexachlorobutadiene _A [#]	<1	<1							µg/kg	A-T-006s
1,2,3-Trichlorobenzene _A	<3	<3							µg/kg	A-T-006s

Envirolab Job Number: 18/00452

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00452/1	18/00452/2							Units	Method ref
Client Sample No	101	101								
Client Sample ID	SS1.3	SS1.4								
Depth to Top	1.50	0.0								
Depth To Bottom		1.0								
Date Sampled	10-Jan-18	11-Jan-18								
Sample Type	Soil - ES	Soil - ES								
Sample Matrix Code	5A	1A								
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Ali >C8-C10 _A [#]	0.02	<0.01							mg/kg	A-T-022s
Ali >C10-C12 _A [#]	12.8	1.0							mg/kg	A-T-023s
Ali >C12-C16 _A [#]	127	26.8							mg/kg	A-T-023s
Ali >C16-C21 _A [#]	144	58.4							mg/kg	A-T-023s
Ali >C21-C35 _A [#]	48.5	73.7							mg/kg	A-T-023s
Total Aliphatics _A	332	160							mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Aro >C8-C9 _A [#]	<0.01	0.02							mg/kg	A-T-022s
Aro >C9-C10 _A [#]	<0.01	0.02							mg/kg	A-T-022s
Aro >C10-C12 _A [#]	3.4	15.2							mg/kg	A-T-023s
Aro >C12-C16 _A [#]	77.9	31.7							mg/kg	A-T-023s
Aro >C16-C21 _A [#]	145	66.3							mg/kg	A-T-023s
Aro >C21-C35 _A [#]	45.1	80.6							mg/kg	A-T-023s
Total Aromatics _A	271	194							mg/kg	A-T-023s
TPH (Ali & Aro) _A	603	354							mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01							mg/kg	A-T-022s

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All results are reported as dry weight (<40°C).

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For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

Final Test Report

Envirolab Job Number: 18/00452
Issue Number: 1

Date: 2-Feb-18

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK, WF10 1NJ

Project Manager: Alex Jones
Project Name: Project Blue
Project Ref: 764393
Order No: N/A

Date Samples Received: 15-Jan-18
Date Instructions Received: 23-Jan-18
Date Analysis Completed: 2-Feb-18

Notes - Soil analysis

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

Superscript "M" indicates method accredited to MCERTS.

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

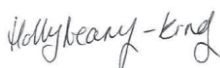
IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Superscript # indicates method accredited to ISO 17025.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

Prepared by:



Holly Neary-King
Administrative Assistant

Approved by:



Georgia King
Admin & Client Services Supervisor



Sample Details					Landfill Waste Acceptance Criteria Limits			
Lab Sample ID	Method	ISO17025	MCERTS	18/00452/1				
Client Sample Number				101	Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill	
Client Sample ID				SS1.3				
Depth to Top				1.5				
Depth to Bottom								
Date Sampled				10/01/2018				
Sample Type				Soil - ES				
Sample Matrix Code				5A				
Solid Waste Analysis								
pH (pH Units) _D	A-T-031	Y	Y	8.72	-	>6	-	
ANC to pH 4 (mol/kg) _D	A-T-ANC	N	N	0.64	-	to be evaluated	to be evaluated	
ANC to pH 6 (mol/kg) _D	A-T-ANC	N	N	0.24	-	to be evaluated	to be evaluated	
Loss on Ignition (%) _D	A-T-030	Y	N	1.7	-	-	10	
Total Organic Carbon (%) _D	A-T-032	Y	Y	0.28	3	5	6	
PAH Sum of 17 (mg/kg) _A	A-T-019	N	N	8.16	100	-	-	
Mineral Oil (mg/kg) _A	A-T-007	N	N	593	500	-	-	
Sum of 7 PCBs (mg/kg) _D	A-T-004	N	N	<0.007	1	-	-	
Sum of BTEX (mg/kg) _A	A-T-022	N	N	<0.01	6	-	-	
Eluate Analysis				10:1	10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
				mg/l	mg/kg			
Arsenic	A-T-025	Y	N	<0.001	<0.01	0.5	2	25
Barium	A-T-025	Y	N	0.016	0.160	20	100	300
Cadmium	A-T-025	Y	N	<0.001	<0.01	0.04	1	5
Chromium	A-T-025	Y	N	<0.001	<0.01	0.5	10	70
Copper	A-T-025	Y	N	<0.001	<0.01	2	50	100
Mercury	A-T-025	Y	N	<0.0005	<0.005	0.01	0.2	2
Molybdenum	A-T-025	Y	N	0.012	0.120	0.5	10	30
Nickel	A-T-025	Y	N	<0.001	<0.01	0.4	10	40
Lead	A-T-025	Y	N	<0.001	<0.01	0.5	10	50
Antimony	A-T-025	Y	N	0.002	0.030	0.06	0.7	5
Selenium	A-T-025	Y	N	<0.001	<0.01	0.1	0.5	7
Zinc	A-T-025	Y	N	0.022	0.220	4	50	200
Chloride	A-T-026	Y	N	72	721	800	15000	25000
Fluoride	A-T-026	Y	N	0.3	3.0	10	150	500
Sulphate as SO ₄	A-T-026	Y	N	38	385	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	222	2220	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<0.2	<200	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	Y	7.1				
Conductivity (µS/cm)	A-T-037	N	N	444				
Mass Sample (kg)				0.212				
Dry Matter (%)	A-T-044	N	N	82.7				
Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation								

Sample Details								
Lab Sample ID	Method	ISO17025	MCERTS	18/00452/2	Landfill Waste Acceptance Criteria Limits			
Client Sample Number				101	Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill	
Client Sample ID				SS1.4				
Depth to Top				0				
Depth to Bottom				1.00				
Date Sampled				11/01/2018				
Sample Type				Soil - ES				
Sample Matrix Code				1A				
Solid Waste Analysis								
pH (pH Units) _D	A-T-031	Y	Y	9.00	-	>6	-	
ANC to pH 4 (mol/kg) _D	A-T-ANC	N	N	0.22	-	to be evaluated	to be evaluated	
ANC to pH 6 (mol/kg) _D	A-T-ANC	N	N	<0.01	-	to be evaluated	to be evaluated	
Loss on Ignition (%) _D	A-T-030	Y	N	1	-	-	10	
Total Organic Carbon (%) _D	A-T-032	Y	Y	0.67	3	5	6	
PAH Sum of 17 (mg/kg) _A	A-T-019	N	N	62.1	100	-	-	
Mineral Oil (mg/kg) _A	A-T-007	N	N	166	500	-	-	
Sum of 7 PCBs (mg/kg) _D	A-T-004	N	N	<0.007	1	-	-	
Sum of BTEX (mg/kg) _A	A-T-022	N	N	<0.01	6	-	-	
Eluate Analysis				10:1	10:1	Limit values for compliance leaching test using		
				mg/l	mg/kg	BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic	A-T-025	Y	N	0.007	0.070	0.5	2	25
Barium	A-T-025	Y	N	0.013	0.130	20	100	300
Cadmium	A-T-025	Y	N	<0.001	<0.01	0.04	1	5
Chromium	A-T-025	Y	N	<0.001	<0.01	0.5	10	70
Copper	A-T-025	Y	N	0.010	0.100	2	50	100
Mercury	A-T-025	Y	N	<0.0005	<0.005	0.01	0.2	2
Molybdenum	A-T-025	Y	N	0.003	0.030	0.5	10	30
Nickel	A-T-025	Y	N	<0.001	<0.01	0.4	10	40
Lead	A-T-025	Y	N	0.015	0.150	0.5	10	50
Antimony	A-T-025	Y	N	0.002	0.010	0.06	0.7	5
Selenium	A-T-025	Y	N	<0.001	<0.01	0.1	0.5	7
Zinc	A-T-025	Y	N	0.090	0.890	4	50	200
Chloride	A-T-026	Y	N	59	591	800	15000	25000
Fluoride	A-T-026	Y	N	0.2	2.0	10	150	500
Sulphate as SO ₄	A-T-026	Y	N	9	85	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	154	1540	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<0.2	<200	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	Y	7.5				
Conductivity (µS/cm)	A-T-037	N	N	308				
Mass Sample (kg)				0.194				
Dry Matter (%)	A-T-044	N	N	90				
Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation								

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 18/00821
Issue Number: 1

Date: 15 February, 2018

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK
WF10 1NJ

Project Manager: Alex Jones
Project Name: Project Blue
Project Ref: 764393
Order No: N/A
Date Samples Received: 29/01/18
Date Instructions Received: 05/02/18
Date Analysis Completed: 14/02/18

Prepared by:


Melanie Marshall
Laboratory Coordinator

Approved by:


Richard Wong
Client Manager

Envirolab Job Number: 18/00821

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/00821/1	18/00821/2							Units	Method ref
Client Sample No										
Client Sample ID	SS2.3	SS2.3								
Depth to Top	0.30	1.0								
Depth To Bottom	1.00	2.00								
Date Sampled	16-Jan-18	16-Jan-18								
Sample Type	Soil - B	Soil - B								
Sample Matrix Code	4A	4A								
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD								A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A								

REPORT NOTES

General:

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure and there is insufficient sample to repeat the analysis. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 18/01279
Issue Number: 1
Date: 05 March, 2018

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK
WF10 1NJ

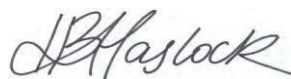
Project Manager: Alex Jones
Project Name: Project Blue
Project Ref: 764393
Order No: N/A
Date Samples Received: 16/02/18
Date Instructions Received: 20/02/18
Date Analysis Completed: 05/03/18

Prepared by:



Melanie Marshall
Laboratory Coordinator

Approved by:



Iain Haslock
Analytical Consultant

Envirolab Job Number: 18/01279

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01279/1	18/01279/2	18/01279/4	18/01279/5	18/01279/6	18/01279/7	18/01279/8		Units	Method ref
Client Sample No										
Client Sample ID	BH101	BH102A	BH108A	BH114	OH101	OH102	OH103			
Depth to Top	3.30	4.20	7.50	3.40	2.90	3.00	3.10			
Depth To Bottom										
Date Sampled	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
pH (w) _A [#]	8.01	8.24	8.52	7.89	8.67	8.56	8.01		pH	A-T-031w
pH BRE (w) _A [#]	8.01	-	-	-	8.67	8.56	8.01		pH	A-T-031w
Hardness Total _A [#]	714	3060	1184	2790	159	698	2480		mg/l Ca CO3	A-T-049w
Ammoniacal nitrogen (w) _A [#]	1.68	1.01	1.44	0.76	0.17	1.36	0.33		mg/l	A-T-033w
Ammonium / Ammoniacal N as NH4 BRE (w) _A [#]	2.174	-	-	-	0.223	1.749	0.424		mg/l	A-T-033w
Chloride (w) _A [#]	432	9090	4600	9770	78	1480	8030		mg/l	A-T-026w
Chloride BRE (w) _A [#]	432	-	-	-	77.6	1480	8030		mg/l	A-T-026w
Nitrate BRE (w) _A [#]	<0.10	-	-	-	0.87	<0.10	<0.10		mg/l	A-T-026w
Sulphate BRE (w) _A [#]	76	-	-	-	23	127	1150		mg/l	A-T-026w
Cyanide (total) (w) _A [#]	<0.005	<0.005	0.025	<0.005	0.181	<0.005	0.030		mg/l	A-T-042wTCN
Sulphide (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1	3.3	<0.1		mg/l	A-T-S2-w
Arsenic (dissolved) _A [#]	28	3	1	<1	5	3	5		µg/l	A-T-025w
Boron (dissolved) _A [#]	337	2350	1760	1690	153	584	1840		µg/l	A-T-025w
Barium (dissolved) _A [#]	183	68	78	278	52	156	135		µg/l	A-T-025w
Beryllium (dissolved) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-025w
Cadmium (dissolved) _A [#]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		µg/l	A-T-025w
Copper (dissolved) _A [#]	<1	2	<1	3	5	<1	1		µg/l	A-T-025w
Chromium (dissolved) _A [#]	6	12	12	12	22	<1	1		µg/l	A-T-025w
Lead (dissolved) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-025w
Magnesium BRE (dissolved) _A [#]	37.9	-	-	-	4.9	86.6	396		mg/l	A-T-049w
Mercury (dissolved) _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		µg/l	A-T-025w
Nickel (dissolved) _A [#]	<1	3	2	<1	1	<1	2		µg/l	A-T-025w
Selenium (dissolved) _A [#]	<1	<1	1	<1	<1	9	1		µg/l	A-T-025w
Vanadium (dissolved) _A [#]	<1	2	3	1	1	2	2		µg/l	A-T-025w
Zinc (dissolved) _A [#]	7	138	157	3	3	<1	1		µg/l	A-T-025w

Envirolab Job Number: 18/01279

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01279/1	18/01279/2	18/01279/4	18/01279/5	18/01279/6	18/01279/7	18/01279/8		Units	Method ref
Client Sample No										
Client Sample ID	BH101	BH102A	BH108A	BH114	OH101	OH102	OH103			
Depth to Top	3.30	4.20	7.50	3.40	2.90	3.00	3.10			
Depth To Bottom										
Date Sampled	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
PAH 16MS (w)										
Acenaphthene (w) _A [#]	<0.01	0.01	0.01	<0.01	<0.01	5.36	0.06		µg/l	A-T-019w
Acenaphthylene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01		µg/l	A-T-019w
Anthracene (w) _A [#]	<0.01	<0.01	0.01	<0.01	<0.01	0.39	0.01		µg/l	A-T-019w
Benzo(a)anthracene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	0.02		µg/l	A-T-019w
Benzo(a)pyrene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.02		µg/l	A-T-019w
Benzo(b)fluoranthene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.02		µg/l	A-T-019w
Benzo(ghi)perylene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01		µg/l	A-T-019w
Benzo(k)fluoranthene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02		µg/l	A-T-019w
Chrysene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	0.04		µg/l	A-T-019w
Dibenzo(ah)anthracene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Fluoranthene (w) _A [#]	<0.01	<0.01	0.04	<0.01	<0.01	0.81	0.08		µg/l	A-T-019w
Fluorene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	2.67	<0.01		µg/l	A-T-019w
Indeno(123-cd)pyrene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01		µg/l	A-T-019w
Naphthalene (w) _A [#]	<0.01	0.02	<0.01	<0.01	<0.01	2.02	<0.01		µg/l	A-T-019w
Phenanthrene (w) _A [#]	<0.01	0.01	0.06	<0.01	<0.01	1.87	0.03		µg/l	A-T-019w
Pyrene (w) _A [#]	<0.01	<0.01	0.03	<0.01	<0.01	0.53	0.06		µg/l	A-T-019w
PAH (total 16) (w) _A [#]	<0.01	0.04	0.15	<0.01	<0.01	13.88	0.38		µg/l	A-T-019w

Envirolab Job Number: 18/01279

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01279/1	18/01279/2	18/01279/4	18/01279/5	18/01279/6	18/01279/7	18/01279/8		Units	Method ref
Client Sample No										
Client Sample ID	BH101	BH102A	BH108A	BH114	OH101	OH102	OH103			
Depth to Top	3.30	4.20	7.50	3.40	2.90	3.00	3.10			
Depth To Bottom										
Date Sampled	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
SVOC (excluding PAH-16) (w)										
2,4,5-Trichlorophenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2,4,6-Trichlorophenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2,4-Dichlorophenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2,4-Dimethylphenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2,4-Dinitrotoluene _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2,6-Dinitrotoluene _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2-Chloronaphthalene _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2-Chlorophenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2-Methylnaphthalene _A	-	-	-	-	<1	1	<1		µg/l	A-T-052w
2-Methylphenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
2-Nitrophenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
4-Bromophenyl phenyl ether _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
4-Chloro-3-methylphenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Bis(2-chloroisopropyl)ether _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
4-Methylphenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
4-Nitrophenol _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Bis(2-chloroethyl)ether _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Bis(2-chloroethoxy)methane _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Bis(2-ethylhexyl)phthalate _A	-	-	-	-	<10	<10	<10		µg/l	A-T-052w
Butylbenzyl phthalate _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Carbazole _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Dibenzofuran _A	-	-	-	-	<1	5	<1		µg/l	A-T-052w
n-Dibutylphthalate _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
n-Dioctylphthalate _A	-	-	-	-	<10	<10	<10		µg/l	A-T-052w
n-Nitroso-n-dipropylamine _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Diethyl phthalate _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Dimethyl phthalate _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Hexachlorobenzene _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Pentachlorophenol _A	-	-	-	-	<5	<5	<5		µg/l	A-T-052w
Phenol _A	-	-	-	-	<1	2	<1		µg/l	A-T-052w
Hexachloroethane _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Nitrobenzene _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w

Envirolab Job Number: 18/01279

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01279/1	18/01279/2	18/01279/4	18/01279/5	18/01279/6	18/01279/7	18/01279/8		Units	Method ref
Client Sample No										
Client Sample ID	BH101	BH102A	BH108A	BH114	OH101	OH102	OH103			
Depth to Top	3.30	4.20	7.50	3.40	2.90	3.00	3.10			
Depth To Bottom										
Date Sampled	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Isophorone _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Hexachlorocyclopentadiene _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w
Perylene _A	-	-	-	-	<1	<1	<1		µg/l	A-T-052w

Envirolab Job Number: 18/01279

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01279/1	18/01279/2	18/01279/4	18/01279/5	18/01279/6	18/01279/7	18/01279/8		Units	Method ref
Client Sample No										
Client Sample ID	BH101	BH102A	BH108A	BH114	OH101	OH102	OH103			
Depth to Top	3.30	4.20	7.50	3.40	2.90	3.00	3.10			
Depth To Bottom										
Date Sampled	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
VOC (w)										
Dichlorodifluoromethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Chloromethane _A [#]	-	-	-	-	<10	<10	<10		µg/l	A-T-006w
Vinyl Chloride _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Bromomethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Chloroethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Trichlorofluoromethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
trans 1,2-Dichloroethene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Dichloromethane _A	-	-	-	-	<5	<5	<5		µg/l	A-T-006w
Carbon Disulphide _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,1-Dichloroethene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,1-Dichloroethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
cis 1,2-Dichloroethene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Bromochloromethane _A [#]	-	-	-	-	<5	<5	<5		µg/l	A-T-006w
Chloroform _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
2,2-Dichloropropane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,2-Dichloroethane _A [#]	-	-	-	-	<2	<2	<2		µg/l	A-T-006w
1,1,1-Trichloroethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,1-Dichloropropene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Benzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Carbon Tetrachloride _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Dibromomethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,2-Dichloropropane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Bromodichloromethane _A [#]	-	-	-	-	<10	<10	<10		µg/l	A-T-006w
Trichloroethene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
cis 1,3-Dichloropropene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
trans 1,3-Dichloropropene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,1,2-Trichloroethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Toluene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,3-Dichloropropane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Dibromochloromethane _A [#]	-	-	-	-	<3	<3	<3		µg/l	A-T-006w
1,2-Dibromoethane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Tetrachloroethene _A	-	-	-	-	<1	<1	<1		µg/l	A-T-006w

Envirolab Job Number: 18/01279

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01279/1	18/01279/2	18/01279/4	18/01279/5	18/01279/6	18/01279/7	18/01279/8		Units	Method ref
Client Sample No										
Client Sample ID	BH101	BH102A	BH108A	BH114	OH101	OH102	OH103			
Depth to Top	3.30	4.20	7.50	3.40	2.90	3.00	3.10			
Depth To Bottom										
Date Sampled	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
1,1,1,2-Tetrachloroethane _A	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Chlorobenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Ethylbenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
m & p Xylene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Bromoform _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Styrene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,1,2,2-Tetrachloroethane _A	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
o-Xylene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,2,3-Trichloropropane _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Isopropylbenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
Bromobenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
2-Chlorotoluene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
n-propylbenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
4-Chlorotoluene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,2,4-Trimethylbenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
4-Isopropyltoluene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,3,5-Trimethylbenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,2-Dichlorobenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,4-Dichlorobenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
sec-Butylbenzene _A [#]	-	-	-	-	<1	1	<1		µg/l	A-T-006w
tert-Butylbenzene _A [#]	-	-	-	-	<2	<2	<2		µg/l	A-T-006w
1,3-Dichlorobenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
n-butylbenzene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w
1,2-Dibromo-3-chloropropane _A [#]	-	-	-	-	<2	<2	<2		µg/l	A-T-006w
1,2,4-Trichlorobenzene _A [#]	-	-	-	-	<3	<3	<3		µg/l	A-T-006w
1,2,3-Trichlorobenzene _A [#]	-	-	-	-	<3	<3	<3		µg/l	A-T-006w
Hexachlorobutadiene _A [#]	-	-	-	-	<1	<1	<1		µg/l	A-T-006w

Envirolab Job Number: 18/01279

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01279/1	18/01279/2	18/01279/4	18/01279/5	18/01279/6	18/01279/7	18/01279/8		Units	Method ref
Client Sample No										
Client Sample ID	BH101	BH102A	BH108A	BH114	OH101	OH102	OH103			
Depth to Top	3.30	4.20	7.50	3.40	2.90	3.00	3.10			
Depth To Bottom										
Date Sampled	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18	15-Feb-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
TPH CWG										
Ali >C5-C6 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Ali >C6-C8 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Ali >C8-C10 (w) _A [#]	<1	<1	<1	<1	<1	12	<1		µg/l	A-T-022w
Ali >C10-C12 (w) _A [#]	<5	<5	<5	<5	<5	1019	<5		µg/l	A-T-023w
Ali >C12-C16 (w) _A [#]	<5	<5	<5	<5	<5	7043	<5		µg/l	A-T-023w
Ali >C16-C21 (w) _A [#]	<5	<5	<5	<5	<5	7991	<5		µg/l	A-T-023w
Ali >C21-C35 (w) _A [#]	45	83	<5	<5	<5	2500	<5		µg/l	A-T-023w
Total Aliphatics (w) _A	45	83	<5	<5	<5	18565	<5		µg/l	A-T-022+23w
Aro >C5-C7 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Aro >C7-C8 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Aro >C8-C9 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Aro >C9-C10 (w) _A [#]	<1	<1	<1	<1	<1	5	<1		µg/l	A-T-022w
Aro >C10-C12 (w) _A [#]	<5	<5	<5	<5	<5	106	<5		µg/l	A-T-023w
Aro >C12-C16 (w) _A [#]	<5	<5	<5	<5	<5	2340	<5		µg/l	A-T-023w
Aro >C16-C21 (w) _A [#]	<5	<5	<5	<5	<5	3352	<5		µg/l	A-T-023w
Aro >C21-C35 (w) _A [#]	<5	<5	<5	<5	<5	1174	<5		µg/l	A-T-023w
Total Aromatics (w) _A	<5	<5	<5	<5	<5	6978	<5		µg/l	A-T-022+23w
TPH (Ali & Aro) (w) _A	45	83	<5	<5	<5	25543	<5		µg/l	A-T-022+23w
BTEX - Benzene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
BTEX - Toluene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
BTEX - Ethyl Benzene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
BTEX - m & p Xylene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
BTEX - o Xylene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
MTBE (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w

REPORT NOTES

General:

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure and there is insufficient sample to repeat the analysis. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 18/01782
Issue Number: 1
Date: 27 March, 2018

Client: Structural Soils Limited (Castleford)
The Potteries
Pottery Street
Castleford
West Yorkshire
UK
WF10 1NJ

Project Manager: Alex Jones
Project Name: Project Blue
Project Ref: 764393
Order No: N/A
Date Samples Received: 02/03/18
Date Instructions Received: 14/03/18
Date Analysis Completed: 26/03/18

Prepared by:



Gill Walker
Laboratory Manager

Approved by:



Iain Haslock
Analytical Consultant

Envirolab Job Number: 18/01782

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01782/1	18/01782/2	18/01782/3	18/01782/4	18/01782/5	18/01782/7	18/01782/8		Units	Method ref
Client Sample No										
Client Sample ID	OH101	OH102	OH103	BH101	BH102A	BH108A	BH114			
Depth to Top	3.00	3.20	3.20	3.50	4.50	7.50	3.50			
Depth To Bottom										
Date Sampled	01-Mar-18	02-Mar-18	02-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
pH (w) _A [#]	8.55	8.53	8.10	8.01	8.35	8.52	8.03		pH	A-T-031w
pH BRE (w) _A [#]	-	-	-	-	8.35	8.52	-		pH	A-T-031w
Hardness Total _A [#]	164	717	2286	4243	2859	1151	649		mg/l Ca CO3	A-T-049w
Ammoniacal nitrogen (w) _A [#]	0.30	1.52	0.41	1.09	1.36	1.51	2.00		mg/l	A-T-033w
Ammonium / Ammoniacal N as NH4 BRE (w) _A [#]	-	-	-	-	1.748	1.949	-		mg/l	A-T-033w
Chloride (w) _A [#]	180	1550	8200	1150	9160	4910	543		mg/l	A-T-026w
Chloride BRE (w) _A [#]	-	-	-	-	9020	4690	-		mg/l	A-T-026w
Nitrate BRE (w) _A [#]	-	-	-	-	<0.10	<0.10	-		mg/l	A-T-026w
Sulphate BRE (w) _A [#]	-	-	-	-	1350	541	-		mg/l	A-T-026w
Cyanide (total) (w) _A [#]	0.181	<0.005	0.027	<0.005	<0.005	<0.005	<0.005		mg/l	A-T-042wTCN
Sulphide (w) _A	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	<0.1		mg/l	A-T-S2-w
Arsenic (dissolved) _A [#]	7	5	4	1	4	<1	30		µg/l	A-T-025w
Boron (dissolved) _A [#]	166	588	1820	2860	2250	1700	343		µg/l	A-T-025w
Barium (dissolved) _A [#]	63	163	121	136	61	73	197		µg/l	A-T-025w
Beryllium (dissolved) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-025w
Cadmium (dissolved) _A [#]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		µg/l	A-T-025w
Copper (dissolved) _A [#]	7	<1	1	3	1	<1	<1		µg/l	A-T-025w
Chromium (dissolved) _A [#]	39	8	18	23	11	18	3		µg/l	A-T-025w
Lead (dissolved) _A [#]	1	<1	<1	<1	<1	<1	<1		µg/l	A-T-025w
Magnesium BRE (dissolved) _A [#]	-	-	-	-	560	219	-		mg/l	A-T-049w
Mercury (dissolved) _A [#]	0.1	<0.1	<0.1	0.2	0.2	<0.1	<0.1		µg/l	A-T-025w
Nickel (dissolved) _A [#]	2	<1	2	2	3	1	<1		µg/l	A-T-025w
Selenium (dissolved) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-025w
Vanadium (dissolved) _A [#]	2	2	2	3	2	2	1		µg/l	A-T-025w
Zinc (dissolved) _A [#]	7	8	4	6	579	1135	8		µg/l	A-T-025w

Envirolab Job Number: 18/01782

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01782/1	18/01782/2	18/01782/3	18/01782/4	18/01782/5	18/01782/7	18/01782/8		Units	Method ref
Client Sample No										
Client Sample ID	OH101	OH102	OH103	BH101	BH102A	BH108A	BH114			
Depth to Top	3.00	3.20	3.20	3.50	4.50	7.50	3.50			
Depth To Bottom										
Date Sampled	01-Mar-18	02-Mar-18	02-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
PAH 16MS (w)										
Acenaphthene (w) _A [#]	<0.01	4.34	0.05	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Acenaphthylene (w) _A [#]	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Anthracene (w) _A [#]	<0.01	0.24	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Benzo(a)anthracene (w) _A [#]	<0.01	0.03	0.02	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Benzo(a)pyrene (w) _A [#]	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Benzo(b)fluoranthene (w) _A [#]	<0.01	0.02	0.02	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Benzo(ghi)perylene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Benzo(k)fluoranthene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Chrysene (w) _A [#]	<0.01	0.03	0.02	<0.01	<0.01	0.01	<0.01		µg/l	A-T-019w
Dibenzo(ah)anthracene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Fluoranthene (w) _A [#]	<0.01	0.41	0.09	<0.01	0.02	0.07	<0.01		µg/l	A-T-019w
Fluorene (w) _A [#]	<0.01	1.90	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Indeno(123-cd)pyrene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Naphthalene (w) _A [#]	<0.01	1.43	<0.01	<0.01	<0.01	<0.01	<0.01		µg/l	A-T-019w
Phenanthrene (w) _A [#]	<0.01	1.21	0.03	<0.01	<0.01	0.04	<0.01		µg/l	A-T-019w
Pyrene (w) _A [#]	<0.01	0.29	0.05	<0.01	0.01	0.05	<0.01		µg/l	A-T-019w
PAH (total 16) (w) _A [#]	<0.01	9.91	0.29	<0.01	0.03	0.17	<0.01		µg/l	A-T-019w

Envirolab Job Number: 18/01782

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01782/1	18/01782/2	18/01782/3	18/01782/4	18/01782/5	18/01782/7	18/01782/8		Units	Method ref
Client Sample No										
Client Sample ID	OH101	OH102	OH103	BH101	BH102A	BH108A	BH114			
Depth to Top	3.00	3.20	3.20	3.50	4.50	7.50	3.50			
Depth To Bottom										
Date Sampled	01-Mar-18	02-Mar-18	02-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
SVOC (excluding PAH-16) (w)										
2,4,5-Trichlorophenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
2,4,6-Trichlorophenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
2,4-Dichlorophenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
2,4-Dimethylphenol _A	<1	<1	1	-	-	-	-		µg/l	A-T-052w
2,4-Dinitrotoluene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
2,6-Dinitrotoluene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
2-Chloronaphthalene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
2-Chlorophenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
2-Methylnaphthalene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
2-Methylphenol _A	<1	<1	1	-	-	-	-		µg/l	A-T-052w
2-Nitrophenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
4-Bromophenyl phenyl ether _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
4-Chloro-3-methylphenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Bis(2-chloroisopropyl)ether _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
4-Methylphenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
4-Nitrophenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Bis(2-chloroethyl)ether _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Bis(2-chloroethoxy)methane _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Bis(2-ethylhexyl)phthalate _A	<10	<10	<10	-	-	-	-		µg/l	A-T-052w
Butylbenzyl phthalate _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Carbazole _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Dibenzofuran _A	<1	<1	3	-	-	-	-		µg/l	A-T-052w
n-Dibutylphthalate _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
n-Dioctylphthalate _A	<10	<10	<10	-	-	-	-		µg/l	A-T-052w
n-Nitroso-n-dipropylamine _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Diethyl phthalate _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Dimethyl phthalate _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Hexachlorobenzene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Pentachlorophenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Phenol _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Hexachloroethane _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Nitrobenzene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w

Envirolab Job Number: 18/01782

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01782/1	18/01782/2	18/01782/3	18/01782/4	18/01782/5	18/01782/7	18/01782/8		Units	Method ref
Client Sample No										
Client Sample ID	OH101	OH102	OH103	BH101	BH102A	BH108A	BH114			
Depth to Top	3.00	3.20	3.20	3.50	4.50	7.50	3.50			
Depth To Bottom										
Date Sampled	01-Mar-18	02-Mar-18	02-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Isophorone _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Hexachlorocyclopentadiene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w
Perylene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-052w

Envirolab Job Number: 18/01782

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01782/1	18/01782/2	18/01782/3	18/01782/4	18/01782/5	18/01782/7	18/01782/8		Units	Method ref
Client Sample No										
Client Sample ID	OH101	OH102	OH103	BH101	BH102A	BH108A	BH114			
Depth to Top	3.00	3.20	3.20	3.50	4.50	7.50	3.50			
Depth To Bottom										
Date Sampled	01-Mar-18	02-Mar-18	02-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
VOC (w)										
Dichlorodifluoromethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Chloromethane _A [#]	<10	<10	<10	-	-	-	-		µg/l	A-T-006w
Vinyl Chloride _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Bromomethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Chloroethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Trichlorofluoromethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
trans 1,2-Dichloroethene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Dichloromethane _A	<5	<5	<5	-	-	-	-		µg/l	A-T-006w
Carbon Disulphide _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,1-Dichloroethene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,1-Dichloroethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
cis 1,2-Dichloroethene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Bromochloromethane _A [#]	<5	<5	<5	-	-	-	-		µg/l	A-T-006w
Chloroform _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
2,2-Dichloropropane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,2-Dichloroethane _A [#]	<2	<2	<2	-	-	-	-		µg/l	A-T-006w
1,1,1-Trichloroethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,1-Dichloropropene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Benzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Carbon Tetrachloride _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Dibromomethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,2-Dichloropropane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Bromodichloromethane _A [#]	<10	<10	<10	-	-	-	-		µg/l	A-T-006w
Trichloroethene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
cis 1,3-Dichloropropene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
trans 1,3-Dichloropropene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,1,2-Trichloroethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Toluene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,3-Dichloropropane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Dibromochloromethane _A [#]	<3	<3	<3	-	-	-	-		µg/l	A-T-006w
1,2-Dibromoethane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Tetrachloroethene _A	<1	<1	<1	-	-	-	-		µg/l	A-T-006w

Envirolab Job Number: 18/01782

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01782/1	18/01782/2	18/01782/3	18/01782/4	18/01782/5	18/01782/7	18/01782/8		Units	Method ref
Client Sample No										
Client Sample ID	OH101	OH102	OH103	BH101	BH102A	BH108A	BH114			
Depth to Top	3.00	3.20	3.20	3.50	4.50	7.50	3.50			
Depth To Bottom										
Date Sampled	01-Mar-18	02-Mar-18	02-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
1,1,1,2-Tetrachloroethane _A	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Chlorobenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Ethylbenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
m & p Xylene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Bromoform _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Styrene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,1,2,2-Tetrachloroethane _A	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
o-Xylene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,2,3-Trichloropropane _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Isopropylbenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
Bromobenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
2-Chlorotoluene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
n-propylbenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
4-Chlorotoluene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,2,4-Trimethylbenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
4-Isopropyltoluene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,3,5-Trimethylbenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,2-Dichlorobenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,4-Dichlorobenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
sec-Butylbenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
tert-Butylbenzene _A [#]	<2	<2	<2	-	-	-	-		µg/l	A-T-006w
1,3-Dichlorobenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
n-butylbenzene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w
1,2-Dibromo-3-chloropropane _A [#]	<2	<2	<2	-	-	-	-		µg/l	A-T-006w
1,2,4-Trichlorobenzene _A [#]	<3	<3	<3	-	-	-	-		µg/l	A-T-006w
1,2,3-Trichlorobenzene _A [#]	<3	<3	<3	-	-	-	-		µg/l	A-T-006w
Hexachlorobutadiene _A [#]	<1	<1	<1	-	-	-	-		µg/l	A-T-006w

Envirolab Job Number: 18/01782

Client Project Name: Project Blue

Client Project Ref: 764393

Lab Sample ID	18/01782/1	18/01782/2	18/01782/3	18/01782/4	18/01782/5	18/01782/7	18/01782/8		Units	Method ref
Client Sample No										
Client Sample ID	OH101	OH102	OH103	BH101	BH102A	BH108A	BH114			
Depth to Top	3.00	3.20	3.20	3.50	4.50	7.50	3.50			
Depth To Bottom										
Date Sampled	01-Mar-18	02-Mar-18	02-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18	01-Mar-18			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
TPH CWG										
Ali >C5-C6 (w) _A [#]	<1	<1	1	<1	<1	<1	<1		µg/l	A-T-022w
Ali >C6-C8 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Ali >C8-C10 (w) _A [#]	<1	2	<1	<1	<1	<1	<1		µg/l	A-T-022w
Ali >C10-C12 (w) _A [#]	<5	16	<5	<5	<5	<5	<5		µg/l	A-T-023w
Ali >C12-C16 (w) _A [#]	<5	222	<5	<5	<5	<5	<5		µg/l	A-T-023w
Ali >C16-C21 (w) _A [#]	<5	269	<5	<5	<5	<5	<5		µg/l	A-T-023w
Ali >C21-C35 (w) _A [#]	<5	107	<5	<5	<5	<5	<5		µg/l	A-T-023w
Total Aliphatics (w) _A	<5	615	<5	<5	<5	<5	<5		µg/l	A-T-022+23w
Aro >C5-C7 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Aro >C7-C8 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Aro >C8-C9 (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
Aro >C9-C10 (w) _A [#]	<1	2	<1	<1	<1	<1	<1		µg/l	A-T-022w
Aro >C10-C12 (w) _A [#]	<5	47	<5	<5	<5	<5	<5		µg/l	A-T-023w
Aro >C12-C16 (w) _A [#]	<5	248	<5	<5	<5	<5	<5		µg/l	A-T-023w
Aro >C16-C21 (w) _A [#]	<5	202	<5	<5	<5	<5	<5		µg/l	A-T-023w
Aro >C21-C35 (w) _A [#]	<5	140	<5	<5	<5	<5	<5		µg/l	A-T-023w
Total Aromatics (w) _A	<5	639	<5	<5	<5	<5	<5		µg/l	A-T-022+23w
TPH (Ali & Aro) (w) _A	<5	1254	<5	<5	<5	<5	<5		µg/l	A-T-022+23w
BTEX - Benzene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
BTEX - Toluene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
BTEX - Ethyl Benzene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
BTEX - m & p Xylene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
BTEX - o Xylene (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w
MTBE (w) _A [#]	<1	<1	<1	<1	<1	<1	<1		µg/l	A-T-022w

REPORT NOTES

General:

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure and there is insufficient sample to repeat the analysis. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

United Kingdom Accreditation Service

ACCREDITATION CERTIFICATE



TESTING LABORATORY
No. 1247

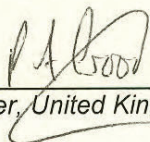
Envirolab

is accredited in accordance with the recognised International Standard ISO/IEC 17025:2005
General Requirements for the competence of testing and calibration laboratories.

This accreditation demonstrates technical competence for a defined scope as detailed in and at the locations specified in the schedule to this certificate, and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009).

The schedule to this certificate is an essential accreditation document and from time to time may be revised and reissued by the United Kingdom Accreditation Service. The most recent issue of the schedule of accreditation, which bears the same accreditation number as this certificate, is available from the UKAS website www.ukas.com.

This accreditation is subject to continuing conformity with United Kingdom Accreditation Service requirements. The absence of a schedule on the UKAS website indicates that the accreditation is no longer in force.



Accreditation Manager, United Kingdom Accreditation Service

Initial Accreditation date
2 December 1992

This certificate issued on
12 November 2012

UKAS is appointed as the sole national accreditation body for the UK by The Accreditation Regulations 2009 (SI No 3155/2009) and operates under a Memorandum of Understanding (MoU) with the Department for Business, Innovation and Skills (BIS).

APPENDIX F - MONITORING RECORDS

(i) Gas/Groundwater Monitoring Results

IN-SITU WATER MONITORING RESULTS

<u>Weather</u>		<u>Ground Conditions</u>	<u>Wind Conditions</u>	<u>Air Temperature (°C)</u>	<u>Equipment Used & Remarks</u>
Round 2	Sunny	Wet	Light	4	
Round 4	Overcast	Snow	Medium	-4	
Round 6	Raining	Wet	Medium	6	
Round 7	Overcast	Wet	Light	8	
Round 8	Overcast	Wet	Medium	7	
Round 9	Sunny	Dry	Light	17	

Exploratory Position ID	Pipe Ref	Pipe Diameter	Monitoring Round / Test Number	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring	Water Depth (mbgl)	pH	Redox (mV)	Conductivity (uS/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	Remarks
BH101	1	50	2 / 1	3.50	3.71	0.50 to 3.50	15/02/2018 12:19	2.43	6.73	-22	1671	11.4	7.1	
BH101	1	50	2 / 1				15/02/2018 12:22	2.43	6.52	-89	1884	9.6	4.0	
BH101	1	50	2 / 1				15/02/2018 12:25	2.43	6.53	-90	1891	9.6	3.0	
BH101	1	50	2 / 1				15/02/2018 12:28	2.43	6.54	-90	1901	9.6	2.1	
BH101	1	50	2 / 1				15/02/2018 12:31	2.43	6.55	-91	1900	9.6	1.8	
BH101	1	50	2 / 1				15/02/2018 12:34	2.43	6.57	-91	1897	9.7	1.1	
BH101	1	50	2 / 1				15/02/2018 12:37	2.43	6.57	-91	1898	9.7	1.0	
BH101	1	50	2 / 1				15/02/2018 12:40	2.43	6.58	-91	1898	9.7	0.9	
BH101	1	50	2 / 1				15/02/2018 12:43	2.43	6.58	-90	1898	9.7	0.8	
BH101	1	50	2 / 1				15/02/2018 12:46	2.43	6.59	-90	1900	9.7	0.7	
BH101	1	50	4 / 1	3.50	3.77	0.50 to 3.50	01/03/2018 16:34	3.12	6.71	-94	28900	6.7	5.5	
BH101	1	50	4 / 1				01/03/2018 16:37	3.12	6.98	-115	29240	6.5	2.9	
BH101	1	50	4 / 1				01/03/2018 16:40	3.12	7.04	-116	29610	6.4	2.1	
BH101	1	50	4 / 1				01/03/2018 16:43	3.12	7.07	-117	29880	6.4	2.3	
BH101	1	50	4 / 1				01/03/2018 16:46	3.12	7.09	-117	30010	6.3	2.9	
BH101	1	50	4 / 1				01/03/2018 16:49	3.12	7.08	-118	30100	6.2	3.1	
BH101	1	50	4 / 1				01/03/2018 16:52	3.12	7.06	-119	30170	6.3	3.5	
BH101	1	50	4 / 1				01/03/2018 16:55	3.12	7.04	-120	30210	6.5	3.8	

Key: NDA denotes 'no data available'.

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IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter	Monitoring Round / Test Number	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring	Water Depth (mbgl)	pH	Redox (mV)	Conductivity (uS/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	Remarks
BH101	1	50	4 / 1				01/03/2018 16:58	3.12	7.05	-119	30260	6.5	3.9	
BH101	1	50	4 / 1				01/03/2018 17:01	3.12	7.06	-119	30290	6.5	4.0	
BH102	1	19	4 / 1	4.50	2.95	0.50 to 5.50	01/03/2018 14:50	2.87	---	---	---	---	---	
BH102	1	19	6 / 1	4.50	2.86	0.50 to 5.50	12/03/2018 12:30	2.76	---	---	---	---	---	
BH102	1	19	7 / 1	4.50	4.34	0.50 to 5.50	22/03/2018 09:39	3.24	---	---	---	---	---	
BH102	1	19	8 / 1	4.50	4.34	0.50 to 5.50	27/03/2018 12:17	3.31	---	---	---	---	---	
BH102	1	19	9 / 1	4.50	4.34	0.50 to 5.50	20/04/2018 11:00	0.08	---	---	---	---	---	
BH102A	1	35	2 / 1	5.00	5.18	1.00 to 5.50	15/02/2018 15:27	3.35	7.32	-125	21	9.2	6.4	
BH102A	1	35	2 / 1				15/02/2018 15:30	3.35	7.16	-106	20	9.5	3.3	
BH102A	1	35	2 / 1				15/02/2018 15:33	3.35	7.16	-112	20	9.6	2.1	
BH102A	1	35	2 / 1				15/02/2018 15:36	3.35	7.05	-103	20	9.6	1.7	
BH102A	1	35	2 / 1				15/02/2018 15:39	3.35	7.02	-103	20	9.6	1.5	
BH102A	1	35	2 / 1				15/02/2018 15:42	3.35	6.97	-100	20	9.5	1.3	
BH102A	1	35	4 / 1	5.00	5.17	1.00 to 5.50	01/03/2018 15:08	3.42	7.32	-67	21320	5.4	5.1	General Remarks: No odour - translucent yellow tint.
BH102A	1	35	4 / 1				01/03/2018 15:11	3.42	7.23	-78	20750	7.0	2.0	General Remarks: No odour - translucent yellow tint.
BH102A	1	35	4 / 1				01/03/2018 15:14	3.42	7.17	-81	20190	6.5	1.1	General Remarks: No odour - translucent yellow tint.
BH102A	1	35	4 / 1				01/03/2018 15:17	3.42	7.18	-87	20180	5.7	1.1	General Remarks: No odour - translucent yellow tint.
BH102A	1	35	4 / 1				01/03/2018 15:20	3.42	7.15	-89	20210	5.3	1.1	General Remarks: No odour - translucent yellow tint.
BH102A	1	35	4 / 1				01/03/2018 15:23	3.42	7.14	-91	20330	5.0	1.1	General Remarks: No odour - translucent yellow tint.
BH102A	1	35	6 / 1	5.00	4.96	1.00 to 5.50	12/03/2018 12:35	3.10	---	---	---	---	---	
BH102A	1	35	7 / 1	5.00	5.14	1.00 to 5.50	22/03/2018 09:35	3.30	---	---	---	---	---	
BH102A	1	35	8 / 1	5.00	5.15	1.00 to 5.50	27/03/2018 12:15	3.33	---	---	---	---	---	
BH102A	1	35	9 / 1	5.00	5.13	1.00 to 5.50	20/04/2018 11:01	3.18	---	---	---	---	---	

Key: NDA denotes 'no data available'.

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IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter	Monitoring Round / Test Number	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring	Water Depth (mbgl)	pH	Redox (mV)	Conductivity (uS/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	Remarks
BH108	1	19	4 / 1	14.00	11.67	12.00 to 15.00	01/03/2018 12:30	6.45	---	---	---	---	---	General Remarks: No Odour - translucent yellow tint with sand sediment.
BH108	1	19	6 / 1	14.00	11.38	12.00 to 15.00	12/03/2018 12:04	6.58	---	---	---	---	---	
BH108	1	19	7 / 1	14.00	11.17	12.00 to 15.00	22/03/2018 10:16	7.40	---	---	---	---	---	
BH108	1	19	8 / 1	14.00	11.19	12.00 to 15.00	27/03/2018 12:39	6.47	---	---	---	---	---	
BH108	1	19	9 / 1	14.00	11.23	12.00 to 15.00	20/04/2018 12:08	7.67	---	---	---	---	---	
BH108A	1	35	2 / 1	14.50	14.28	12.00 to 15.00	15/02/2018 14:36	6.20	6.88	-68	10670	10.1	4.4	
BH108A	1	35	2 / 1				15/02/2018 14:39	6.20	7.15	-77	11100	11.0	2.4	
BH108A	1	35	2 / 1				15/02/2018 14:42	6.20	7.28	-76	11140	11.2	1.4	
BH108A	1	35	2 / 1				15/02/2018 14:45	6.20	7.36	-76	11140	11.2	1.2	
BH108A	1	35	2 / 1				15/02/2018 14:48	6.20	7.37	-80	11140	11.2	1.0	
BH108A	1	35	2 / 1				15/02/2018 14:51	6.20	7.40	-83	11150	11.2	1.0	
BH108A	1	35	4 / 1	14.50	14.36	12.00 to 15.00	01/03/2018 13:57	6.48	7.62	-44	7634	7.8	3.6	
BH108A	1	35	4 / 1				01/03/2018 14:00	6.48	7.41	-51	9731	11.4	1.0	
BH108A	1	35	4 / 1				01/03/2018 14:03	6.48	7.33	-54	10310	10.8	0.8	
BH108A	1	35	4 / 1				01/03/2018 14:06	6.48	7.29	-55	10370	10.7	0.7	
BH108A	1	35	4 / 1				01/03/2018 14:09	6.48	7.24	-58	10780	10.9	0.6	
BH108A	1	35	4 / 1				01/03/2018 14:12	6.48	7.27	-60	10880	10.9	0.5	
BH108A	1	35	6 / 1	14.50	14.27	12.00 to 15.00	12/03/2018 12:45	6.40	---	---	---	---	---	
BH108A	1	35	7 / 1	14.50	14.36	12.00 to 15.00	22/03/2018 10:13	7.41	---	---	---	---	---	
BH108A	1	35	8 / 1	14.50	14.35	12.00 to 15.00	27/03/2018 12:34	6.39	---	---	---	---	---	
BH108A	1	35	9 / 1	14.50	14.35	12.00 to 15.00	20/04/2018 12:07	7.61	---	---	---	---	---	

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IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter	Monitoring Round / Test Number	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring	Water Depth (mbgl)	pH	Redox (mV)	Conductivity (uS/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	Remarks
BH114	1	50	2 / 1	5.00	5.19	0.50 to 5.00	15/02/2018 09:25	2.81	6.98	-69	408	6.7	10.2	
BH114	1	50	2 / 1				15/02/2018 09:32	2.81	6.99	-63	414	6.6	10.1	
BH114	1	50	2 / 1				15/02/2018 09:35	2.81	6.95	-61	431	6.6	10.0	
BH114	1	50	2 / 1				15/02/2018 09:38	2.81	6.89	-61	450	6.5	10.0	
BH114	1	50	2 / 1				15/02/2018 09:41	2.81	6.78	-58	551	6.7	9.9	
BH114	1	50	2 / 1				15/02/2018 09:44	2.81	6.68	-54	751	6.9	9.8	
BH114	1	50	2 / 1				15/02/2018 09:47	2.81	6.55	-54	1195	6.9	9.6	
BH114	1	50	2 / 1				15/02/2018 09:50	2.81	6.48	-74	5146	7.0	8.8	
BH114	1	50	2 / 1				15/02/2018 09:53	2.81	6.50	-85	8716	7.0	8.6	
BH114	1	50	2 / 1				15/02/2018 09:56	2.81	6.50	-88	10100	7.0	8.4	
BH114	1	50	2 / 1				15/02/2018 09:59	2.81	6.52	-90	13750	7.0	8.1	
BH114	1	50	2 / 1				15/02/2018 10:02	2.81	6.54	-92	15240	7.1	7.9	
BH114	1	50	4 / 1	5.00	5.06	0.50 to 5.00	01/03/2018 11:31	2.53	6.49	-37	2086	6.5	4.6	
BH114	1	50	4 / 1				01/03/2018 11:34	2.53	6.42	-33	2074	8.1	2.4	
BH114	1	50	4 / 1				01/03/2018 11:37	2.53	6.32	-36	2082	8.6	1.1	
BH114	1	50	4 / 1				01/03/2018 11:40	2.53	6.22	-42	2088	9.0	0.8	
BH114	1	50	4 / 1				01/03/2018 11:43	2.53	6.21	-44	2085	9.1	0.5	
BH114	1	50	4 / 1				01/03/2018 11:46	2.53	6.20	-46	2088	9.1	0.4	
BH114	1	50	4 / 1				01/03/2018 11:49	2.53	6.19	-47	2091	9.2	0.4	
OH101	1	50	2 / 1	3.00	3.53	0.50 to 3.00	15/02/2018 11:04	1.90	7.21	-97	867	8.8	1.1	
OH101	1	50	2 / 1				15/02/2018 11:07	1.90	7.16	-95	834	8.7	3.6	
OH101	1	50	2 / 1				15/02/2018 11:10	1.90	7.04	-93	760	8.7	2.6	
OH101	1	50	2 / 1				15/02/2018 11:13	1.90	7.01	-87	720	9.0	1.7	
OH101	1	50	2 / 1				15/02/2018 11:16	1.90	7.01	-82	708	9.1	1.3	

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IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter	Monitoring Round / Test Number	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring	Water Depth (mbgl)	pH	Redox (mV)	Conductivity (uS/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	Remarks
OH101	1	50	2 / 1				15/02/2018 11:19	1.90	7.05	-81	715	9.1	1.1	
OH101	1	50	2 / 1				15/02/2018 11:22	1.90	7.04	-82	717	9.2	1.0	
OH101	1	50	4 / 1	3.00	3.52	0.50 to 3.00	01/03/2018 10:08	2.10	7.99	-38	1519	3.7	6.0	
OH101	1	50	4 / 1				01/03/2018 10:11	2.10	7.51	-32	1833	4.9	3.9	
OH101	1	50	4 / 1				01/03/2018 10:14	2.10	7.16	-35	1298	5.5	1.4	
OH101	1	50	4 / 1				01/03/2018 10:17	2.10	6.72	-38	1965	6.0	1.1	
OH101	1	50	4 / 1				01/03/2018 10:20	2.10	6.92	-43	2034	6.3	0.7	
OH101	1	50	4 / 1				01/03/2018 10:23	2.10	6.96	-41	985	5.9	0.8	
OH101	1	50	4 / 1				01/03/2018 10:26	2.10	6.88	-40	809	6.0	0.9	
OH101	1	50	4 / 1				01/03/2018 10:29	2.10	6.85	-39	796	6.1	0.8	
OH102	1	50	2 / 1	4.00	4.89	0.50 to 4.50	15/02/2018 10:42	2.00	6.98	-379	6388	7.4	0.2	
OH102	1	50	2 / 1				15/02/2018 10:45	2.00	6.93	-373	6366	7.2	0.0	
OH102	1	50	2 / 1				15/02/2018 10:48	2.00	6.93	-368	6114	7.1	0.0	
OH102	1	50	2 / 1				15/02/2018 10:51	2.00	6.92	-364	6100	7.1	0.0	
OH102	1	50	2 / 1				15/02/2018 10:54	2.00	6.92	-361	6097	7.1	0.0	
OH102	1	50	4 / 1	4.00	4.56	0.50 to 4.50	01/03/2018 10:33	1.88	7.50	-122	4938	6.1	4.9	General Remarks: Sulphate Odour - clear with oil sheen on surface
OH102	1	50	4 / 1				01/03/2018 10:36	1.88	6.58	-120	4761	6.2	1.1	General Remarks: Sulphate Odour - clear with oil sheen on surface
OH102	1	50	4 / 1				01/03/2018 10:39	1.88	6.84	-121	4727	5.8	0.5	General Remarks: Sulphate Odour - clear with oil sheen on surface
OH102	1	50	4 / 1				01/03/2018 10:42	1.88	7.01	-129	4724	5.7	0.4	General Remarks: Sulphate Odour - clear with oil sheen on surface
OH102	1	50	4 / 1				01/03/2018 10:45	1.88	6.96	-129	4639	5.7	0.3	General Remarks: Sulphate Odour - clear with oil sheen on surface
OH102	1	50	4 / 1				01/03/2018 10:48	1.88	6.92	-129	4572	5.7	0.2	General Remarks: Sulphate Odour - clear with oil sheen on surface
OH103	1	50	2 / 1	5.50	5.34	0.50 to 5.50	15/02/2018 11:40	2.10	8.32	-282	25	8.4	0.4	
OH103	1	50	2 / 1				15/02/2018 11:43	2.10	8.39	-293	25	8.7	0.2	

Key: NDA denotes 'no data available'.

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IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter	Monitoring Round / Test Number	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring	Water Depth (mbgl)	pH	Redox (mV)	Conductivity (uS/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	Remarks
OH103	1	50	2 / 1				15/02/2018 11:46	2.10	8.37	-295	25	8.7	0.0	
OH103	1	50	2 / 1				15/02/2018 11:49	2.10	8.33	-295	25	8.7	0.0	
OH103	1	50	2 / 1				15/02/2018 11:52	2.10	8.31	-295	25	8.6	0.0	
OH103	1	50	4 / 1	5.50	5.34	0.50 to 5.50	01/03/2018 09:07	2.13	7.64	-106	18	5.3	3.76	
OH103	1	50	4 / 1				01/03/2018 09:10	2.13	7.53	-109	18	6.7	1.2	
OH103	1	50	4 / 1				01/03/2018 09:13	2.13	7.56	-108	18	7.0	0.8	
OH103	1	50	4 / 1				01/03/2018 09:16	2.13	7.61	-108	18	7.4	0.5	
OH103	1	50	4 / 1				01/03/2018 09:19	2.13	7.64	-107	18	7.5	0.4	
OH103	1	50	4 / 1				01/03/2018 09:22	2.13	7.69	-108	18	7.5	0.4	

Key: NDA denotes 'no data available'.

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IN-SITU GAS MONITORING RESULTS

[Pressures]	Previous	During	Start	End	Equipment Used & Remarks
Round 1	-	-	1024	1023	Weather: Clear + Ground: Dry + Wind: Light + Air Temp: 1DegC
Round 2	-	-	1003	1003	Weather: Sunny + Ground: Wet + Wind: Light + Air Temp: 4DegC
Round 3	-	-	1017	1017	Weather: Drizzle + Ground: Wet + Wind: Medium + Air Temp: 7DegC
Round 4	-	-	1009	1009	Weather: Overcast + Ground: Snow + Wind: Medium + Air Temp: -4DegC
Round 5	-	-	992	992	Weather: Overcast + Ground: Dry + Wind: Light + Air Temp: 9DegC
Round 6	-	-	992	994	Weather: Raining + Ground: Wet + Wind: Medium + Air Temp: 6DegC

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH101	1	50	1	3.50	3.76	0.50 to 3.50	07/02/2018 09:41:00	1023	1023	0.0	3.04	0.0	0.0	20.9	0.0	0	0
BH101	1	50	1		3.76	0.50 to 3.50	15 secs	1023	1023	0.0	3.04	0.1	0.0	20.7	0.0	0	0
BH101	1	50	1		3.76	0.50 to 3.50	30 secs	1023	1023	0.0	3.04	0.2	0.0	19.3	0.0	0	0
BH101	1	50	1		3.76	0.50 to 3.50	60 secs	1023	1023	0.0	3.04	0.2	0.0	19.0	0.0	0	0
BH101	1	50	1		3.76	0.50 to 3.50	90 secs	1023	1023	0.0	3.04	0.2	0.0	19.0	0.0	0	0
BH101	1	50	1		3.76	0.50 to 3.50	120 secs	1023	1023	0.0	3.04	0.1	0.0	18.9	0.0	0	0
BH101	1	50	1		3.76	0.50 to 3.50	180 secs	1023	1023	0.0	3.04	0.1	0.0	18.8	0.0	0	0
BH101	1	50	1		3.76	0.50 to 3.50	240 secs	1023	1023	0.0	3.04	0.1	0.0	18.8	0.0	0	0
BH101	1	50	1		3.76	0.50 to 3.50	300 secs	1023	1023	0.0	3.04	0.1	0.0	18.7	0.0	0	0
BH101	1	50	2	3.50	3.76	0.50 to 3.50	15/02/2018 08:19:00	1003	1003	0.2	2.82	0.0	0.0	20.8	0.0	0	0
BH101	1	50	2		3.76	0.50 to 3.50	15 secs	1003	1003	0.2	2.82	0.2	0.0	19.2	0.0	0	0
BH101	1	50	2		3.76	0.50 to 3.50	30 secs	1003	1003	0.2	2.82	0.2	0.0	18.8	0.0	0	0
BH101	1	50	2		3.76	0.50 to 3.50	60 secs	1003	1003	0.2	2.82	0.2	0.0	18.2	0.0	0	0
BH101	1	50	2		3.76	0.50 to 3.50	90 secs	1003	1003	0.2	2.82	0.2	0.0	18.3	0.0	0	0
BH101	1	50	2		3.76	0.50 to 3.50	120 secs	1003	1003	0.2	2.82	0.2	0.0	18.4	0.0	0	0
BH101	1	50	2		3.76	0.50 to 3.50	180 secs	1003	1003	0.2	2.82	0.2	0.0	18.3	0.0	0	0
BH101	1	50	2		3.76	0.50 to 3.50	240 secs	1003	1003	0.2	2.82	0.2	0.0	18.3	0.0	0	0
BH101	1	50	2		3.76	0.50 to 3.50	300 secs	1003	1003	0.2	2.82	0.2	0.0	18.3	0.0	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

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IN-SITU GAS MONITORING RESULTS

[Pressures]	Previous	During	Start	End	Equipment Used & Remarks
Round 7	-	-	1019	1018	Weather: Overcast + Ground: Wet + Wind: Light + Air Temp: 8DegC
Round 8	-	-	1003	1003	Weather: Overcast + Ground: Wet + Wind: Medium + Air Temp: 7DegC
Round 9	-	-	1025	1025	Weather: Sunny + Ground: Dry + Wind: Light + Air Temp: 17DegC

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH101	1	50	3	3.50	3.76	0.50 to 3.50	19/02/2018 10:00:00	1017	1017	0.1	2.76	0.0	0.0	20.8	0.0	0	0
BH101	1	50	3		3.76	0.50 to 3.50	15 secs	1017	1017	0.1	2.76	0.2	0.0	19.7	0.0	0	0
BH101	1	50	3		3.76	0.50 to 3.50	30 secs	1017	1017	0.1	2.76	0.2	0.0	18.6	0.0	0	0
BH101	1	50	3		3.76	0.50 to 3.50	60 secs	1017	1017	0.1	2.76	0.3	0.0	18.4	0.0	0	0
BH101	1	50	3		3.76	0.50 to 3.50	90 secs	1017	1017	0.1	2.76	0.2	0.0	18.2	0.0	0	0
BH101	1	50	3		3.76	0.50 to 3.50	120 secs	1017	1017	0.1	2.76	0.2	0.0	18.2	0.0	0	0
BH101	1	50	3		3.76	0.50 to 3.50	180 secs	1017	1017	0.1	2.76	0.2	0.0	18.2	0.0	0	0
BH101	1	50	3		3.76	0.50 to 3.50	240 secs	1017	1017	0.1	2.76	0.2	0.0	18.2	0.0	0	0
BH101	1	50	3		3.76	0.50 to 3.50	300 secs	1017	1017	0.1	2.76	0.2	0.0	18.2	0.0	0	0
BH101	1	50	4	3.50	3.76	0.50 to 3.50	01/03/2018 15:30:00	1003	1003	0.0	3.11	0.0	0.0	20.9	0.0	0	0
BH101	1	50	4		3.76	0.50 to 3.50	15 secs	1003	1003	0.0	3.11	0.0	0.0	20.7	0.0	0	0
BH101	1	50	4		3.76	0.50 to 3.50	30 secs	1003	1003	0.0	3.11	0.2	0.0	20.6	0.0	0	0
BH101	1	50	4		3.76	0.50 to 3.50	60 secs	1003	1003	0.0	3.11	0.2	0.0	20.5	0.0	0	0
BH101	1	50	4		3.76	0.50 to 3.50	90 secs	1003	1003	0.0	3.11	0.2	0.0	20.5	0.0	0	0
BH101	1	50	4		3.76	0.50 to 3.50	120 secs	1003	1003	0.0	3.11	0.2	0.0	20.5	0.0	0	0
BH101	1	50	4		3.76	0.50 to 3.50	180 secs	1003	1003	0.0	3.11	0.2	0.0	20.5	0.0	0	0
BH101	1	50	4		3.76	0.50 to 3.50	240 secs	1003	1003	0.0	3.11	0.2	0.0	20.5	0.0	0	0
BH101	1	50	4		3.76	0.50 to 3.50	300 secs	1003	1003	0.0	3.11	0.2	0.0	20.5	0.0	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

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IN-SITU GAS MONITORING RESULTS

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH101	1	50	5	3.50	3.76	0.50 to 3.50	07/03/2018 10:34:00	993	993	0.0	2.77	0.0	0.0	20.9	0.0	0	0
BH101	1	50	5		3.76	0.50 to 3.50	15 secs	993	993	0.0	2.77	0.1	0.0	20.4	0.0	0	0
BH101	1	50	5		3.76	0.50 to 3.50	30 secs	993	993	0.0	2.77	0.1	0.0	19.9	0.0	0	0
BH101	1	50	5		3.76	0.50 to 3.50	60 secs	993	993	0.0	2.77	0.1	0.0	19.9	0.0	0	0
BH101	1	50	5		3.76	0.50 to 3.50	90 secs	993	993	0.0	2.77	0.1	0.0	20.0	0.0	0	0
BH101	1	50	5		3.76	0.50 to 3.50	120 secs	993	993	0.0	2.77	0.1	0.0	20.0	0.0	0	0
BH101	1	50	5		3.76	0.50 to 3.50	180 secs	993	993	0.0	2.77	0.1	0.0	20.0	0.0	0	0
BH101	1	50	5		3.76	0.50 to 3.50	240 secs	993	993	0.0	2.77	0.1	0.0	20.0	0.0	0	0
BH101	1	50	5		3.76	0.50 to 3.50	300 secs	993	993	0.0	2.77	0.1	0.0	20.0	0.0	0	0
BH101	1	50	7	3.50	3.76	0.50 to 3.50	22/03/2018 09:19:00	1019	1019	0.0	3.01	0.0	0.0	20.8	0.0	0	0
BH101	1	50	7		3.76	0.50 to 3.50	15 secs	1019	1019	0.0	3.01	0.3	0.0	20.5	0.0	0	0
BH101	1	50	7		3.76	0.50 to 3.50	30 secs	1019	1019	0.0	3.01	0.3	0.0	19.4	0.0	0	0
BH101	1	50	7		3.76	0.50 to 3.50	60 secs	1019	1019	0.0	3.01	0.3	0.0	19.3	0.0	0	0
BH101	1	50	7		3.76	0.50 to 3.50	90 secs	1019	1019	0.0	3.01	0.3	0.0	19.2	0.0	0	0
BH101	1	50	7		3.76	0.50 to 3.50	120 secs	1019	1019	0.0	3.01	0.3	0.0	19.2	0.0	0	0
BH101	1	50	7		3.76	0.50 to 3.50	180 secs	1019	1019	0.0	3.01	0.3	0.0	19.2	0.0	0	0
BH101	1	50	7		3.76	0.50 to 3.50	240 secs	1019	1019	0.0	3.01	0.3	0.0	19.2	0.0	0	0
BH101	1	50	7		3.76	0.50 to 3.50	300 secs	1019	1019	0.0	3.01	0.3	0.0	19.2	0.0	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.



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IN-SITU GAS MONITORING RESULTS

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH101	1	50	8	3.50	3.75	0.50 to 3.50	27/03/2018 11:50:00	1003	1003	0.1	2.92	0.0	0.0	20.9	-	0	0
BH101	1	50	8		3.75	0.50 to 3.50	15 secs	1003	1003	0.1	2.92	0.0	0.0	20.4	-	0	0
BH101	1	50	8		3.75	0.50 to 3.50	30 secs	1003	1003	0.1	2.92	0.2	0.0	20.5	-	0	0
BH101	1	50	8		3.75	0.50 to 3.50	60 secs	1003	1003	0.1	2.92	0.2	0.0	20.5	-	0	0
BH101	1	50	8		3.75	0.50 to 3.50	90 secs	1003	1003	0.1	2.92	0.2	0.0	20.6	-	0	0
BH101	1	50	8		3.75	0.50 to 3.50	120 secs	1003	1003	0.1	2.92	0.2	0.0	20.6	-	0	0
BH101	1	50	8		3.75	0.50 to 3.50	180 secs	1003	1003	0.1	2.92	0.2	0.0	20.6	-	0	0
BH101	1	50	8		3.75	0.50 to 3.50	240 secs	1003	1003	0.1	2.92	0.2	0.0	20.6	-	0	0
BH101	1	50	8		3.75	0.50 to 3.50	300 secs	1003	1003	0.1	2.92	0.2	0.0	20.6	-	0	0
BH101	1	50	9	3.50	3.74	0.50 to 3.50	20/04/2018 10:42:00	1023	1024	0.1	2.98	0.0	0.0	20.9	-	0	0
BH101	1	50	9		3.74	0.50 to 3.50	15 secs	1023	1024	0.1	2.98	0.4	0.0	20.6	-	0	0
BH101	1	50	9		3.74	0.50 to 3.50	30 secs	1023	1024	0.1	2.98	0.4	0.0	20.4	-	0	0
BH101	1	50	9		3.74	0.50 to 3.50	60 secs	1023	1024	0.1	2.98	0.4	0.0	20.4	-	0	0
BH101	1	50	9		3.74	0.50 to 3.50	90 secs	1023	1024	0.1	2.98	0.4	0.0	20.4	-	0	0
BH101	1	50	9		3.74	0.50 to 3.50	120 secs	1023	1024	0.1	2.98	0.4	0.0	20.4	-	0	0
BH101	1	50	9		3.74	0.50 to 3.50	180 secs	1023	1024	0.1	2.98	0.4	0.0	20.4	-	0	0
BH101	1	50	9		3.74	0.50 to 3.50	240 secs	1023	1024	0.1	2.98	0.4	0.0	20.4	-	0	0
BH101	1	50	9		3.74	0.50 to 3.50	300 secs	1023	1024	0.1	2.98	0.4	0.0	20.4	-	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.



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IN-SITU GAS MONITORING RESULTS

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH102	1	19	1	4.50	2.87	0.50 to 5.50	07/02/2018 09:30:00	-	1024	-	2.81	-	-	-	-	-	-
BH102	1	19	3	4.50	2.91	0.50 to 5.50	19/02/2018 10:33:00	-	-	-	DRY	-	-	-	-	-	-
BH102	1	19	5	4.50	2.86	0.50 to 5.50	07/03/2018	-	-	-	2.80	-	-	-	-	-	-
BH102A	1	35	1	5.00	4.57	1.00 to 5.50	07/02/2018 09:28:00	-	1024	-	3.29	-	-	-	-	-	-
BH102A	1	35	2	5.00	4.96	1.00 to 5.50	15/02/2018 07:58:00	-	-	-	3.15	-	-	-	-	-	-
BH102A	1	35	3	5.00	5.16	1.00 to 5.50	19/02/2018 10:29:00	-	-	-	3.34	-	-	-	-	-	-
BH102A	1	35	5	5.00	4.96	1.00 to 5.50	07/03/2018	-	-	-	3.15	-	-	-	-	-	-
BH108	1	19	1	14.00	10.85	12.00 to 15.00	07/02/2018 11:02:00	-	1023	-	7.51	-	-	-	-	-	-
BH108	1	19	3	14.00	11.70	12.00 to 15.00	19/02/2018 11:17:00	-	-	-	7.57	-	-	-	-	-	-
BH108	1	19	5	14.00	11.38	12.00 to 15.00	07/03/2018	-	-	-	7.37	-	-	-	-	-	-
BH108A	1	35	1	14.50	13.65	12.00 to 15.00	07/02/2018 11:25:00	-	1023	-	7.18	-	-	-	-	-	-
BH108A	1	35	2	14.50	14.28	12.00 to 15.00	15/02/2018 08:35:00	-	-	-	6.09	-	-	-	-	-	-
BH108A	1	35	3	14.50	14.38	12.00 to 15.00	19/02/2018 11:12:00	-	-	-	7.47	-	-	-	-	-	-
BH108A	1	35	5	14.50	14.27	12.00 to 15.00	07/03/2018	-	-	-	7.19	-	-	-	-	-	-

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH114	1	50	1	5.00	5.13	0.50 to 5.00	07/02/2018 11:45:00	1023	1023	0.0	2.48	0.0	0.0	20.9	0.0	0	0
BH114	1	50	1		5.13	0.50 to 5.00	15 secs	1023	1023	0.0	2.48	2.3	0.0	20.4	0.0	0	0
BH114	1	50	1		5.13	0.50 to 5.00	30 secs	1023	1023	0.0	2.48	2.3	0.0	18.8	0.0	0	0
BH114	1	50	1		5.13	0.50 to 5.00	60 secs	1023	1023	0.0	2.48	2.3	0.0	18.3	0.0	0	0
BH114	1	50	1		5.13	0.50 to 5.00	90 secs	1023	1023	0.0	2.48	2.3	0.0	18.3	0.0	0	0
BH114	1	50	1		5.13	0.50 to 5.00	120 secs	1023	1023	0.0	2.48	2.4	0.0	18.2	0.0	0	0
BH114	1	50	1		5.13	0.50 to 5.00	180 secs	1023	1023	0.0	2.48	2.7	0.0	17.9	0.0	0	0
BH114	1	50	1		5.13	0.50 to 5.00	240 secs	1023	1023	0.0	2.48	3.1	0.0	17.3	0.0	0	0
BH114	1	50	1		5.13	0.50 to 5.00	300 secs	1023	1023	0.0	2.48	3.1	0.0	17.3	0.0	0	0
BH114	1	50	2	5.00	5.13	0.50 to 5.00	15/02/2018 08:47:00	1002	1002	0.4	2.45	0.0	0.0	20.9	0.0	0	0
BH114	1	50	2		5.13	0.50 to 5.00	15 secs	1002	1002	0.4	2.45	0.3	0.0	20.4	0.0	0	0
BH114	1	50	2		5.13	0.50 to 5.00	30 secs	1002	1002	0.4	2.45	0.4	0.0	20.2	0.0	0	0
BH114	1	50	2		5.13	0.50 to 5.00	60 secs	1002	1002	0.4	2.45	0.3	0.0	20.2	0.0	0	0
BH114	1	50	2		5.13	0.50 to 5.00	90 secs	1002	1002	0.4	2.45	0.3	0.0	20.2	0.0	0	0
BH114	1	50	2		5.13	0.50 to 5.00	120 secs	1002	1002	0.4	2.45	0.3	0.0	20.2	0.0	0	0
BH114	1	50	2		5.13	0.50 to 5.00	180 secs	1002	1002	0.4	2.45	0.3	0.0	20.2	0.0	0	0
BH114	1	50	2		5.13	0.50 to 5.00	240 secs	1002	1002	0.4	2.45	0.3	0.0	20.2	0.0	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.



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IN-SITU GAS MONITORING RESULTS

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH114	1	50	2		5.13	0.50 to 5.00	300 secs	1002	1002	0.4	2.45	0.3	0.0	20.2	0.0	0	0
BH114	1	50	3	5.00	5.13	0.50 to 5.00	19/02/2018 10:57:00	1017	1017	0.3	2.47	0.0	0.0	20.8	0.0	0	0
BH114	1	50	3		5.13	0.50 to 5.00	15 secs	1017	1017	0.3	2.47	1.9	0.0	20.2	0.0	0	0
BH114	1	50	3		5.13	0.50 to 5.00	30 secs	1017	1017	0.3	2.47	2.0	0.0	18.5	0.0	0	0
BH114	1	50	3		5.13	0.50 to 5.00	60 secs	1017	1017	0.3	2.47	2.0	0.0	17.8	0.0	0	0
BH114	1	50	3		5.13	0.50 to 5.00	90 secs	1017	1017	0.3	2.47	2.0	0.0	17.6	0.0	0	0
BH114	1	50	3		5.13	0.50 to 5.00	120 secs	1017	1017	0.3	2.47	2.0	0.0	17.8	0.0	0	0
BH114	1	50	3		5.13	0.50 to 5.00	180 secs	1017	1017	0.3	2.47	2.0	0.0	17.8	0.0	0	0
BH114	1	50	3		5.13	0.50 to 5.00	240 secs	1017	1017	0.3	2.47	2.0	0.0	17.8	0.0	0	0
BH114	1	50	3		5.13	0.50 to 5.00	300 secs	1017	1017	0.3	2.47	2.0	0.0	17.8	0.0	0	0
BH114	1	50	4	5.00	5.13	0.50 to 5.00	01/03/2018 11:10:00	1009	1009	0.0	2.53	0.0	0.0	20.9	0.0	0	0
BH114	1	50	4		5.13	0.50 to 5.00	15 secs	1009	1009	0.0	2.53	1.8	0.0	20.0	0.0	0	0
BH114	1	50	4		5.13	0.50 to 5.00	30 secs	1009	1009	0.0	2.53	2.9	0.0	16.1	0.0	0	0
BH114	1	50	4		5.13	0.50 to 5.00	60 secs	1009	1009	0.0	2.53	3.0	0.0	15.6	0.0	0	0
BH114	1	50	4		5.13	0.50 to 5.00	90 secs	1009	1009	0.0	2.53	3.0	0.0	15.5	0.0	0	0
BH114	1	50	4		5.13	0.50 to 5.00	120 secs	1009	1009	0.0	2.53	3.0	0.0	15.5	0.0	0	0
BH114	1	50	4		5.13	0.50 to 5.00	180 secs	1009	1009	0.0	2.53	3.0	0.0	15.5	0.0	0	0
BH114	1	50	4		5.13	0.50 to 5.00	240 secs	1009	1009	0.0	2.53	3.0	0.0	15.5	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH114	1	50	4		5.13	0.50 to 5.00	300 secs	1009	1009	0.0	2.53	3.0	0.0	15.5	0.0	0	0
BH114	1	50	5	5.00	5.13	0.50 to 5.00	07/03/2018 11:30:00	993	993	0.0	2.52	0.0	0.0	20.9	0.0	0	0
BH114	1	50	5		5.13	0.50 to 5.00	15 secs	993	993	0.0	2.52	1.6	0.0	19.9	0.0	0	0
BH114	1	50	5		5.13	0.50 to 5.00	30 secs	993	993	0.0	2.52	1.7	0.0	18.5	0.0	0	0
BH114	1	50	5		5.13	0.50 to 5.00	60 secs	993	993	0.0	2.52	1.7	0.0	18.4	0.0	0	0
BH114	1	50	5		5.13	0.50 to 5.00	90 secs	993	993	0.0	2.52	1.7	0.0	18.3	0.0	0	0
BH114	1	50	5		5.13	0.50 to 5.00	120 secs	993	993	0.0	2.52	1.7	0.0	18.3	0.0	0	0
BH114	1	50	5		5.13	0.50 to 5.00	180 secs	993	993	0.0	2.52	1.7	0.0	18.3	0.0	0	0
BH114	1	50	5		5.13	0.50 to 5.00	240 secs	993	993	0.0	2.52	1.7	0.0	18.3	0.0	0	0
BH114	1	50	5		5.13	0.50 to 5.00	300 secs	993	993	0.0	2.52	1.7	0.0	18.3	0.0	0	0
BH114	1	50	6	5.00	5.13	0.50 to 5.00	12/03/2018 12:04:00	993	993	0.0	2.47	0.0	0.0	20.9	0.0	0	0
BH114	1	50	6		5.13	0.50 to 5.00	15 secs	993	993	0.0	2.47	2.4	0.0	17.7	0.0	0	0
BH114	1	50	6		5.13	0.50 to 5.00	30 secs	993	993	0.0	2.47	2.4	0.0	17.0	0.0	0	0
BH114	1	50	6		5.13	0.50 to 5.00	60 secs	993	993	0.0	2.47	2.4	0.0	16.9	0.0	0	0
BH114	1	50	6		5.13	0.50 to 5.00	90 secs	993	993	0.0	2.47	2.4	0.0	16.9	0.0	0	0
BH114	1	50	6		5.13	0.50 to 5.00	120 secs	993	993	0.0	2.47	2.4	0.0	16.9	0.0	0	0
BH114	1	50	6		5.13	0.50 to 5.00	180 secs	993	993	0.0	2.47	2.4	0.0	16.9	0.0	0	0
BH114	1	50	6		5.13	0.50 to 5.00	240 secs	993	993	0.0	2.47	2.4	0.0	16.9	0.0	0	0

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH114	1	50	6		5.13	0.50 to 5.00	300 secs	993	993	0.0	2.47	2.4	0.0	16.9	0.0	0	0
BH114	1	50	7	5.00	5.13	0.50 to 5.00	22/03/2018 10:21:00	1018	1018	0.1	2.44	0.0	0.0	20.8	0.0	0	0
BH114	1	50	7		5.13	0.50 to 5.00	15 secs	1018	1018	0.1	2.44	2.8	0.0	19.9	0.0	0	0
BH114	1	50	7		5.13	0.50 to 5.00	30 secs	1018	1018	0.1	2.44	3.0	0.0	17.2	0.0	0	0
BH114	1	50	7		5.13	0.50 to 5.00	60 secs	1018	1018	0.1	2.44	3.1	0.0	17.0	0.0	0	0
BH114	1	50	7		5.13	0.50 to 5.00	90 secs	1018	1018	0.1	2.44	3.1	0.0	17.0	0.0	0	0
BH114	1	50	7		5.13	0.50 to 5.00	120 secs	1018	1018	0.1	2.44	3.1	0.0	17.0	0.0	0	0
BH114	1	50	7		5.13	0.50 to 5.00	180 secs	1018	1018	0.1	2.44	3.1	0.0	17.0	0.0	0	0
BH114	1	50	7		5.13	0.50 to 5.00	240 secs	1018	1018	0.1	2.44	3.1	0.0	17.0	0.0	0	0
BH114	1	50	7		5.13	0.50 to 5.00	300 secs	1018	1018	0.1	2.44	3.1	0.0	17.0	0.0	0	0
BH114	1	50	8	5.00	5.13	0.50 to 5.00	27/03/2018 12:42:00	1002	1002	0.3	2.70	0.0	0.0	20.8	-	0	0
BH114	1	50	8		5.13	0.50 to 5.00	15 secs	1002	1002	0.3	2.70	4.5	0.0	18.0	-	0	0
BH114	1	50	8		5.13	0.50 to 5.00	30 secs	1002	1002	0.3	2.70	4.8	0.0	11.6	-	0	0
BH114	1	50	8		5.13	0.50 to 5.00	60 secs	1002	1002	0.3	2.70	4.8	0.0	9.4	-	0	0
BH114	1	50	8		5.13	0.50 to 5.00	90 secs	1002	1002	0.3	2.70	4.7	0.0	9.5	-	0	0
BH114	1	50	8		5.13	0.50 to 5.00	120 secs	1002	1002	0.3	2.70	4.7	0.0	9.7	-	0	0
BH114	1	50	8		5.13	0.50 to 5.00	180 secs	1002	1002	0.3	2.70	4.7	0.0	9.7	-	0	0
BH114	1	50	8		5.13	0.50 to 5.00	240 secs	1002	1002	0.3	2.70	4.7	0.0	9.7	-	0	0

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
BH114	1	50	8		5.13	0.50 to 5.00	300 secs	1002	1002	0.3	2.70	4.7	0.0	9.7	-	0	0
BH114	1	50	9	5.00	5.12	0.50 to 5.00	20/04/2018 12:11:00	1026	1025	0.4	3.28	0.0	0.0	20.8	-	0	0
BH114	1	50	9		5.12	0.50 to 5.00	15 secs	1026	1025	0.4	3.28	4.3	0.0	17.4	-	0	0
BH114	1	50	9		5.12	0.50 to 5.00	30 secs	1026	1025	0.4	3.28	4.5	0.0	12.0	-	0	0
BH114	1	50	9		5.12	0.50 to 5.00	60 secs	1026	1025	0.4	3.28	4.5	0.0	11.3	-	0	0
BH114	1	50	9		5.12	0.50 to 5.00	90 secs	1026	1025	0.4	3.28	4.5	0.0	11.2	-	0	0
BH114	1	50	9		5.12	0.50 to 5.00	120 secs	1026	1025	0.4	3.28	4.6	0.0	11.2	-	0	0
BH114	1	50	9		5.12	0.50 to 5.00	180 secs	1026	1025	0.4	3.28	4.6	0.0	11.2	-	0	0
BH114	1	50	9		5.12	0.50 to 5.00	240 secs	1026	1025	0.4	3.28	4.6	0.0	11.2	-	0	0
BH114	1	50	9		5.12	0.50 to 5.00	300 secs	1026	1025	0.4	3.28	4.6	0.0	11.2	-	0	0
OH101	1	50	1	3.00	3.53	0.50 to 3.00	07/02/2018 08:40:00	1024	1024	0.0	1.98	0.0	0.0	20.9	0.0	0	0
OH101	1	50	1		3.53	0.50 to 3.00	15 secs	1024	1024	0.0	1.98	1.3	0.0	19.8	0.0	0	0
OH101	1	50	1		3.53	0.50 to 3.00	30 secs	1024	1024	0.0	1.98	1.3	0.0	18.0	0.0	0	0
OH101	1	50	1		3.53	0.50 to 3.00	60 secs	1024	1024	0.0	1.98	1.3	0.0	17.7	0.0	0	0
OH101	1	50	1		3.53	0.50 to 3.00	90 secs	1024	1024	0.0	1.98	1.3	0.0	17.7	0.0	0	0
OH101	1	50	1		3.53	0.50 to 3.00	120 secs	1024	1024	0.0	1.98	1.3	0.0	17.8	0.0	0	0
OH101	1	50	1		3.53	0.50 to 3.00	180 secs	1024	1024	0.0	1.98	1.2	0.0	17.8	0.0	0	0

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH101	1	50	1		3.53	0.50 to 3.00	240 secs	1024	1024	0.0	1.98	1.2	0.0	17.9	0.0	0	0
OH101	1	50	1		3.53	0.50 to 3.00	300 secs	1024	1024	0.0	1.98	1.2	0.0	17.9	0.0	0	0
OH101	1	50	2	3.00	3.53	0.50 to 3.00	15/02/2018 08:33:00	1002	1002	0.3	1.90	0.0	0.0	20.9	0.0	0	0
OH101	1	50	2		3.53	0.50 to 3.00	15 secs	1002	1002	0.3	1.90	0.6	0.0	20.8	0.0	0	0
OH101	1	50	2		3.53	0.50 to 3.00	30 secs	1002	1002	0.3	1.90	0.6	0.0	20.2	0.0	0	0
OH101	1	50	2		3.53	0.50 to 3.00	60 secs	1002	1002	0.3	1.90	0.6	0.0	20.3	0.0	0	0
OH101	1	50	2		3.53	0.50 to 3.00	90 secs	1002	1002	0.3	1.90	0.6	0.0	20.2	0.0	0	0
OH101	1	50	2		3.53	0.50 to 3.00	120 secs	1002	1002	0.3	1.90	0.6	0.0	20.2	0.0	0	0
OH101	1	50	2		3.53	0.50 to 3.00	180 secs	1002	1002	0.3	1.90	0.6	0.0	20.2	0.0	0	0
OH101	1	50	2		3.53	0.50 to 3.00	240 secs	1002	1002	0.3	1.90	0.6	0.0	20.2	0.0	0	0
OH101	1	50	2		3.53	0.50 to 3.00	300 secs	1002	1002	0.3	1.90	0.6	0.0	20.2	0.0	0	0
OH101	1	50	3	3.00	3.53	0.50 to 3.00	19/02/2018 10:41:00	1016	1017	0.2	1.85	0.0	0.0	20.8	0.0	0	0
OH101	1	50	3		3.53	0.50 to 3.00	15 secs	1016	1017	0.2	1.85	1.0	0.0	19.9	0.0	0	0
OH101	1	50	3		3.53	0.50 to 3.00	30 secs	1016	1017	0.2	1.85	1.0	0.0	19.5	0.0	0	0
OH101	1	50	3		3.53	0.50 to 3.00	60 secs	1016	1017	0.2	1.85	1.1	0.0	19.5	0.0	0	0
OH101	1	50	3		3.53	0.50 to 3.00	90 secs	1016	1017	0.2	1.85	1.1	0.0	19.6	0.0	0	0
OH101	1	50	3		3.53	0.50 to 3.00	120 secs	1016	1017	0.2	1.85	1.1	0.0	19.6	0.0	0	0
OH101	1	50	3		3.53	0.50 to 3.00	180 secs	1016	1017	0.2	1.85	1.1	0.0	19.6	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH101	1	50	3		3.53	0.50 to 3.00	240 secs	1016	1017	0.2	1.85	1.1	0.0	19.6	0.0	0	0
OH101	1	50	3		3.53	0.50 to 3.00	300 secs	1016	1017	0.2	1.85	1.1	0.0	19.6	0.0	0	0
OH101	1	50	4	3.00	3.53	0.50 to 3.00	01/03/2018 09:45:00	1009	1009	0.0	2.10	0.0	0.0	20.9	0.0	0	0
OH101	1	50	4		3.53	0.50 to 3.00	15 secs	1009	1009	0.0	2.10	0.2	0.0	20.7	0.0	0	0
OH101	1	50	4		3.53	0.50 to 3.00	30 secs	1009	1009	0.0	2.10	0.2	0.0	20.7	0.0	0	0
OH101	1	50	4		3.53	0.50 to 3.00	60 secs	1009	1009	0.0	2.10	0.2	0.0	20.7	0.0	0	0
OH101	1	50	4		3.53	0.50 to 3.00	90 secs	1009	1009	0.0	2.10	0.2	0.0	20.6	0.0	0	0
OH101	1	50	4		3.53	0.50 to 3.00	120 secs	1009	1009	0.0	2.10	0.2	0.0	20.7	0.0	0	0
OH101	1	50	4		3.53	0.50 to 3.00	180 secs	1009	1009	0.0	2.10	0.2	0.0	20.7	0.0	0	0
OH101	1	50	4		3.53	0.50 to 3.00	240 secs	1009	1009	0.0	2.10	0.2	0.0	20.7	0.0	0	0
OH101	1	50	4		3.53	0.50 to 3.00	300 secs	1009	1009	0.0	2.10	0.2	0.0	20.7	0.0	0	0
OH101	1	50	5	3.00	3.53	0.50 to 3.00	07/03/2018 10:14:00	992	992	0.0	1.89	0.0	0.0	20.9	0.0	0	0
OH101	1	50	5		3.53	0.50 to 3.00	15 secs	992	992	0.0	1.89	0.2	0.0	20.8	0.0	0	0
OH101	1	50	5		3.53	0.50 to 3.00	30 secs	992	992	0.0	1.89	0.3	0.0	20.7	0.0	0	0
OH101	1	50	5		3.53	0.50 to 3.00	60 secs	992	992	0.0	1.89	0.3	0.0	20.7	0.0	0	0
OH101	1	50	5		3.53	0.50 to 3.00	90 secs	992	992	0.0	1.89	0.2	0.0	20.7	0.0	0	0
OH101	1	50	5		3.53	0.50 to 3.00	120 secs	992	992	0.0	1.89	0.2	0.0	20.8	0.0	0	0
OH101	1	50	5		3.53	0.50 to 3.00	180 secs	992	992	0.0	1.89	0.2	0.0	20.8	0.0	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.



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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH101	1	50	5		3.53	0.50 to 3.00	240 secs	992	992	0.0	1.89	0.1	0.0	20.8	0.0	0	0
OH101	1	50	5		3.53	0.50 to 3.00	300 secs	992	992	0.0	1.89	0.1	0.0	20.8	0.0	0	0
OH101	1	50	6	3.00	3.53	0.50 to 3.00	12/03/2018 11:53:00	993	993	0.0	1.75	0.0	0.0	20.9	0.0	0	0
OH101	1	50	6		3.53	0.50 to 3.00	15 secs	993	993	0.0	1.75	0.1	0.0	20.8	0.0	0	0
OH101	1	50	6		3.53	0.50 to 3.00	30 secs	993	993	0.0	1.75	0.1	0.0	20.8	0.0	0	0
OH101	1	50	6		3.53	0.50 to 3.00	60 secs	993	993	0.0	1.75	0.1	0.0	20.8	0.0	0	0
OH101	1	50	6		3.53	0.50 to 3.00	90 secs	993	993	0.0	1.75	0.2	0.0	20.8	0.0	0	0
OH101	1	50	6		3.53	0.50 to 3.00	120 secs	993	993	0.0	1.75	0.2	0.0	20.7	0.0	0	0
OH101	1	50	6		3.53	0.50 to 3.00	180 secs	993	993	0.0	1.75	0.2	0.0	20.7	0.0	0	0
OH101	1	50	6		3.53	0.50 to 3.00	240 secs	993	993	0.0	1.75	0.2	0.0	20.7	0.0	0	0
OH101	1	50	6		3.53	0.50 to 3.00	300 secs	993	993	0.0	1.75	0.2	0.0	20.7	0.0	0	0
OH101	1	50	7	3.00	3.53	0.50 to 3.00	22/03/2018 09:50:00	1018	1018	0.1	1.98	0.0	0.0	20.9	0.0	0	0
OH101	1	50	7		3.53	0.50 to 3.00	15 secs	1018	1018	0.1	1.98	0.6	0.0	20.7	0.0	0	0
OH101	1	50	7		3.53	0.50 to 3.00	30 secs	1018	1018	0.1	1.98	0.6	0.0	19.6	0.0	0	0
OH101	1	50	7		3.53	0.50 to 3.00	60 secs	1018	1018	0.1	1.98	0.6	0.0	19.3	0.0	0	0
OH101	1	50	7		3.53	0.50 to 3.00	90 secs	1018	1018	0.1	1.98	0.6	0.0	19.2	0.0	0	0
OH101	1	50	7		3.53	0.50 to 3.00	120 secs	1018	1018	0.1	1.98	0.6	0.0	19.2	0.0	0	0
OH101	1	50	7		3.53	0.50 to 3.00	180 secs	1018	1018	0.1	1.98	0.6	0.0	19.2	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH101	1	50	7		3.53	0.50 to 3.00	240 secs	1018	1018	0.1	1.98	0.6	0.0	19.2	0.0	0	0
OH101	1	50	7		3.53	0.50 to 3.00	300 secs	1018	1018	0.1	1.98	0.6	0.0	19.2	0.0	0	0
OH101	1	50	8	3.00	3.51	0.50 to 3.00	27/03/2018 12:22:00	1003	1003	0.1	1.83	0.0	0.0	20.9	-	0	0
OH101	1	50	8		3.51	0.50 to 3.00	15 secs	1003	1003	0.1	1.83	0.4	0.0	20.8	-	0	0
OH101	1	50	8		3.51	0.50 to 3.00	30 secs	1003	1003	0.1	1.83	0.4	0.0	20.8	-	0	0
OH101	1	50	8		3.51	0.50 to 3.00	60 secs	1003	1003	0.1	1.83	0.4	0.0	20.8	-	0	0
OH101	1	50	8		3.51	0.50 to 3.00	90 secs	1003	1003	0.1	1.83	0.4	0.0	20.8	-	0	0
OH101	1	50	8		3.51	0.50 to 3.00	120 secs	1003	1003	0.1	1.83	0.4	0.0	20.8	-	0	0
OH101	1	50	8		3.51	0.50 to 3.00	180 secs	1003	1003	0.1	1.83	0.4	0.0	20.8	-	0	0
OH101	1	50	8		3.51	0.50 to 3.00	240 secs	1003	1003	0.1	1.83	0.4	0.0	20.8	-	0	0
OH101	1	50	8		3.51	0.50 to 3.00	300 secs	1003	1003	0.1	1.83	0.4	0.0	20.8	-	0	0
OH101	1	50	9	3.00	3.51	0.50 to 3.00	20/04/2018 11:06:00	1025	1025	0.1	1.96	0.0	0.0	20.8	-	0	0
OH101	1	50	9		3.51	0.50 to 3.00	15 secs	1025	1025	0.1	1.96	0.3	0.0	20.8	-	0	0
OH101	1	50	9		3.51	0.50 to 3.00	30 secs	1025	1025	0.1	1.96	0.3	0.0	20.8	-	0	0
OH101	1	50	9		3.51	0.50 to 3.00	60 secs	1025	1025	0.1	1.96	0.3	0.0	20.8	-	0	0
OH101	1	50	9		3.51	0.50 to 3.00	90 secs	1025	1025	0.1	1.96	0.3	0.0	20.8	-	0	0
OH101	1	50	9		3.51	0.50 to 3.00	120 secs	1025	1025	0.1	1.96	0.3	0.0	20.8	-	0	0
OH101	1	50	9		3.51	0.50 to 3.00	180 secs	1025	1025	0.1	1.96	0.3	0.0	20.8	-	0	0

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH101	1	50	9		3.51	0.50 to 3.00	240 secs	1025	1025	0.1	1.96	0.3	0.0	20.8	-	0	0
OH101	1	50	9		3.51	0.50 to 3.00	300 secs	1025	1025	0.1	1.96	0.3	0.0	20.8	-	0	0
OH102	1	50	1	4.00	4.64	0.50 to 4.50	07/02/2018 10:34:00	1023	1023	0.0	1.91	0.0	0.0	20.9	0.0	0	0
OH102	1	50	1		4.89	0.50 to 4.50	15 secs	1023	1023	0.0	2.16	0.2	0.0	20.8	0.0	0	0
OH102	1	50	1		4.89	0.50 to 4.50	30 secs	1023	1023	0.0	2.16	0.3	0.0	20.3	0.0	0	0
OH102	1	50	1		4.89	0.50 to 4.50	60 secs	1023	1023	0.0	2.16	0.7	0.0	18.7	0.0	0	0
OH102	1	50	1		4.89	0.50 to 4.50	90 secs	1023	1023	0.0	2.16	0.9	0.0	17.7	0.0	0	0
OH102	1	50	1		4.89	0.50 to 4.50	120 secs	1023	1023	0.0	2.16	1.0	0.0	16.7	0.0	0	0
OH102	1	50	1		4.89	0.50 to 4.50	180 secs	1023	1023	0.0	2.16	1.2	0.0	15.7	0.0	0	0
OH102	1	50	1		4.89	0.50 to 4.50	240 secs	1023	1023	0.0	2.16	1.3	0.0	15.1	0.0	0	0
OH102	1	50	1		4.89	0.50 to 4.50	300 secs	1023	1023	0.0	2.16	1.4	0.0	14.4	0.0	0	0
OH102	1	50	2	4.00	4.64	0.50 to 4.50	15/02/2018 09:28:00	1002	1002	0.0	1.74	0.0	0.0	20.8	0.0	0	0
OH102	1	50	2		4.64	0.50 to 4.50	15 secs	1002	1002	0.0	1.74	1.4	0.0	20.6	0.0	0	0
OH102	1	50	2		4.64	0.50 to 4.50	30 secs	1002	1002	0.0	1.74	1.6	0.0	15.0	0.0	0	0
OH102	1	50	2		4.64	0.50 to 4.50	60 secs	1002	1002	0.0	1.74	1.7	0.0	12.5	0.0	0	0
OH102	1	50	2		4.64	0.50 to 4.50	90 secs	1002	1002	0.0	1.74	1.8	0.0	11.4	0.0	0	0
OH102	1	50	2		4.64	0.50 to 4.50	120 secs	1002	1002	0.0	1.74	1.9	0.0	10.7	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH102	1	50	2		4.64	0.50 to 4.50	180 secs	1002	1002	0.0	1.74	2.1	0.0	10.5	0.0	0	0
OH102	1	50	2		4.64	0.50 to 4.50	240 secs	1002	1002	0.0	1.74	2.2	0.0	10.3	0.0	0	0
OH102	1	50	2		4.64	0.50 to 4.50	300 secs	1002	1002	0.0	1.74	2.2	0.0	10.2	0.0	0	0
OH102	1	50	3	4.00	4.64	0.50 to 4.50	19/02/2018 11:54:00	1017	1017	0.1	1.70	0.0	0.0	20.9	0.0	0	0
OH102	1	50	3		4.64	0.50 to 4.50	15 secs	1017	1017	0.1	1.70	1.6	0.0	20.0	0.0	0	0
OH102	1	50	3		4.64	0.50 to 4.50	30 secs	1017	1017	0.1	1.70	1.9	0.0	15.4	0.0	0	0
OH102	1	50	3		4.64	0.50 to 4.50	60 secs	1017	1017	0.1	1.70	2.3	0.0	13.2	0.0	0	0
OH102	1	50	3		4.64	0.50 to 4.50	90 secs	1017	1017	0.1	1.70	2.5	0.0	12.0	0.0	0	0
OH102	1	50	3		4.64	0.50 to 4.50	120 secs	1017	1017	0.1	1.70	2.5	0.0	11.8	0.0	0	0
OH102	1	50	3		4.64	0.50 to 4.50	180 secs	1017	1017	0.1	1.70	2.5	0.0	11.8	0.0	0	0
OH102	1	50	3		4.64	0.50 to 4.50	240 secs	1017	1017	0.1	1.70	2.5	0.0	11.8	0.0	0	0
OH102	1	50	3		4.64	0.50 to 4.50	300 secs	1017	1017	0.1	1.70	2.5	0.0	11.8	0.0	0	0
OH102	1	50	4	4.00	4.64	0.50 to 4.50	01/03/2018 10:05:00	997	997	0.0	1.88	0.0	0.0	20.9	0.0	0	0
OH102	1	50	4		4.64	0.50 to 4.50	15 secs	997	997	0.0	1.88	0.4	0.0	20.2	0.0	0	0
OH102	1	50	4		4.64	0.50 to 4.50	30 secs	997	997	0.0	1.88	0.5	0.0	19.6	0.0	0	0
OH102	1	50	4		4.64	0.50 to 4.50	60 secs	997	997	0.0	1.88	1.3	0.0	17.0	0.0	0	0
OH102	1	50	4		4.64	0.50 to 4.50	90 secs	997	997	0.0	1.88	1.5	0.0	15.6	0.0	0	0
OH102	1	50	4		4.64	0.50 to 4.50	120 secs	997	997	0.0	1.88	1.8	0.0	14.2	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH102	1	50	4		4.64	0.50 to 4.50	180 secs	997	997	0.0	1.88	2.1	0.0	12.2	0.0	0	0
OH102	1	50	4		4.64	0.50 to 4.50	240 secs	997	997	0.0	1.88	2.2	0.0	11.4	0.0	0	0
OH102	1	50	4		4.64	0.50 to 4.50	300 secs	997	997	0.0	1.88	2.3	0.0	11.2	0.0	0	0
OH102	1	50	5	4.00	4.64	0.50 to 4.50	07/03/2018 11:50:00	997	997	0.0	1.80	0.0	0.0	20.9	0.0	0	0
OH102	1	50	5		4.64	0.50 to 4.50	15 secs	997	997	0.0	1.80	3.3	0.0	10.3	0.0	1	0
OH102	1	50	5		4.64	0.50 to 4.50	30 secs	997	997	0.0	1.80	3.3	0.0	3.8	0.0	1	0
OH102	1	50	5		4.64	0.50 to 4.50	60 secs	997	997	0.0	1.80	3.3	0.0	3.6	0.0	1	0
OH102	1	50	5		4.64	0.50 to 4.50	90 secs	997	997	0.0	1.80	3.3	0.0	3.7	0.0	1	0
OH102	1	50	5		4.64	0.50 to 4.50	120 secs	997	997	0.0	1.80	3.3	0.0	3.5	0.0	1	0
OH102	1	50	5		4.64	0.50 to 4.50	180 secs	997	997	0.0	1.80	3.3	0.0	3.1	0.0	1	0
OH102	1	50	5		4.64	0.50 to 4.50	240 secs	997	997	0.0	1.80	3.3	0.0	3.1	0.0	1	0
OH102	1	50	5		4.64	0.50 to 4.50	300 secs	997	997	0.0	1.80	3.3	0.0	3.3	0.0	0	0
OH102	1	50	6	4.00	4.64	0.50 to 4.50	12/03/2018 12:25:00	994	994	0.0	1.67	0.0	0.0	20.9	0.0	0	0
OH102	1	50	6		4.64	0.50 to 4.50	15 secs	994	994	0.0	1.67	1.4	0.0	17.1	0.0	0	0
OH102	1	50	6		4.64	0.50 to 4.50	30 secs	994	994	0.0	1.67	1.5	0.0	14.3	0.0	0	0
OH102	1	50	6		4.64	0.50 to 4.50	60 secs	994	994	0.0	1.67	1.9	0.0	12.1	0.0	0	0
OH102	1	50	6		4.64	0.50 to 4.50	90 secs	994	994	0.0	1.67	2.1	0.0	10.8	0.0	0	0
OH102	1	50	6		4.64	0.50 to 4.50	120 secs	994	994	0.0	1.67	2.4	0.0	9.6	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH102	1	50	6		4.64	0.50 to 4.50	180 secs	994	994	0.0	1.67	3.2	0.0	5.4	0.0	0	0
OH102	1	50	6		4.64	0.50 to 4.50	240 secs	994	994	0.0	1.67	3.4	0.0	4.4	0.0	0	0
OH102	1	50	6		4.64	0.50 to 4.50	300 secs	994	994	0.0	1.67	3.7	0.0	3.2	0.0	0	0
OH102	1	50	7	4.00	4.64	0.50 to 4.50	22/03/2018 11:15:00	1018	1018	0.0	1.75	0.0	0.0	20.8	0.0	0	0
OH102	1	50	7		4.64	0.50 to 4.50	15 secs	1018	1018	0.0	1.75	2.1	0.0	19.7	0.0	0	0
OH102	1	50	7		4.64	0.50 to 4.50	30 secs	1018	1018	0.0	1.75	2.4	0.0	14.2	0.0	0	0
OH102	1	50	7		4.64	0.50 to 4.50	60 secs	1018	1018	0.0	1.75	2.8	0.0	12.1	0.0	0	0
OH102	1	50	7		4.64	0.50 to 4.50	90 secs	1018	1018	0.0	1.75	2.8	0.0	12.0	0.0	0	0
OH102	1	50	7		4.64	0.50 to 4.50	120 secs	1018	1018	0.0	1.75	2.8	0.0	12.0	0.0	0	0
OH102	1	50	7		4.64	0.50 to 4.50	180 secs	1018	1018	0.0	1.75	2.8	0.0	12.0	0.0	0	0
OH102	1	50	7		4.64	0.50 to 4.50	240 secs	1018	1018	0.0	1.75	2.8	0.0	12.0	0.0	0	0
OH102	1	50	7		4.64	0.50 to 4.50	300 secs	1018	1018	0.0	1.75	2.8	0.0	12.0	0.0	0	0
OH102	1	50	8	4.00	4.62	0.50 to 4.50	27/03/2018 11:27:00	1003	1003	0.0	1.75	0.0	0.0	20.9	-	0	0
OH102	1	50	8		4.62	0.50 to 4.50	15 secs	1003	1003	0.0	1.75	2.3	0.0	19.2	-	0	0
OH102	1	50	8		4.62	0.50 to 4.50	30 secs	1003	1003	0.0	1.75	2.7	0.0	14.5	-	0	0
OH102	1	50	8		4.62	0.50 to 4.50	60 secs	1003	1003	0.0	1.75	2.7	0.0	13.3	-	0	0
OH102	1	50	8		4.62	0.50 to 4.50	90 secs	1003	1003	0.0	1.75	2.7	0.0	13.3	-	0	0
OH102	1	50	8		4.62	0.50 to 4.50	120 secs	1003	1003	0.0	1.75	2.7	0.0	13.3	-	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.



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IN-SITU GAS MONITORING RESULTS

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Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH102	1	50	8		4.62	0.50 to 4.50	180 secs	1003	1003	0.0	1.75	2.7	0.0	13.3	-	0	0
OH102	1	50	8		4.62	0.50 to 4.50	240 secs	1003	1003	0.0	1.75	2.7	0.0	13.3	-	0	0
OH102	1	50	8		4.62	0.50 to 4.50	300 secs	1003	1003	0.0	1.75	2.7	0.0	13.3	-	0	0
OH102	1	50	9	4.00	4.61	0.50 to 4.50	20/04/2018 11:46:00	1025	1025	0.1	1.85	0.0	0.0	20.8	-	0	0
OH102	1	50	9		4.61	0.50 to 4.50	15 secs	1025	1025	0.1	1.85	2.5	0.0	18.8	-	0	0
OH102	1	50	9		4.61	0.50 to 4.50	30 secs	1025	1025	0.1	1.85	2.8	0.0	14.5	-	0	0
OH102	1	50	9		4.61	0.50 to 4.50	60 secs	1025	1025	0.1	1.85	2.9	0.0	14.1	-	0	0
OH102	1	50	9		4.61	0.50 to 4.50	90 secs	1025	1025	0.1	1.85	2.9	0.0	14.0	-	0	0
OH102	1	50	9		4.61	0.50 to 4.50	120 secs	1025	1025	0.1	1.85	2.9	0.0	14.0	-	0	0
OH102	1	50	9		4.61	0.50 to 4.50	180 secs	1025	1025	0.1	1.85	2.9	0.0	14.0	-	0	0
OH102	1	50	9		4.61	0.50 to 4.50	240 secs	1025	1025	0.1	1.85	2.9	0.0	14.0	-	0	0
OH102	1	50	9		4.61	0.50 to 4.50	300 secs	1025	1025	0.1	1.85	2.9	0.0	14.0	-	0	0
OH103	1	50	1	5.50	5.41	0.50 to 5.50	07/02/2018 10:11:00	1023	1023	0.0	2.16	0.0	0.0	20.9	0.0	0	0
OH103	1	50	1		5.41	0.50 to 5.50	15 secs	1023	1023	0.0	2.16	0.1	0.0	20.8	0.0	0	0
OH103	1	50	1		5.41	0.50 to 5.50	30 secs	1023	1023	0.0	2.16	0.1	0.0	20.7	0.0	0	0
OH103	1	50	1		5.41	0.50 to 5.50	60 secs	1023	1023	0.0	2.16	0.1	0.0	20.7	0.0	0	0
OH103	1	50	1		5.41	0.50 to 5.50	90 secs	1023	1023	0.0	2.16	0.1	0.0	20.6	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH103	1	50	1		5.41	0.50 to 5.50	120 secs	1023	1023	0.0	2.16	0.1	0.0	20.6	0.0	0	0
OH103	1	50	1		5.41	0.50 to 5.50	180 secs	1023	1023	0.0	2.16	0.1	0.0	20.6	0.0	0	0
OH103	1	50	1		5.41	0.50 to 5.50	240 secs	1023	1023	0.0	2.16	0.1	0.0	20.6	0.0	0	0
OH103	1	50	1		5.41	0.50 to 5.50	300 secs	1023	1023	0.0	2.16	0.1	0.0	20.6	0.0	0	0
OH103	1	50	2	5.50	5.41	0.50 to 5.50	15/02/2018 09:10:00	1003	1003	0.4	2.17	0.0	0.0	20.8	0.0	0	0
OH103	1	50	2		5.41	0.50 to 5.50	15 secs	1003	1003	0.4	2.17	0.0	0.0	20.7	0.0	0	0
OH103	1	50	2		5.41	0.50 to 5.50	30 secs	1003	1003	0.4	2.17	0.3	0.0	20.7	0.0	0	0
OH103	1	50	2		5.41	0.50 to 5.50	60 secs	1003	1003	0.4	2.17	0.2	0.0	20.6	0.0	0	0
OH103	1	50	2		5.41	0.50 to 5.50	90 secs	1003	1003	0.4	2.17	0.3	0.0	20.7	0.0	0	0
OH103	1	50	2		5.41	0.50 to 5.50	120 secs	1003	1003	0.4	2.17	0.3	0.0	20.7	0.0	0	0
OH103	1	50	2		5.41	0.50 to 5.50	180 secs	1003	1003	0.4	2.17	0.3	0.0	20.7	0.0	0	0
OH103	1	50	2		5.41	0.50 to 5.50	240 secs	1003	1003	0.4	2.17	0.3	0.0	20.7	0.0	0	0
OH103	1	50	2		5.41	0.50 to 5.50	300 secs	1003	1003	0.4	2.17	0.3	0.0	20.7	0.0	0	0
OH103	1	50	3	5.50	5.41	0.50 to 5.50	19/02/2018 11:36:00	1017	1017	0.3	2.13	0.0	0.0	20.9	0.0	0	0
OH103	1	50	3		5.41	0.50 to 5.50	15 secs	1017	1017	0.3	2.13	0.7	0.0	20.6	0.0	0	0
OH103	1	50	3		5.41	0.50 to 5.50	30 secs	1017	1017	0.3	2.13	0.8	0.0	20.6	0.0	0	0
OH103	1	50	3		5.41	0.50 to 5.50	60 secs	1017	1017	0.3	2.13	0.8	0.0	20.6	0.0	0	0
OH103	1	50	3		5.41	0.50 to 5.50	90 secs	1017	1017	0.3	2.13	0.8	0.0	20.6	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH103	1	50	3		5.41	0.50 to 5.50	120 secs	1017	1017	0.3	2.13	0.8	0.0	20.6	0.0	0	0
OH103	1	50	3		5.41	0.50 to 5.50	180 secs	1017	1017	0.3	2.13	0.8	0.0	20.6	0.0	0	0
OH103	1	50	3		5.41	0.50 to 5.50	240 secs	1017	1017	0.3	2.13	0.8	0.0	20.6	0.0	0	0
OH103	1	50	3		5.41	0.50 to 5.50	300 secs	1017	1017	0.3	2.13	0.8	0.0	20.6	0.0	0	0
OH103	1	50	4	5.50	5.41	0.50 to 5.50	01/03/2018 08:44:00	998	998	0.0	2.19	0.0	0.0	20.9	0.0	0	0
OH103	1	50	4		5.41	0.50 to 5.50	15 secs	998	998	0.0	2.19	0.2	0.0	20.7	0.0	0	0
OH103	1	50	4		5.41	0.50 to 5.50	30 secs	998	998	0.0	2.19	0.2	0.0	20.7	0.0	0	0
OH103	1	50	4		5.41	0.50 to 5.50	60 secs	998	998	0.0	2.19	0.2	0.0	20.7	0.0	0	0
OH103	1	50	4		5.41	0.50 to 5.50	90 secs	998	998	0.0	2.19	0.2	0.0	20.7	0.0	0	0
OH103	1	50	4		5.41	0.50 to 5.50	120 secs	998	998	0.0	2.19	0.2	0.0	20.7	0.0	0	0
OH103	1	50	4		5.41	0.50 to 5.50	180 secs	998	998	0.0	2.19	0.2	0.0	20.7	0.0	0	0
OH103	1	50	4		5.41	0.50 to 5.50	240 secs	998	998	0.0	2.19	0.2	0.0	20.7	0.0	0	0
OH103	1	50	4		5.41	0.50 to 5.50	300 secs	998	998	0.0	2.19	0.2	0.0	20.7	0.0	0	0
OH103	1	50	5	5.50	5.41	0.50 to 5.50	07/03/2018 11:42:00	994	994	0.0	2.15	0.0	0.0	20.9	0.0	0	0
OH103	1	50	5		5.41	0.50 to 5.50	15 secs	994	994	0.0	2.15	0.3	0.0	20.2	0.0	0	0
OH103	1	50	5		5.41	0.50 to 5.50	30 secs	994	994	0.0	2.15	0.2	0.0	20.2	0.0	0	0
OH103	1	50	5		5.41	0.50 to 5.50	60 secs	994	994	0.0	2.15	0.2	0.0	20.2	0.0	0	0
OH103	1	50	5		5.41	0.50 to 5.50	90 secs	994	994	0.0	2.15	0.2	0.0	20.2	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH103	1	50	5		5.41	0.50 to 5.50	120 secs	994	994	0.0	2.15	0.2	0.0	20.2	0.0	0	0
OH103	1	50	5		5.41	0.50 to 5.50	180 secs	994	994	0.0	2.15	0.2	0.0	20.2	0.0	0	0
OH103	1	50	5		5.41	0.50 to 5.50	240 secs	994	994	0.0	2.15	0.2	0.0	20.2	0.0	0	0
OH103	1	50	5		5.41	0.50 to 5.50	300 secs	994	994	0.0	2.15	0.2	0.0	20.2	0.0	0	0
OH103	1	50	6	5.50	5.41	0.50 to 5.50	12/03/2018 12:15:00	993	993	0.0	2.04	0.0	0.0	20.9	0.0	0	0
OH103	1	50	6		5.41	0.50 to 5.50	15 secs	993	993	0.0	2.04	0.0	0.0	20.8	0.0	0	0
OH103	1	50	6		5.41	0.50 to 5.50	30 secs	993	993	0.0	2.04	0.1	0.0	20.8	0.0	0	0
OH103	1	50	6		5.41	0.50 to 5.50	60 secs	993	993	0.0	2.04	0.1	0.0	20.8	0.0	0	0
OH103	1	50	6		5.41	0.50 to 5.50	90 secs	993	993	0.0	2.04	0.1	0.0	20.7	0.0	0	0
OH103	1	50	6		5.41	0.50 to 5.50	120 secs	993	993	0.0	2.04	0.1	0.0	20.7	0.0	0	0
OH103	1	50	6		5.41	0.50 to 5.50	180 secs	993	993	0.0	2.04	0.1	0.0	20.7	0.0	0	0
OH103	1	50	6		5.41	0.50 to 5.50	240 secs	993	993	0.0	2.04	0.1	0.0	20.7	0.0	0	0
OH103	1	50	6		5.41	0.50 to 5.50	300 secs	993	993	0.0	2.04	0.1	0.0	20.7	0.0	0	0
OH103	1	50	7	5.50	5.41	0.50 to 5.50	22/03/2018 10:56:00	1018	1018	0.1	2.19	0.0	0.0	20.9	0.0	0	0
OH103	1	50	7		5.41	0.50 to 5.50	15 secs	1018	1018	0.1	2.19	0.9	0.0	20.6	0.0	0	0
OH103	1	50	7		5.41	0.50 to 5.50	30 secs	1018	1018	0.1	2.19	1.0	0.0	20.7	0.0	0	0
OH103	1	50	7		5.41	0.50 to 5.50	60 secs	1018	1018	0.1	2.19	1.1	0.0	20.7	0.0	0	0
OH103	1	50	7		5.41	0.50 to 5.50	90 secs	1018	1018	0.1	2.19	1.1	0.0	20.7	0.0	0	0

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IN-SITU GAS MONITORING RESULTS

[Pressures] Previous During Start End Equipment Used & Remarks

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH103	1	50	7		5.41	0.50 to 5.50	120 secs	1018	1018	0.1	2.19	1.1	0.0	20.7	0.0	0	0
OH103	1	50	7		5.41	0.50 to 5.50	180 secs	1018	1018	0.1	2.19	1.1	0.0	20.7	0.0	0	0
OH103	1	50	7		5.41	0.50 to 5.50	240 secs	1018	1018	0.1	2.19	1.1	0.0	20.7	0.0	0	0
OH103	1	50	7		5.41	0.50 to 5.50	300 secs	1018	1018	0.1	2.19	1.1	0.0	20.7	0.0	0	0
OH103	1	50	8	5.50	5.42	0.50 to 5.50	27/03/2018 11:05:00	1003	1003	0.1	2.19	0.0	0.0	20.8	-	0	0
OH103	1	50	8		5.42	0.50 to 5.50	15 secs	1003	1003	0.1	2.19	1.1	0.0	20.6	-	0	0
OH103	1	50	8		5.42	0.50 to 5.50	30 secs	1003	1003	0.1	2.19	1.3	0.0	20.5	-	0	0
OH103	1	50	8		5.42	0.50 to 5.50	60 secs	1003	1003	0.1	2.19	1.3	0.0	20.6	-	0	0
OH103	1	50	8		5.42	0.50 to 5.50	90 secs	1003	1003	0.1	2.19	1.3	0.0	20.6	-	0	0
OH103	1	50	8		5.42	0.50 to 5.50	120 secs	1003	1003	0.1	2.19	1.3	0.0	20.6	-	0	0
OH103	1	50	8		5.42	0.50 to 5.50	180 secs	1003	1003	0.1	2.19	1.3	0.0	20.6	-	0	0
OH103	1	50	8		5.42	0.50 to 5.50	240 secs	1003	1003	0.1	2.19	1.3	0.0	20.6	-	0	0
OH103	1	50	8		5.42	0.50 to 5.50	300 secs	1003	1003	0.1	2.19	1.3	0.0	20.6	-	0	0
OH103	1	50	9	5.50	5.42	0.50 to 5.50	20/04/2018 11:24:00	1025	1025	0.1	2.29	0.0	0.0	20.8	-	0	0
OH103	1	50	9		5.42	0.50 to 5.50	15 secs	1025	1025	0.1	2.29	1.2	0.0	20.7	-	0	0
OH103	1	50	9		5.42	0.50 to 5.50	30 secs	1025	1025	0.1	2.29	1.5	0.0	20.4	-	0	0
OH103	1	50	9		5.42	0.50 to 5.50	60 secs	1025	1025	0.1	2.29	1.5	0.0	20.4	-	0	0
OH103	1	50	9		5.42	0.50 to 5.50	90 secs	1025	1025	0.1	2.29	1.5	0.0	20.4	-	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.



STRUCTURAL SOILS
The Potteries
Pottery Street
Castleford
W. Yorkshire WF10 1NJ

Compiled By

Date

01/06/18

Checked By

Date

Contract Ref:

764393

Contract:

Project Blue

Page:

23 of 24



IN-SITU GAS MONITORING RESULTS

[Pressures]		Previous	During	Start	End	Equipment Used & Remarks
-------------	--	--------------------------	------------------------	-----------------------	---------------------	--

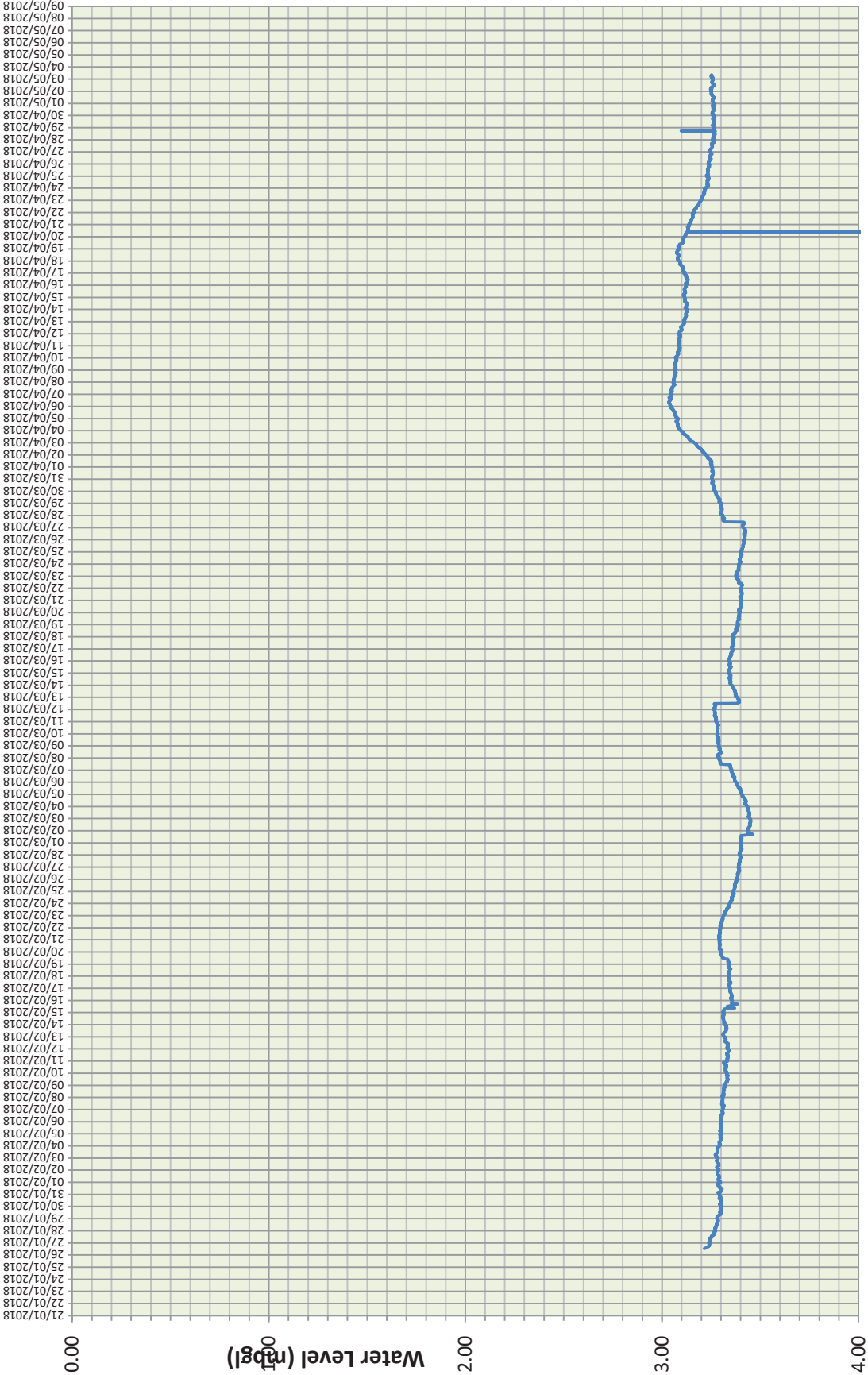
Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	LEL (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)
OH103	1	50	9		5.42	0.50 to 5.50	120 secs	1025	1025	0.1	2.29	1.5	0.0	20.4	-	0	0
OH103	1	50	9		5.42	0.50 to 5.50	180 secs	1025	1025	0.1	2.29	1.5	0.0	20.4	-	0	0
OH103	1	50	9		5.42	0.50 to 5.50	240 secs	1025	1025	0.1	2.29	1.5	0.0	20.4	-	0	0
OH103	1	50	9		5.42	0.50 to 5.50	300 secs	1025	1025	0.1	2.29	1.5	0.0	20.4	-	0	0

Key: I = Initial, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

 STRUCTURAL SOILS The Potteries Pottery Street Castleford W. Yorkshire WF10 1NJ	Compiled By		Date	Checked By	Date	Contract Ref:	
			01/06/18			764393	
	Contract: Project Blue					Page: 24 of 24	

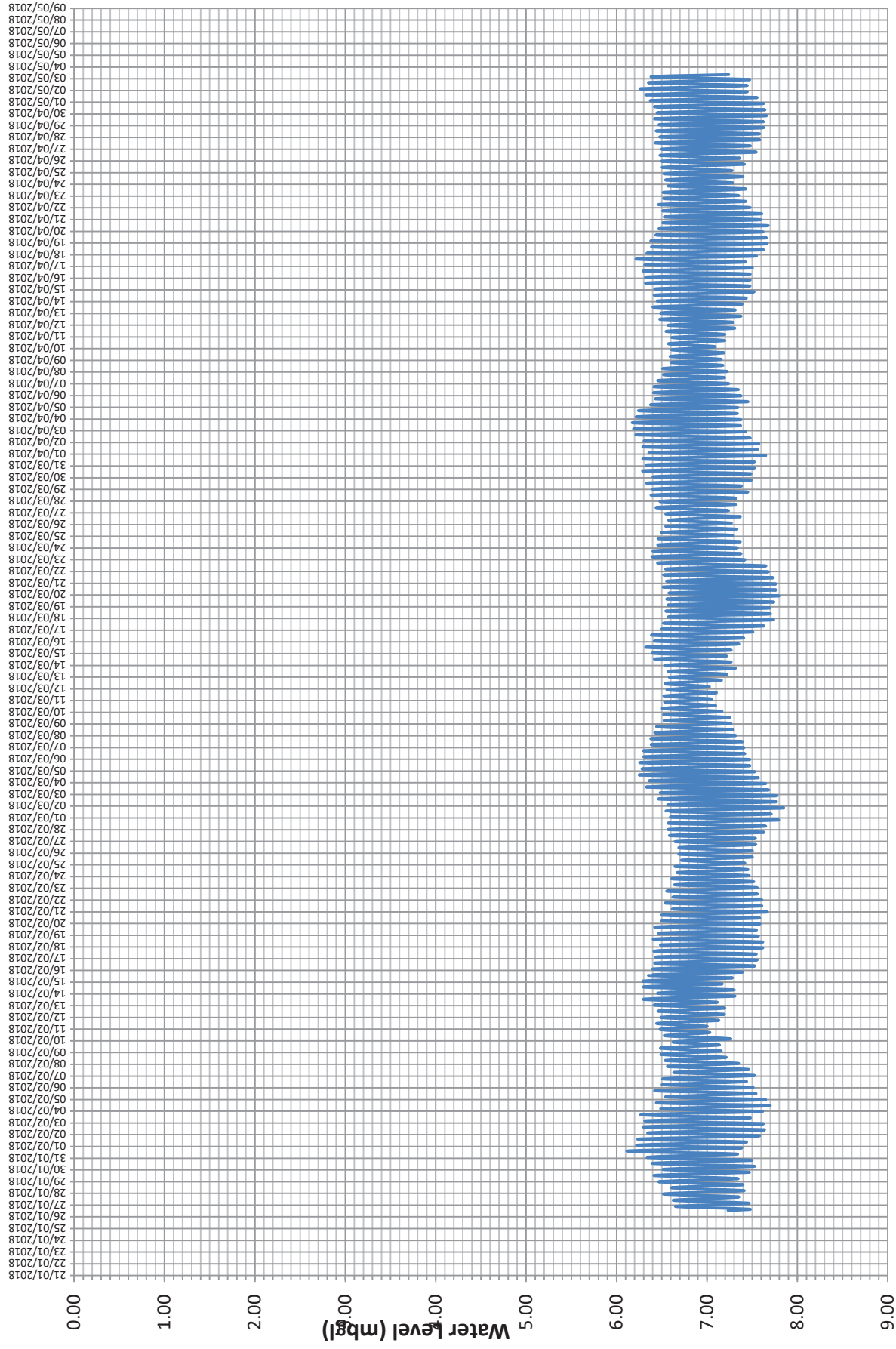
BH102A Water Levels (Diver Measurements)

Date (00:00h)



BH108A Water Levels (Diver Measurements)

Date (00:00h)



APPENDIX G - CALIBRATION CERTIFICATES

- (i) SPT Calibration Records



Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling uk ltd
6-8 victory parkway
victory road
Derby
DE24 8ZF

Hammer Ref: JN.1
Test Date: 12/02/2017
Report Date: 12/02/2017
File Name: JN.1.spt
Test Operator: TP

Instrumented Rod Data

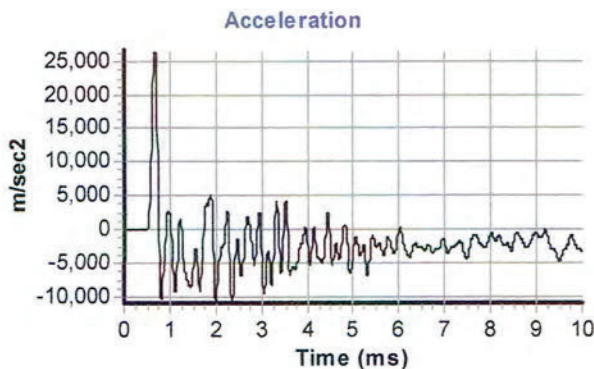
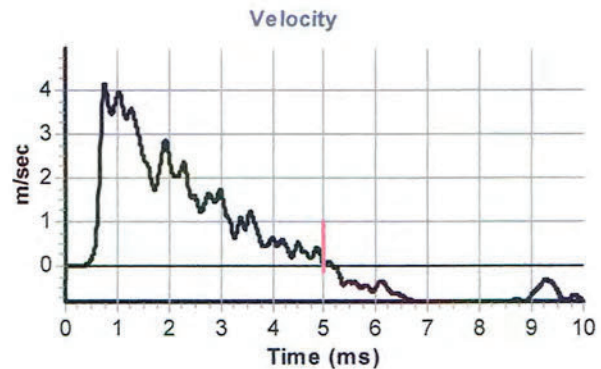
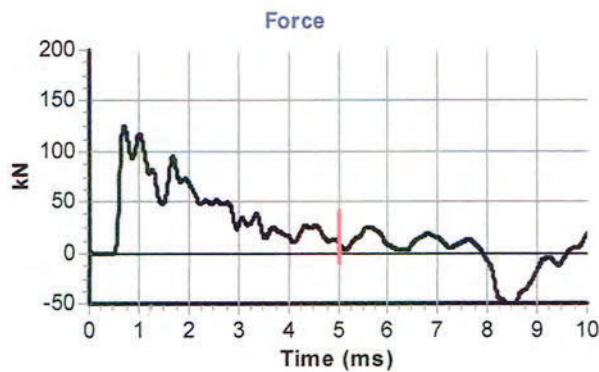
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.9
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 6455
Accelerometer No.2: 6457

Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
String Length L (m): 15.0

Comments / Location

Hammer tested at Dynamic samplings yard.



Calculations

Area of Rod A (mm²): 1021
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 355

Energy Ratio E_r (%): **75**

Signed: A.parker

Title: Manager

The recommended calibration interval is 12 months



Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling uk ltd
6-8 victory parkway
victory road
Derby
DE24 8ZF

Hammer Ref: JT.01
Test Date: 18/05/2017
Report Date:
File Name: JT.01.spt
Test Operator: TP

Instrumented Rod Data

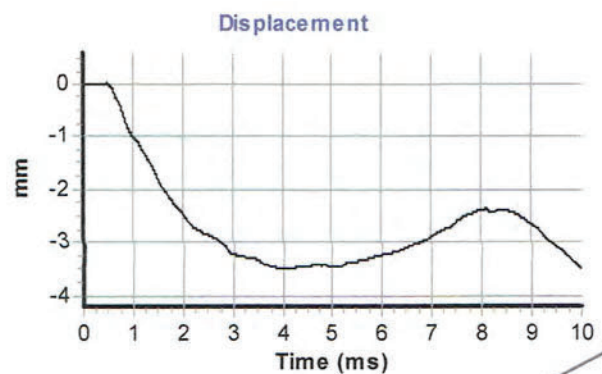
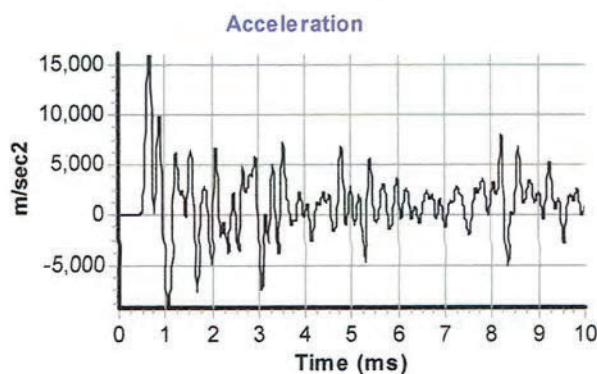
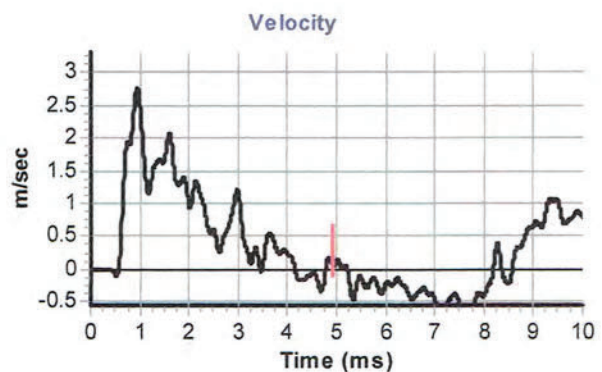
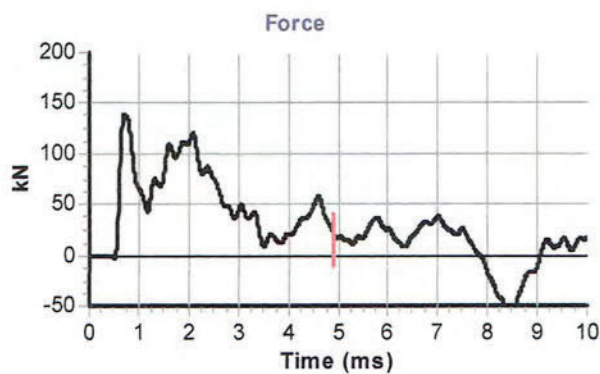
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.9
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 6455
Accelerometer No.2: 6457

Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
String Length L (m): 15.0

Comments / Location

Hammer tested at Dynamic samplings yard.



Calculations

Area of Rod A (mm^2): 1021
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 341

Energy Ratio E_r (%): **72**

Signed: A.parker.

Title: Associate Director.

The recommended calibration interval is 12 months

APPENDIX H - SONAR AND LASER SCANNING

(i) Sonar and Laser Scan Report



CUSTOMER	STRUCTURAL SOILS
DATE	10/01/2018
CAVITY	WELL1
OPERATION #	1
REPORT #	18-3003

TOTAL VOLUME (m3) VERSUS DEPTH

1.4

1.6

1.8

2.0

2.2

2.4

2.6

2.8

3.0

3.2

3.4

3.6

3.8

4.0

4.2

4.4

4.6

— Operation # 1

CUSTOMER : STRUCTURAL SOILS

DATE : 10/01/2018

CAVITY : WELL1

OPERATION # : 1

TOTAL VOLUME : 31.6 m3

SCALE 1/20

0.0

10.0

20.0

30.0

40.0



Challenging the limits

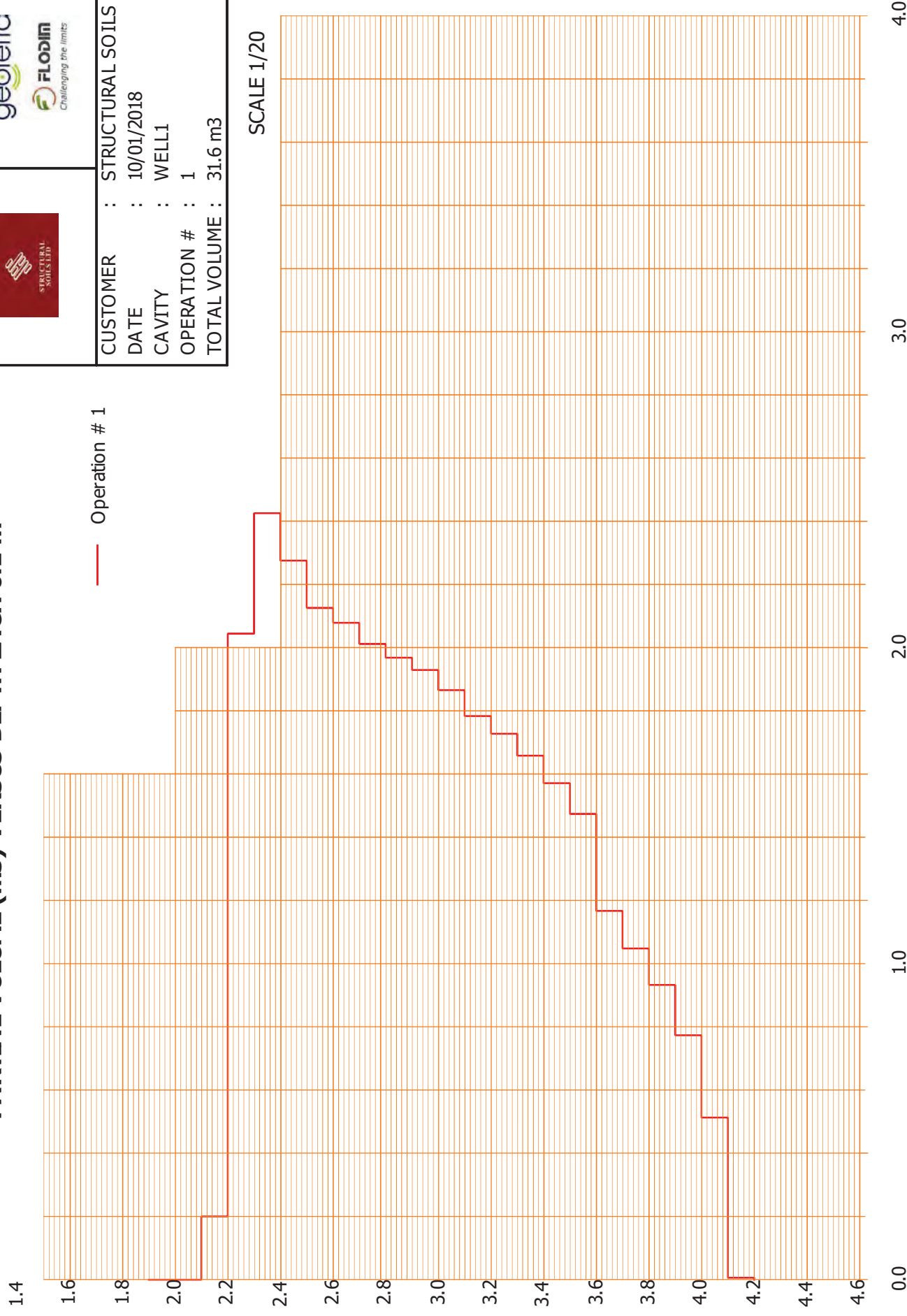
PARTIAL VOLUME (m3) VERSUS DEPTH EACH 0.1 m

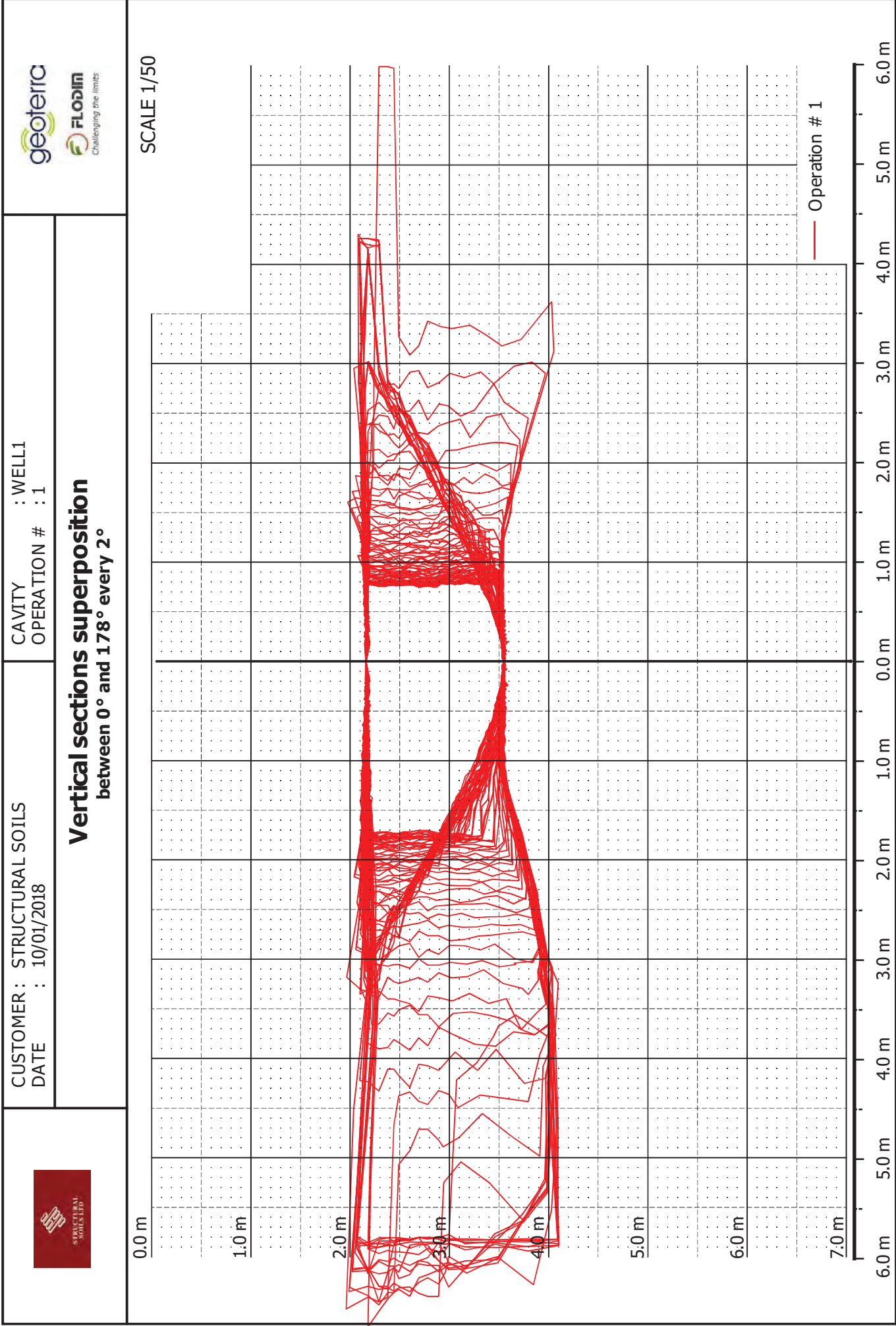


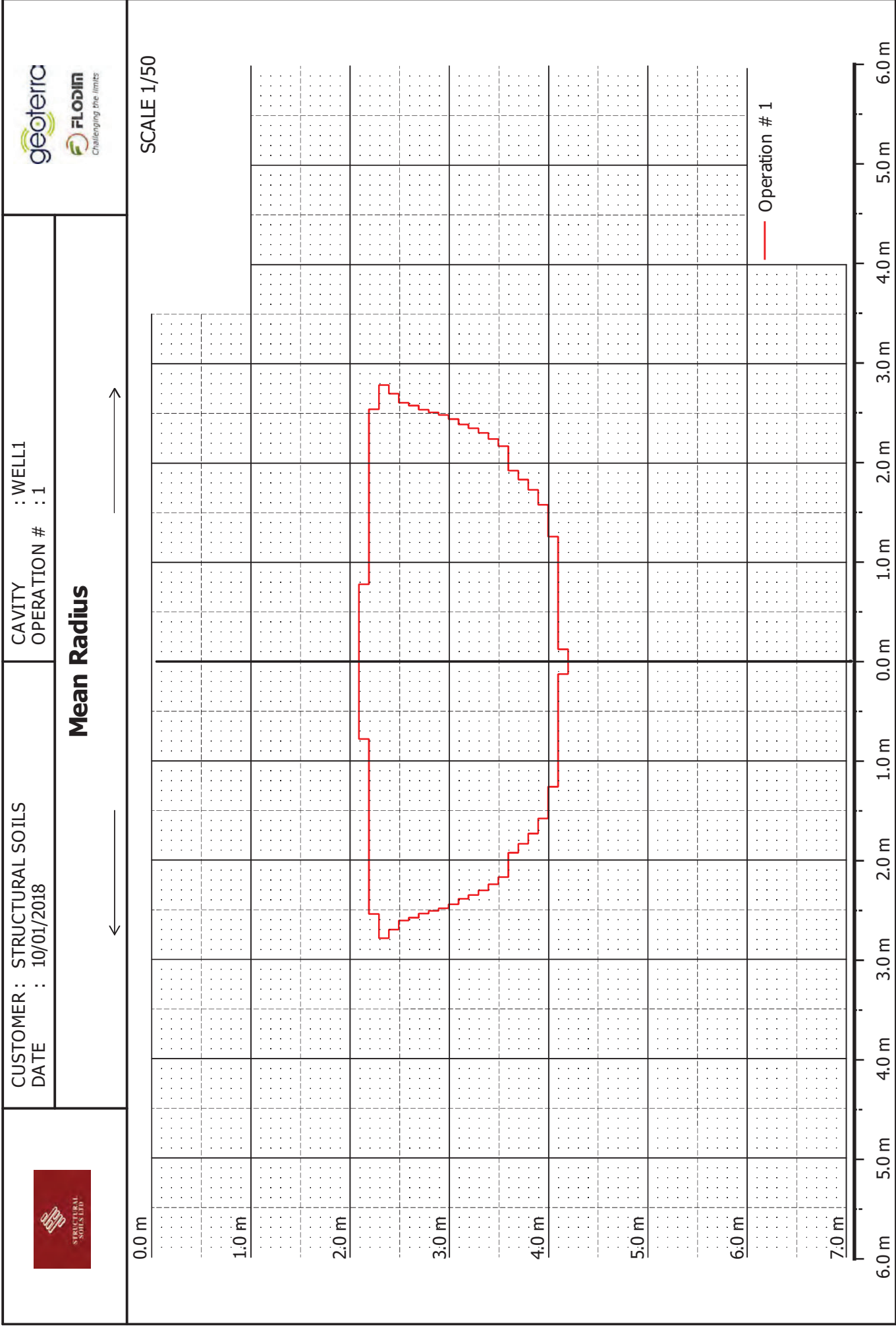
— Operation # 1

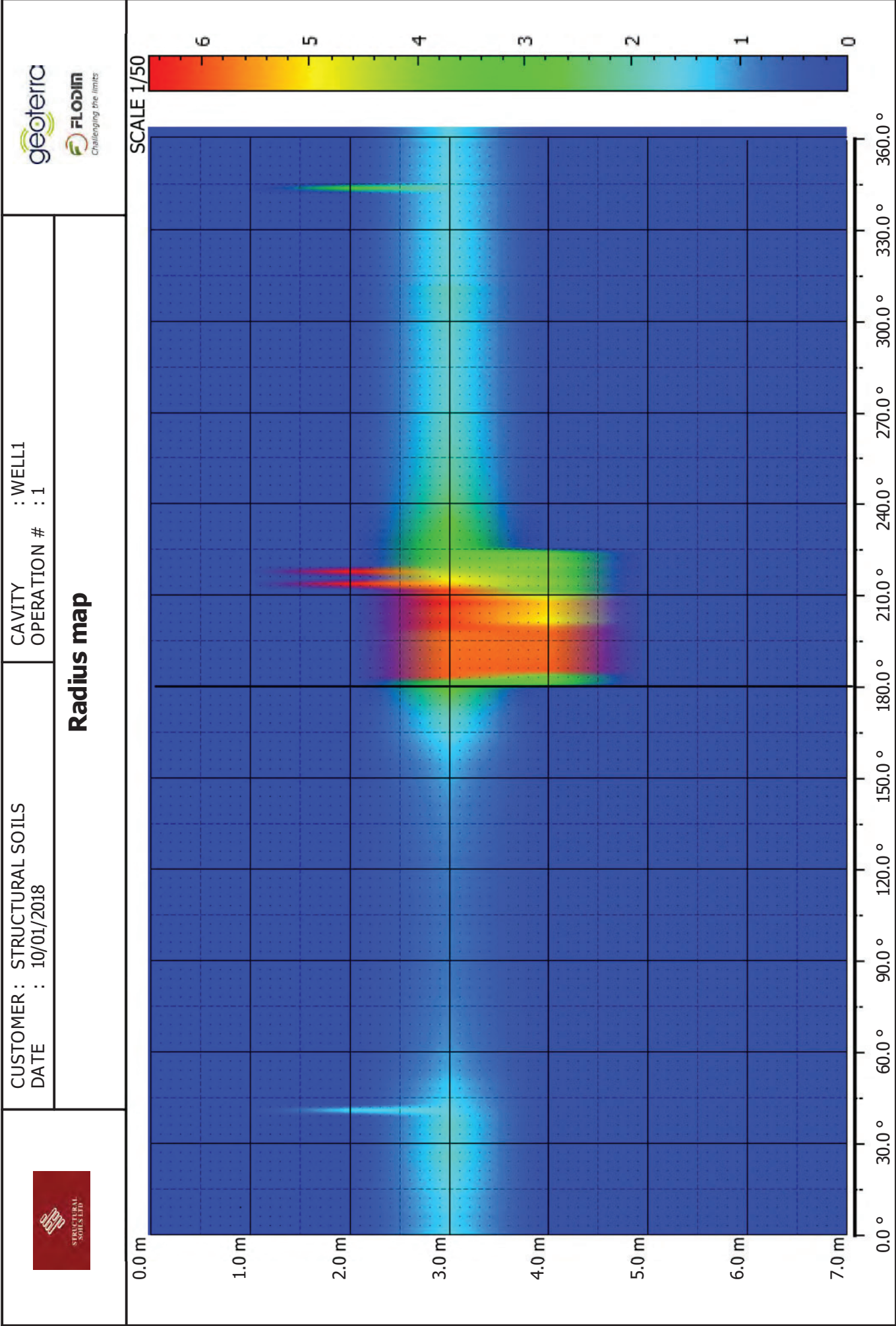
CUSTOMER : STRUCTURAL SOILS
DATE : 10/01/2018
CAVITY : WELL1
OPERATION # : 1
TOTAL VOLUME : 31.6 m3

SCALE 1/20











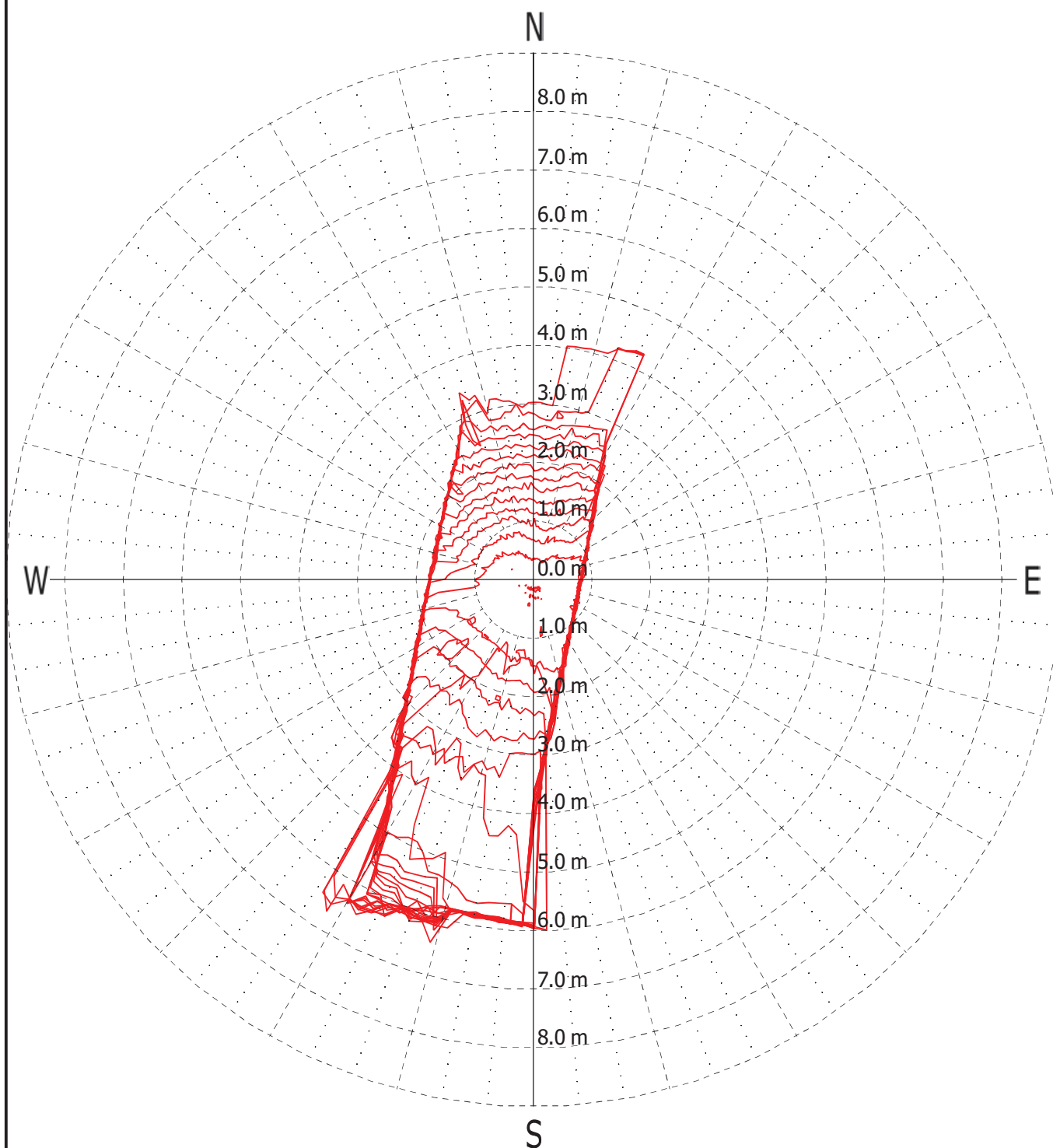
CUSTOMER :STRUCTURAL SOILS
DATE :10/01/2018

CAVITY :WELL1
OPERATION # :1



Horizontal sections superposition between 2.1 m and 4.1 m

SCALE 1/100



— Operation # 1



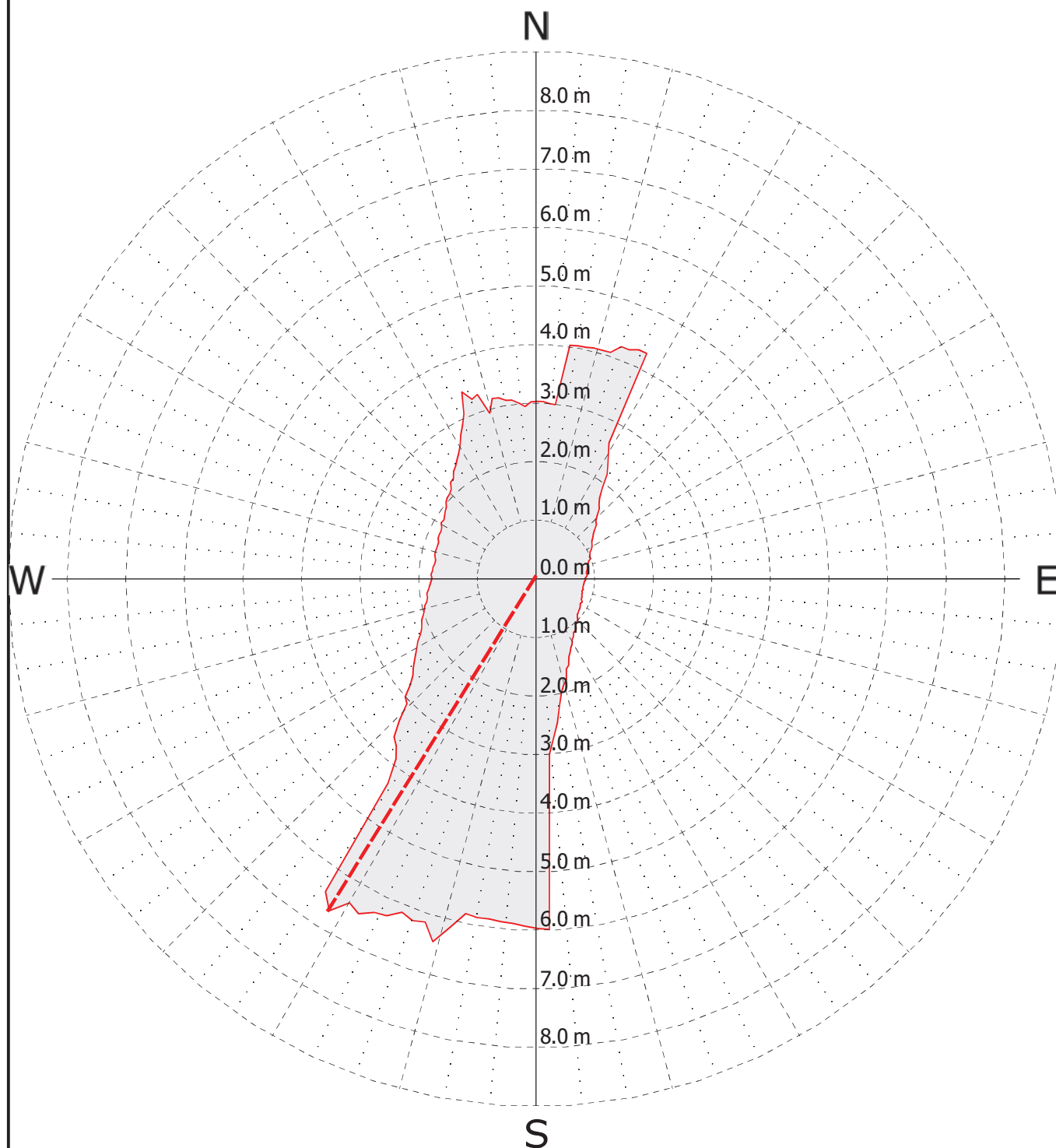
CUSTOMER :STRUCTURAL SOILS
DATE :10/01/2018

CAVITY :WELL1
OPERATION # :1



Maximum extension

SCALE 1/100



— Operation # 1

Maximum radius	: 6.67 m
Orientation maxi. radius	: 212 °
Depth maxi. radius	: 2.2 m
Surface	: 26.03 m ²
Max distance between points	: 10.91 m

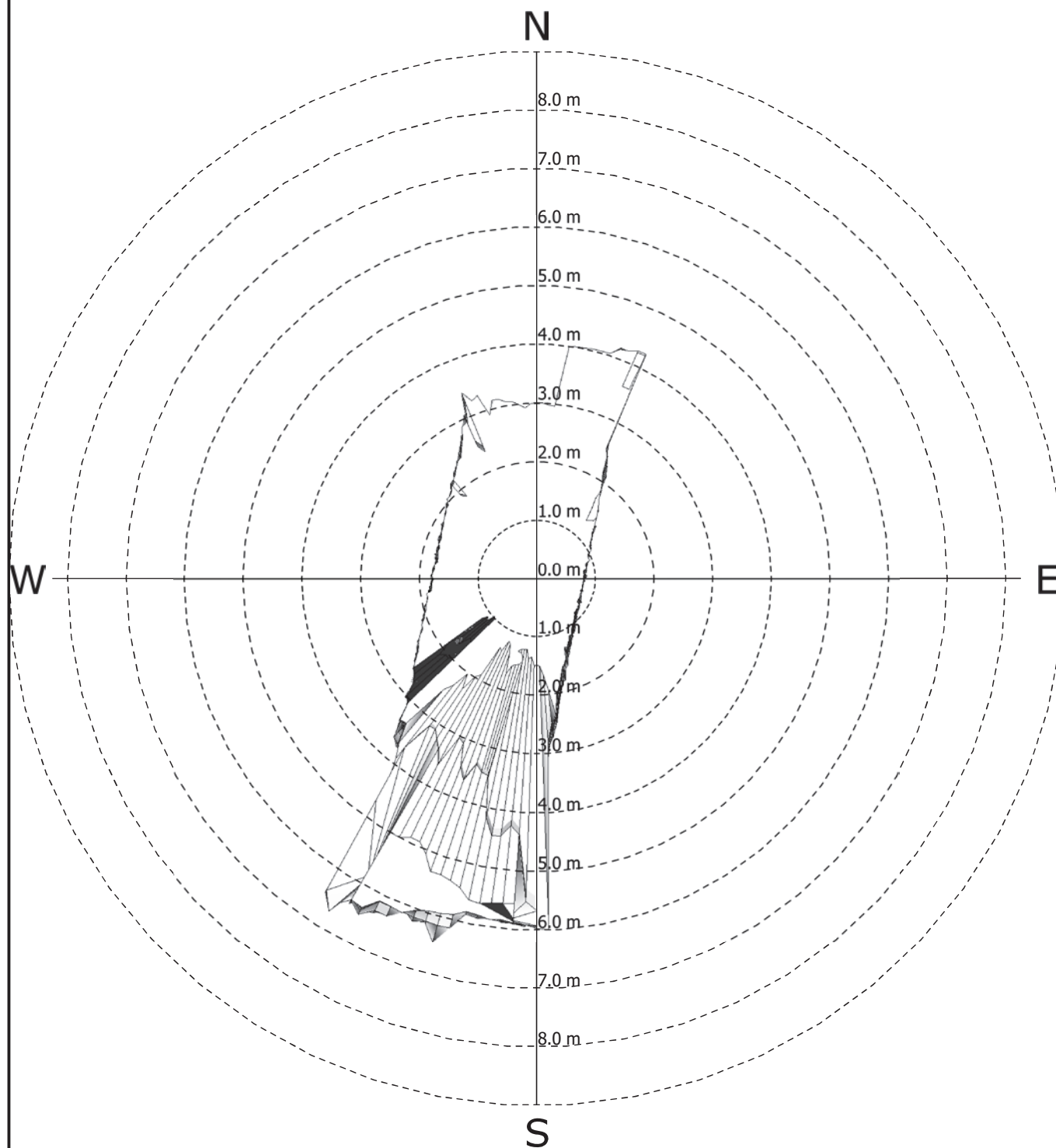


CUSTOMER : STRUCTURAL SOILS
DATE : 10/01/2018

CAVITY : WELL1
OPERATION # : 1



View from Above



Maximum radius	: 6.67 m
Orientation maxi. radius	: 212 °
Depth maxi. radius	: 2.2 m
Surface	: 26.03 m ²
Max distance between points	: 10.91 m

STRUCTURAL SOILS LTD		CUSTOMER : STRUCTURAL SOILS		CAVITY : WELL1		1		Challenging the limits			
		DATE : 10/01/2018		OPERATION # : 1							
		Main characteristics datasheet									
Depth (m)	Cumulated Volume (m3)	Volume Section (m3)	Section Area (m²)	Mean Radius (m)	Mean Diameter (m)	Min Radius (m)	Max Radius (m)	Max Radius Orientation (°)	Min Diameter (m)	Max Diameter (m)	Max Diam. Orientation (°)
1.90	0.00	0.00	-	-	-	-	-	-	-	-	-
2.00	0.00	0.00	-	-	-	-	-	-	-	-	-
2.10	0.20	0.20	1.90	0.78	1.55	1.32	6.33	208.00	8.33	10.36	24.00
2.20	2.24	2.04	20.07	2.53	5.07	0.15	6.67	212.00	1.23	10.36	26.00
2.30	4.67	2.43	24.25	2.78	5.56	0.76	6.53	212.00	2.47	10.51	26.00
2.40	6.95	2.28	22.75	2.69	5.38	0.76	6.39	212.00	2.48	9.12	26.00
2.50	9.07	2.13	21.26	2.60	5.20	0.77	6.31	208.00	2.49	8.87	28.00
2.60	11.15	2.08	20.79	2.57	5.14	0.77	6.37	208.00	2.49	8.84	28.00
2.70	13.16	2.01	20.12	2.53	5.06	0.75	6.35	210.00	2.44	8.62	30.00
2.80	15.13	1.97	19.68	2.50	5.01	0.76	6.38	210.00	2.46	8.52	30.00
2.90	17.06	1.93	19.29	2.48	4.96	0.76	6.38	210.00	2.51	8.32	30.00
3.00	18.92	1.87	18.66	2.44	4.87	0.78	6.29	204.00	2.51	8.08	24.00
3.10	20.71	1.78	17.83	2.38	4.77	0.78	6.17	204.00	2.43	7.66	24.00
3.20	22.44	1.73	17.27	2.34	4.69	0.79	6.14	200.00	2.25	7.41	20.00
3.30	24.09	1.66	16.58	2.30	4.59	0.78	6.09	200.00	2.08	7.03	28.00
3.40	25.66	1.57	15.71	2.24	4.47	0.61	6.06	198.00	1.81	6.83	18.00
3.50	27.14	1.47	14.72	2.16	4.33	0.30	6.03	198.00	1.19	6.35	18.00
3.60	28.31	1.17	11.57	1.92	3.84	1.28	6.07	196.00	-	-	-
3.70	29.35	1.05	10.51	1.83	3.66	1.61	6.14	196.00	-	-	-
3.80	30.29	0.93	9.37	1.73	3.45	1.98	6.22	196.00	-	-	-
3.90	31.06	0.77	7.80	1.58	3.15	2.42	6.06	196.00	-	-	-
4.00	31.57	0.51	4.96	1.26	2.51	2.93	5.89	182.00	-	-	-
4.10	31.58	0.01	0.05	0.12	0.25	5.55	5.87	182.00	-	-	-



```
CAVITY : WELL1
OPERATION # : 1
```



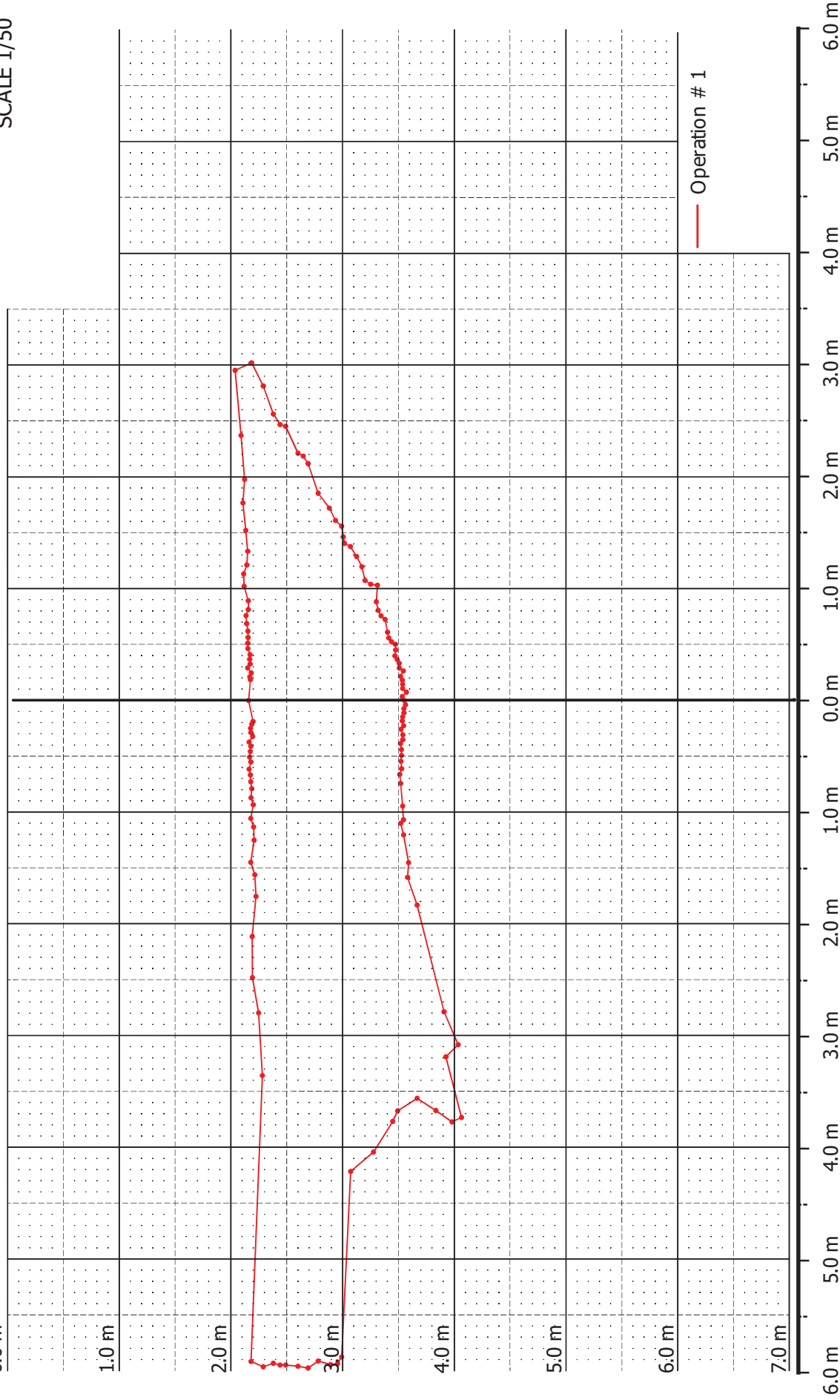
Vertical section

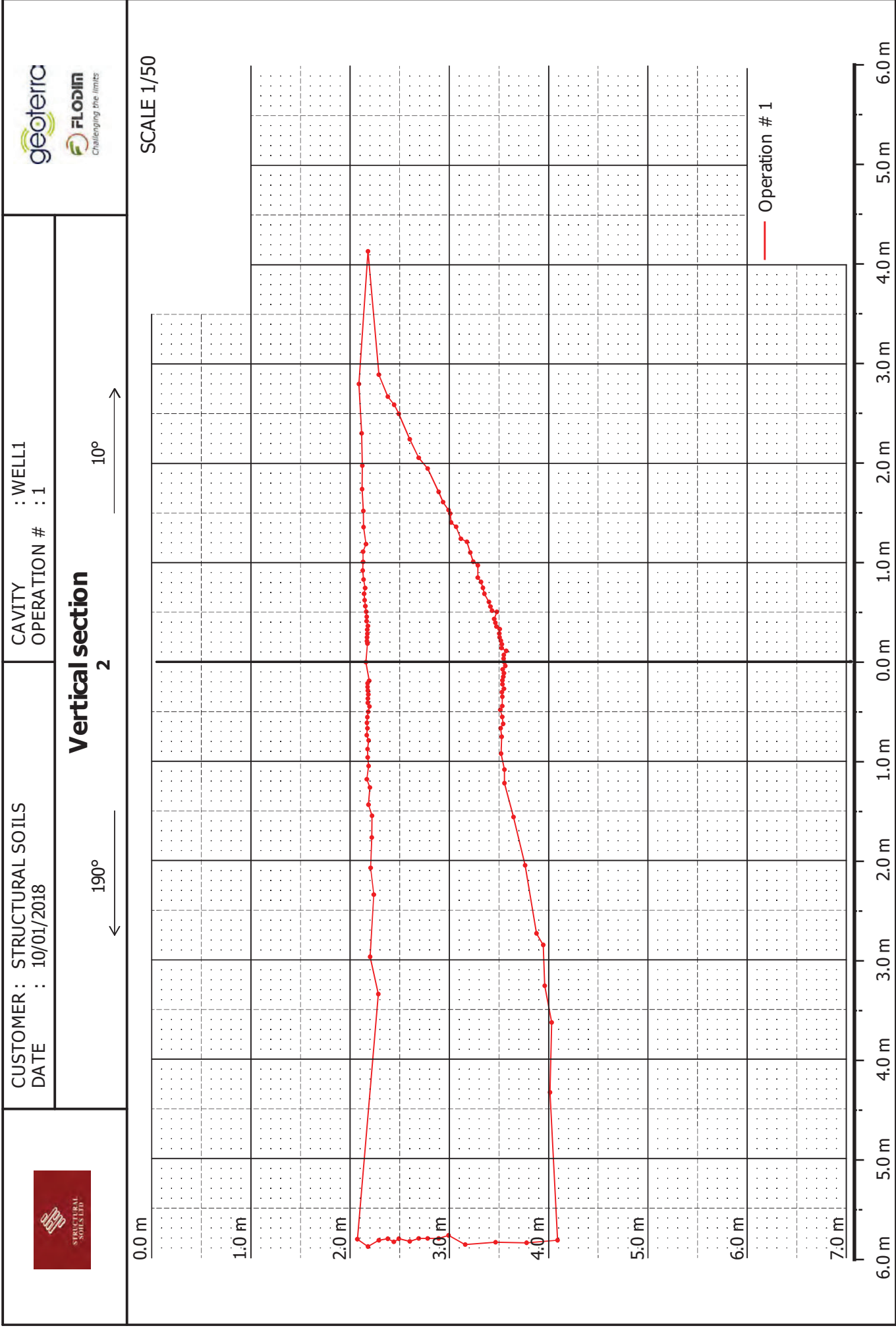
0°

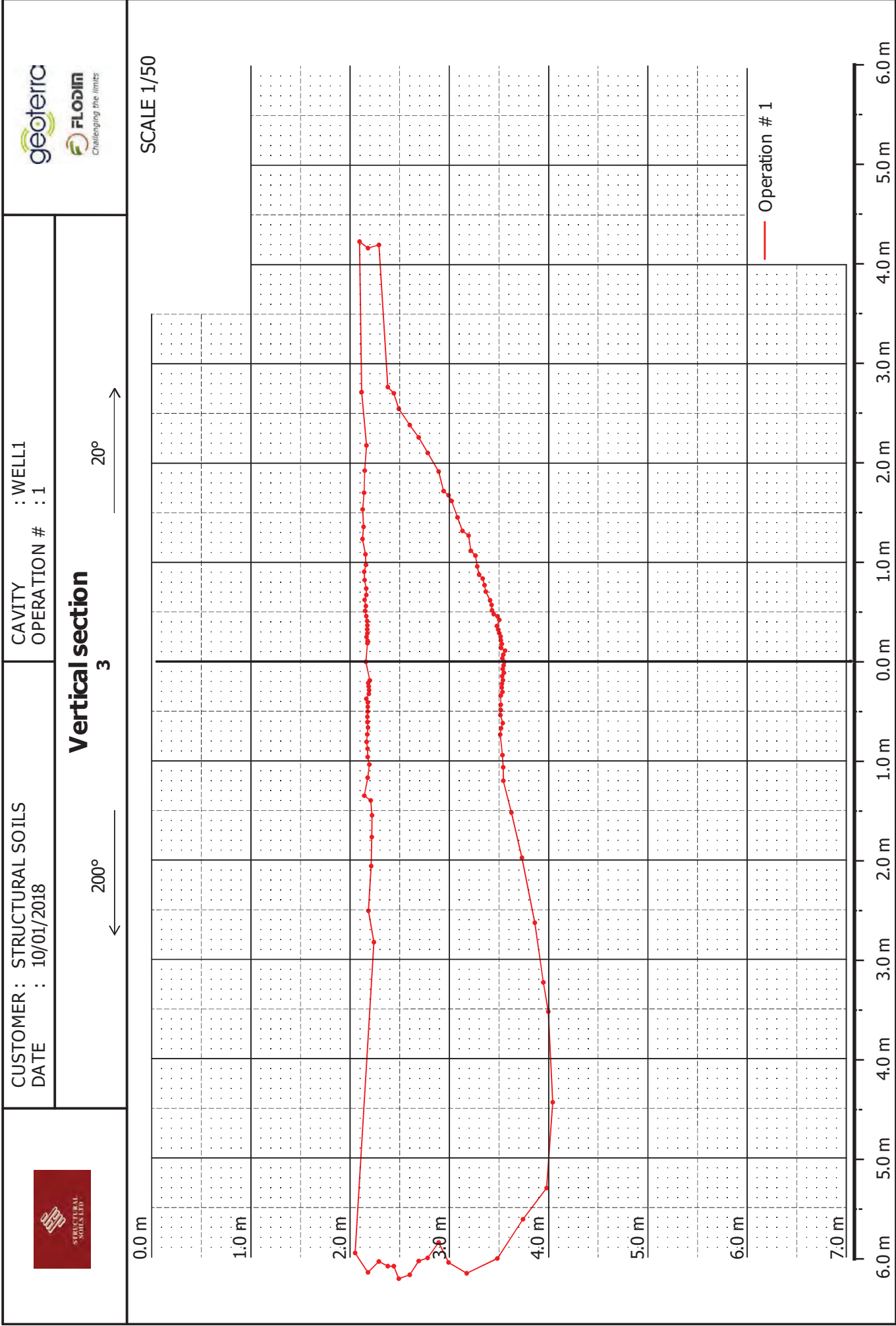
180°

0.0 m

SCALE 1/50









```
CAVITY : WELL1
OPERATION # : 1
```



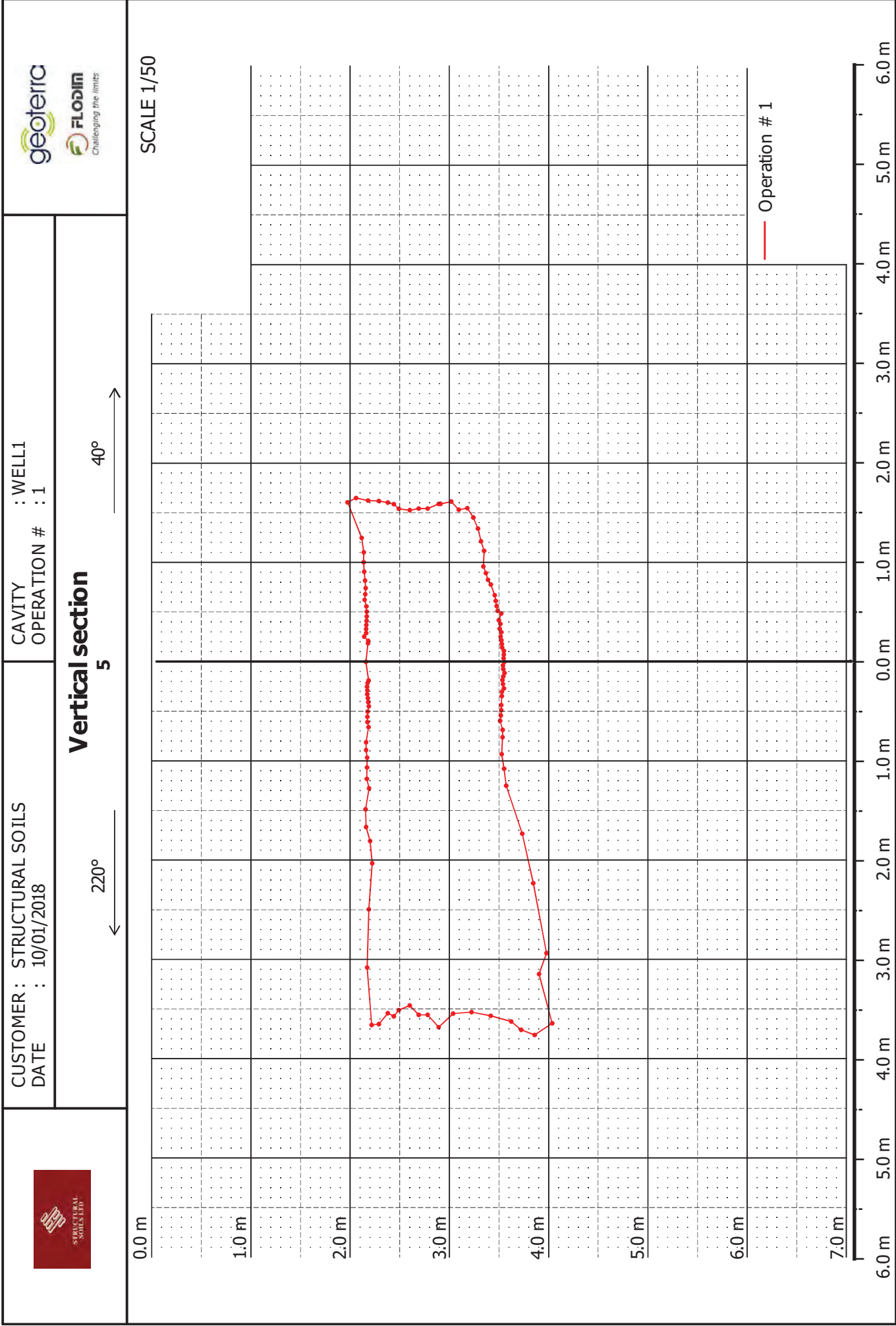
Vertical section

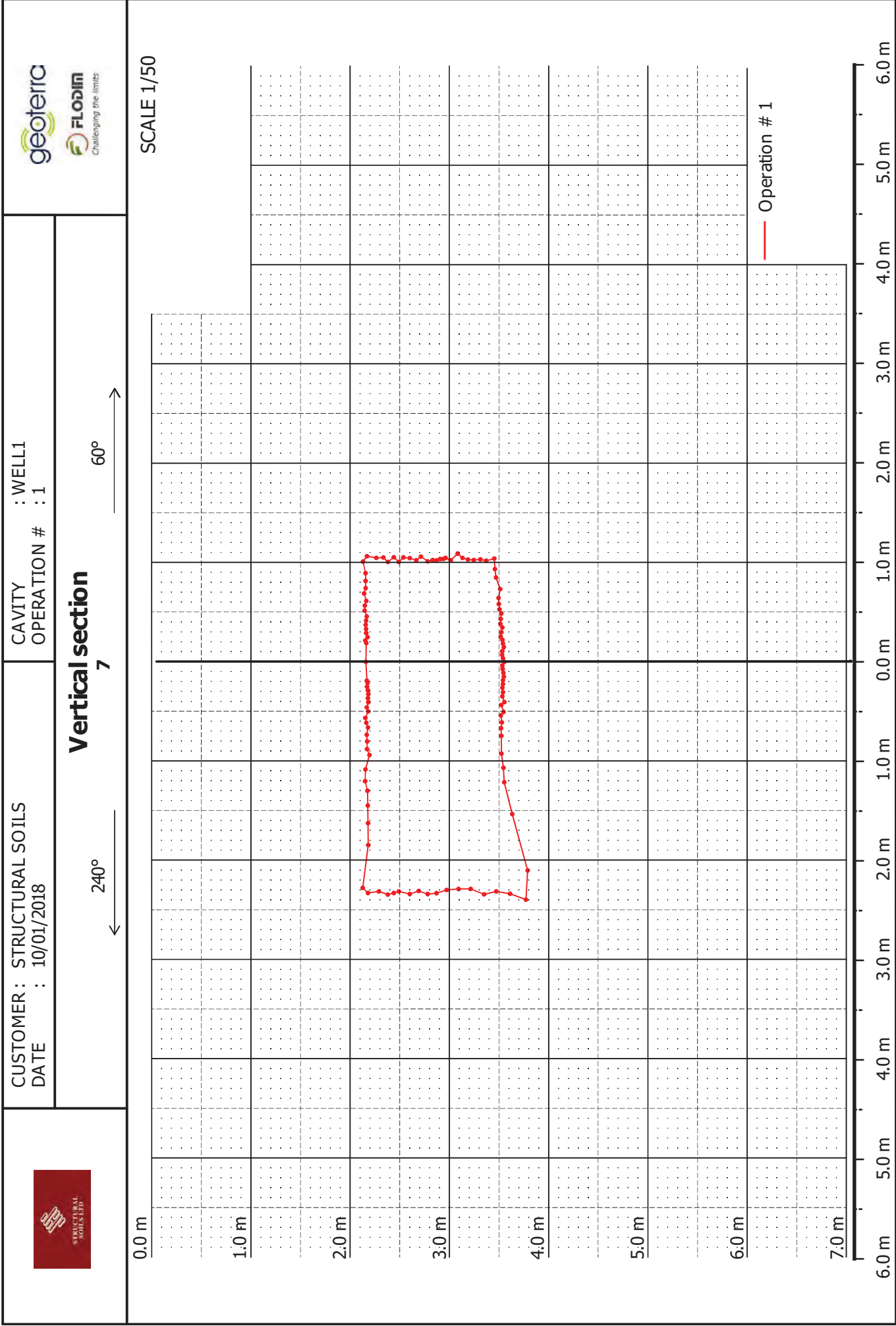
210°
 $\leftarrow$

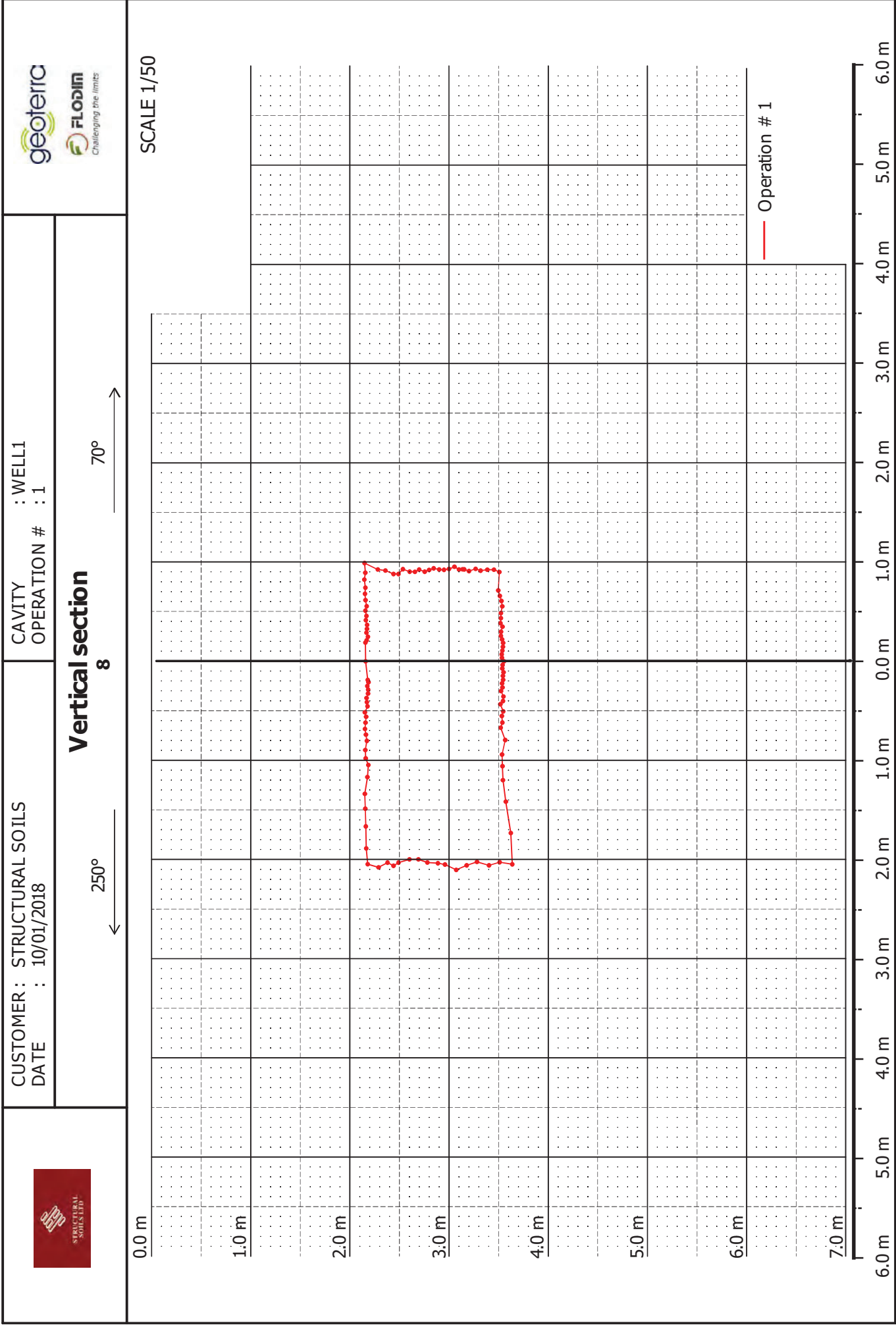
0.0 m

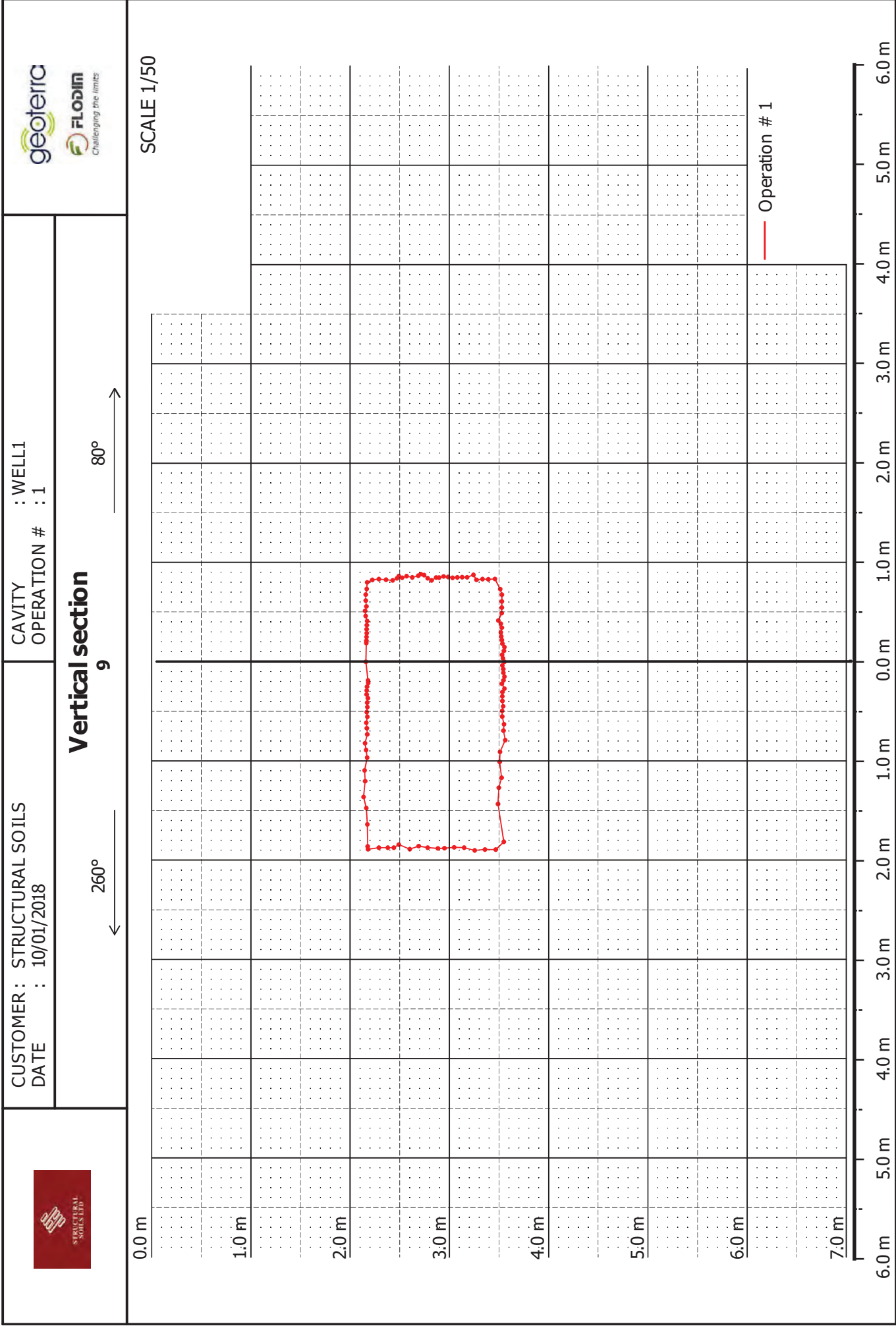
SCALE 1/50

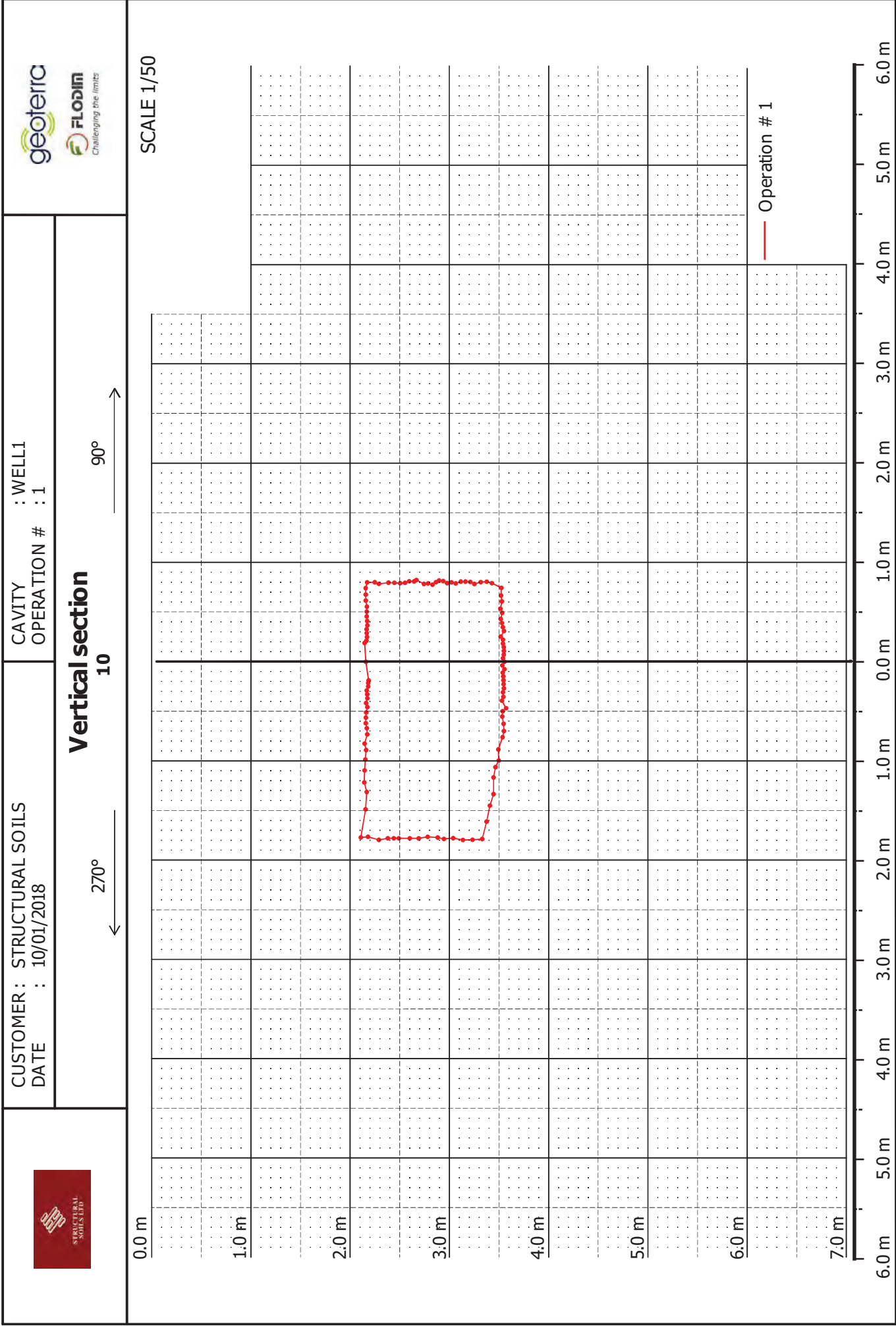


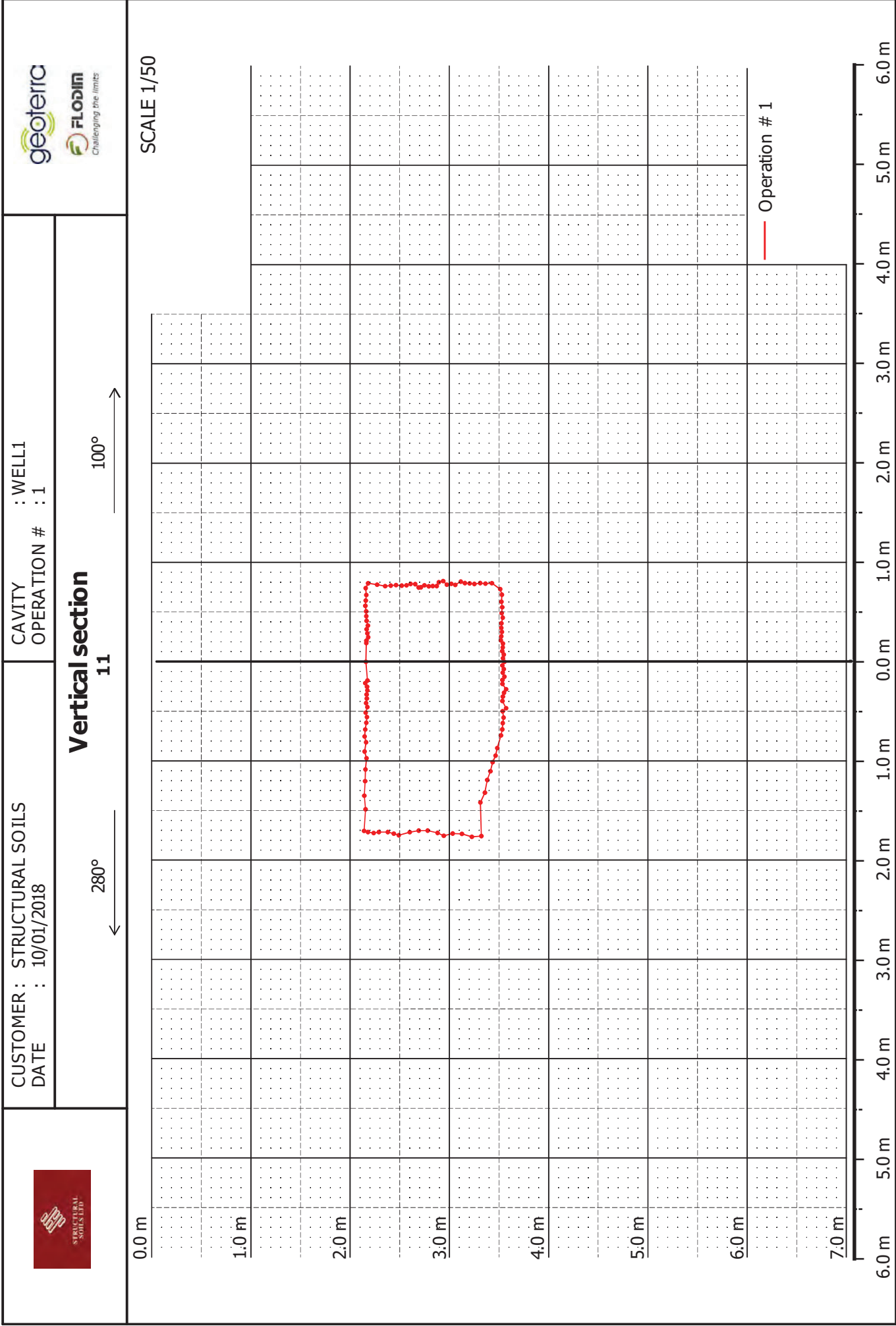


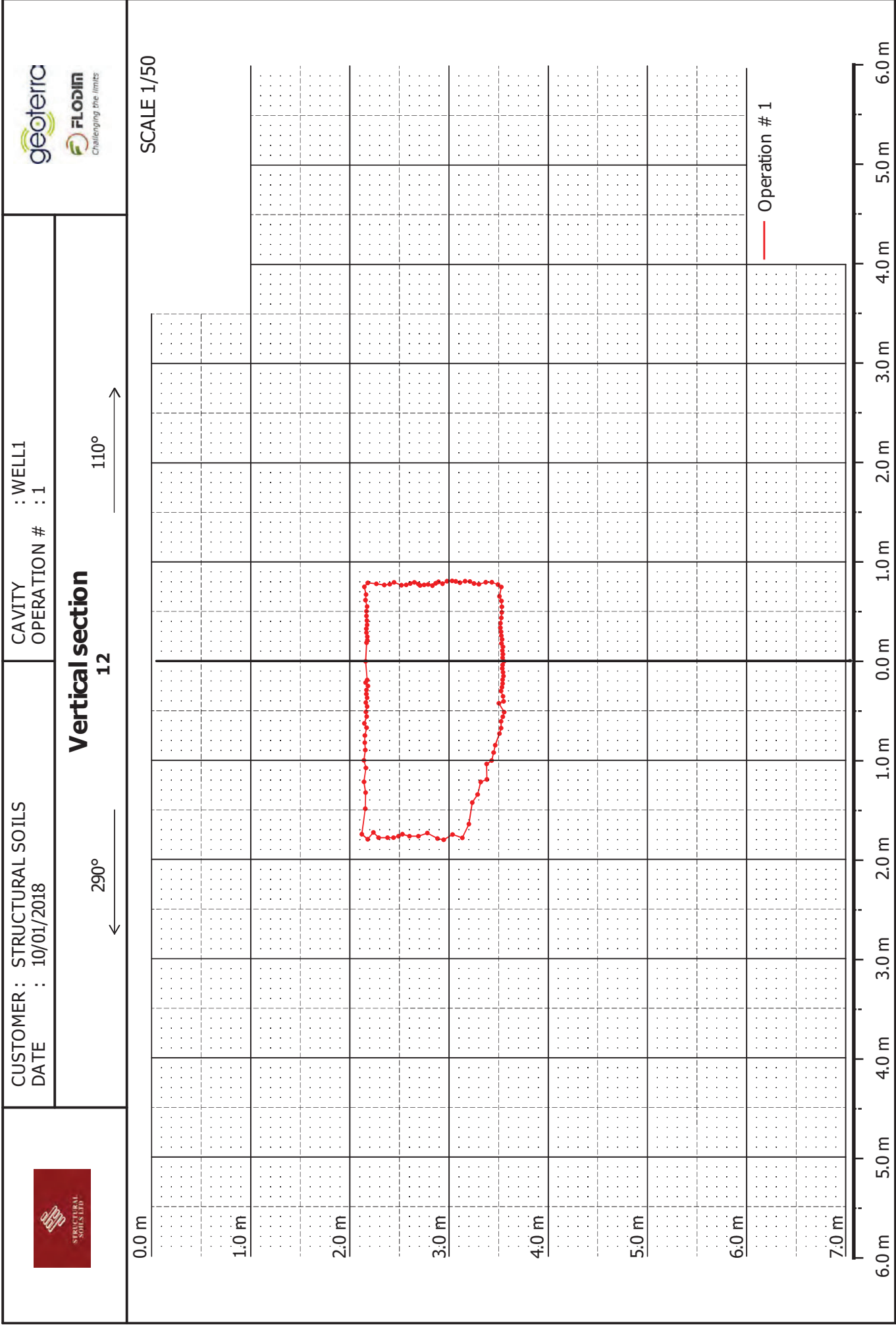


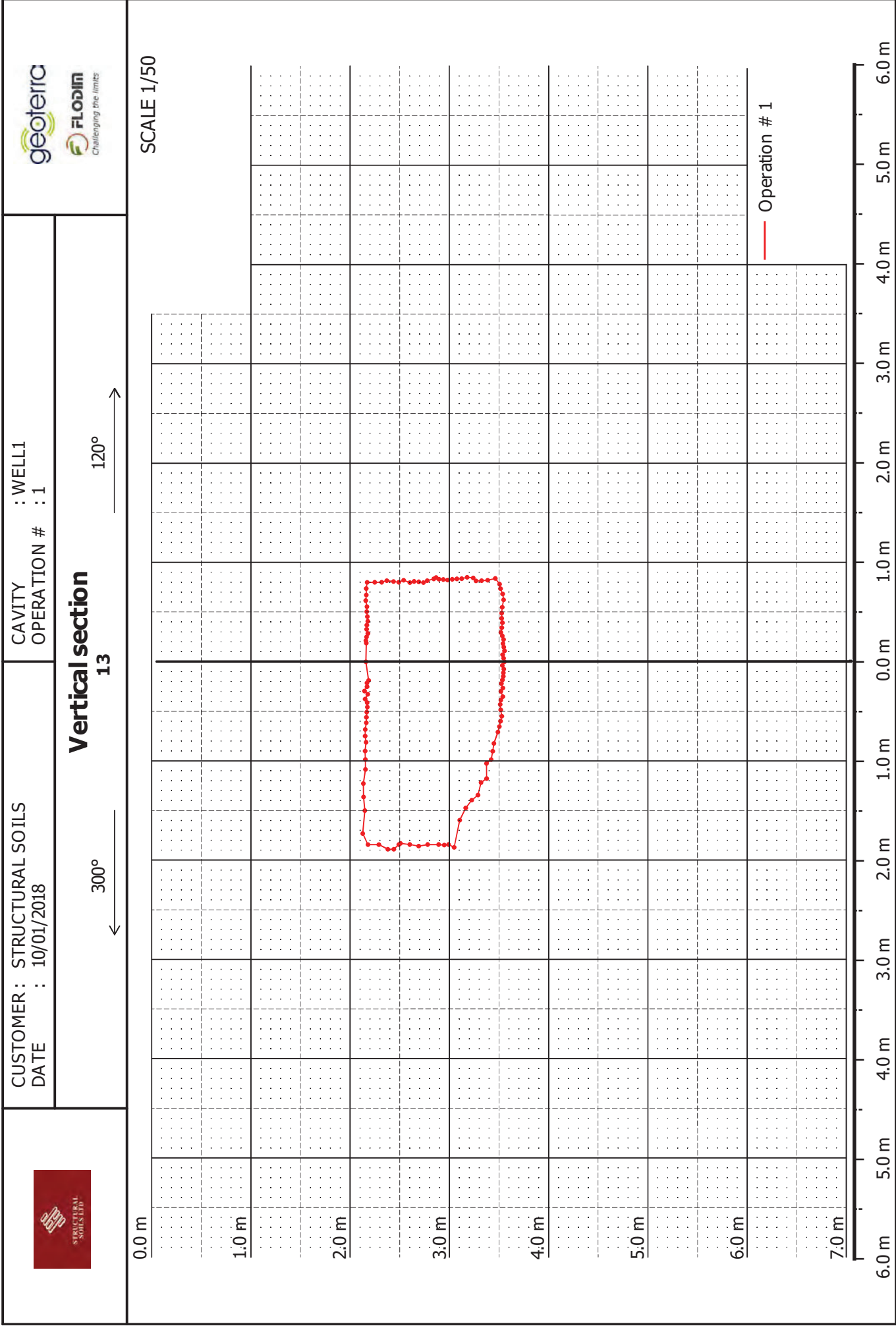


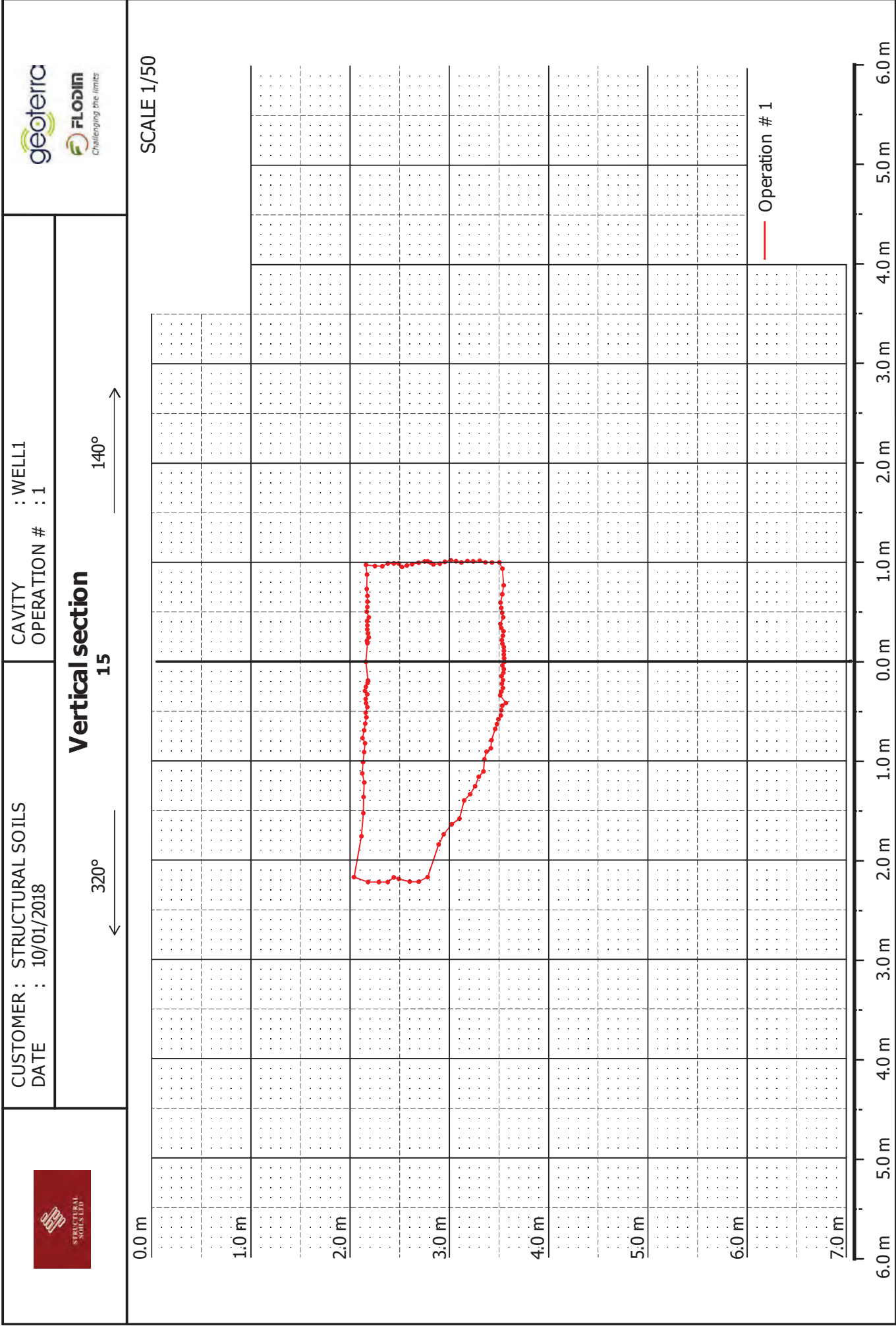


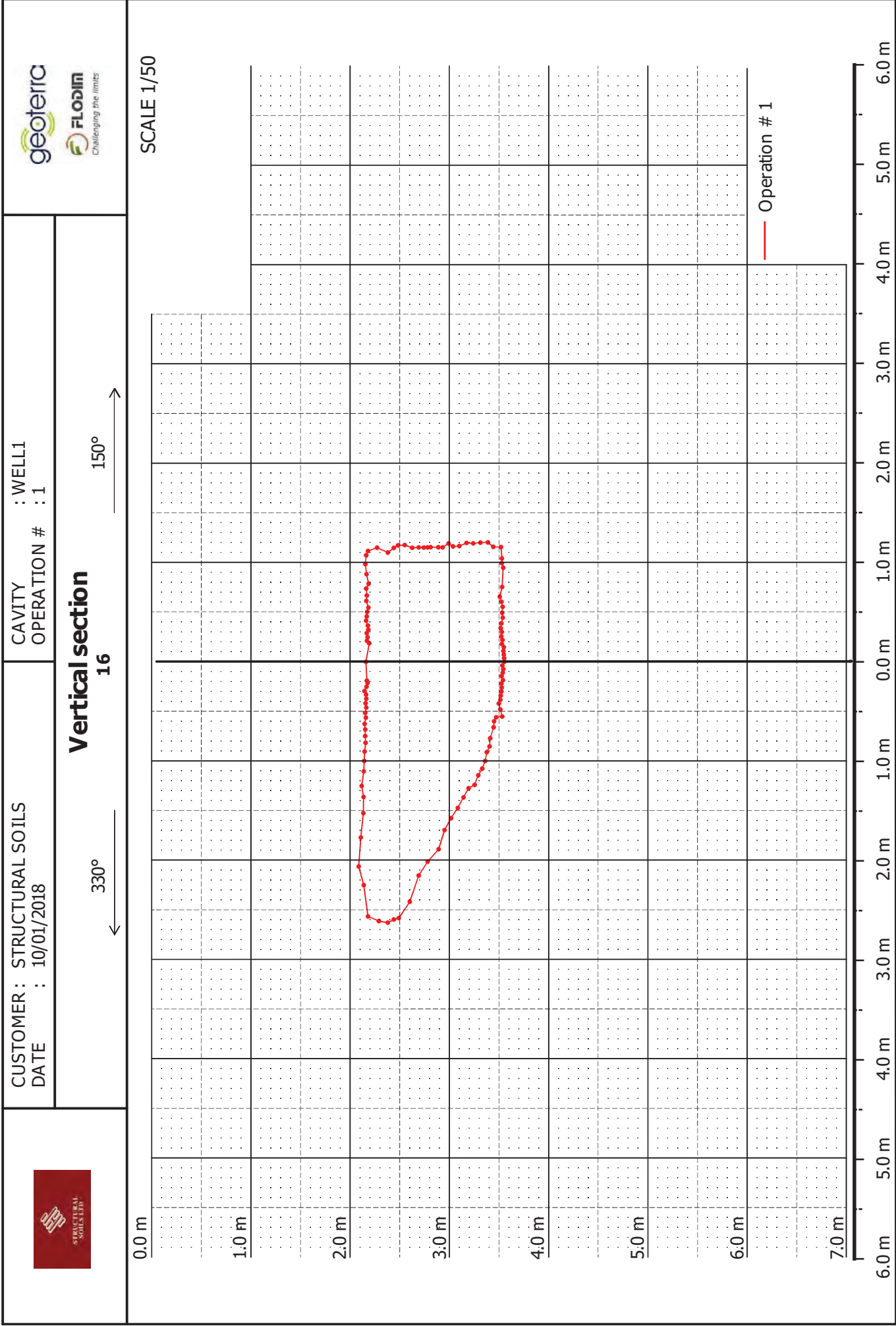














```
CAVITY : WELL1
OPERATION # : 1
```



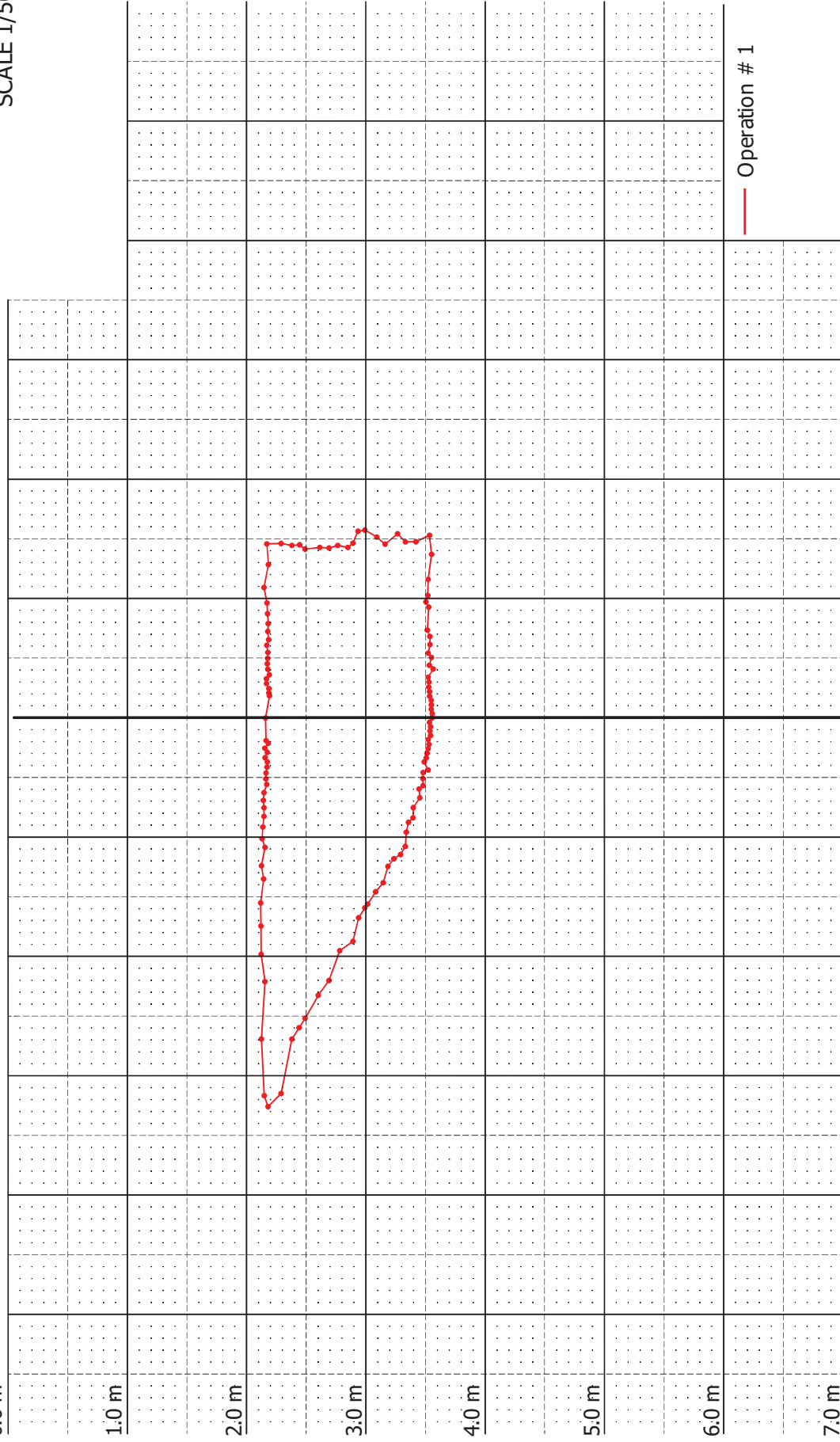
Vertical section 17

340°

 160°

0.0 m

SCALE 1/50



— Operation # 1

6.0 m

5.0 m

4.0 m

3.0 m

2.0 m

1.0 m

0.0 m

1.0 m

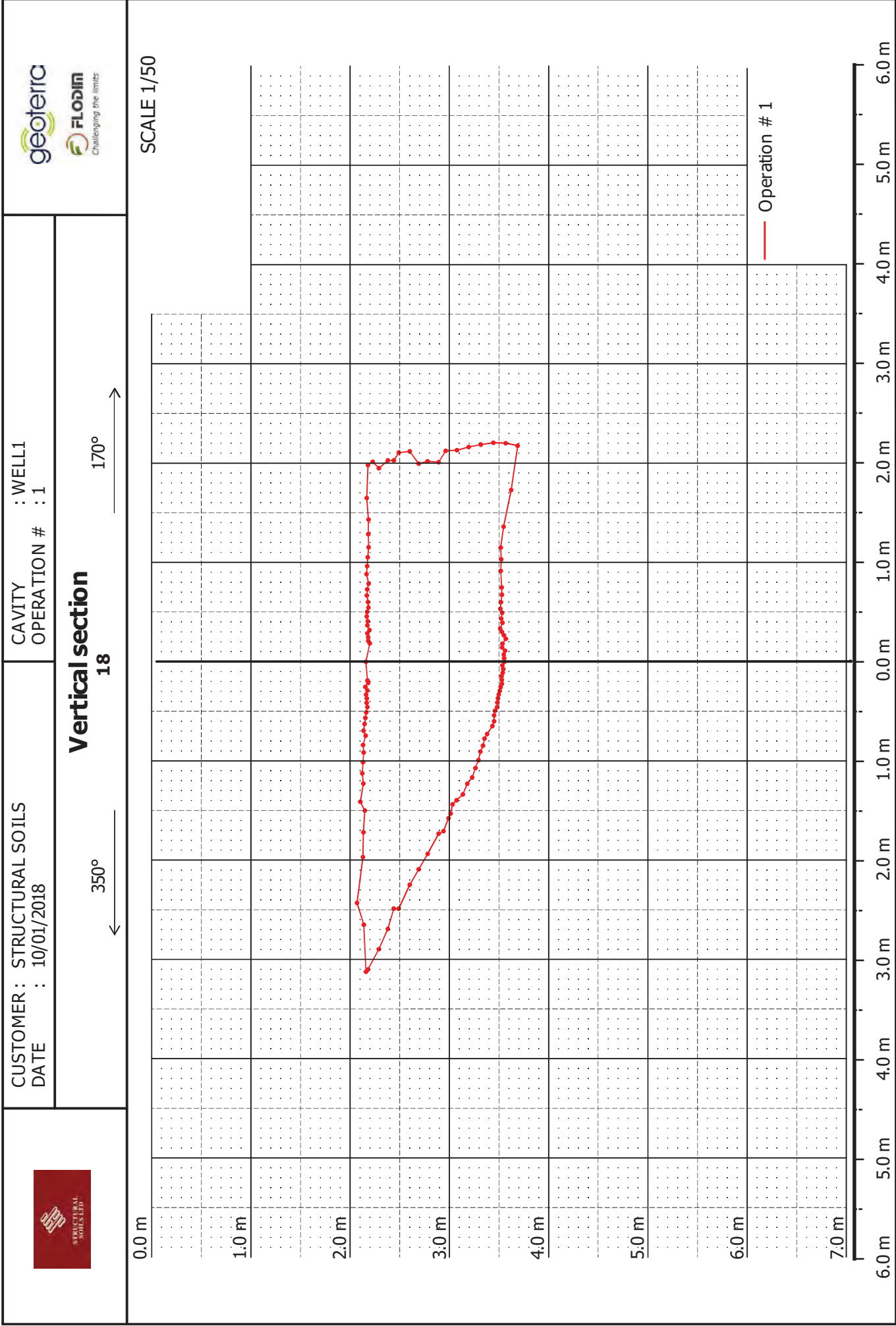
2.0 m

3.0 m

4.0 m

5.0 m

6.0 m





CUSTOMER :STRUCTURAL SOILS
DATE :10/01/2018

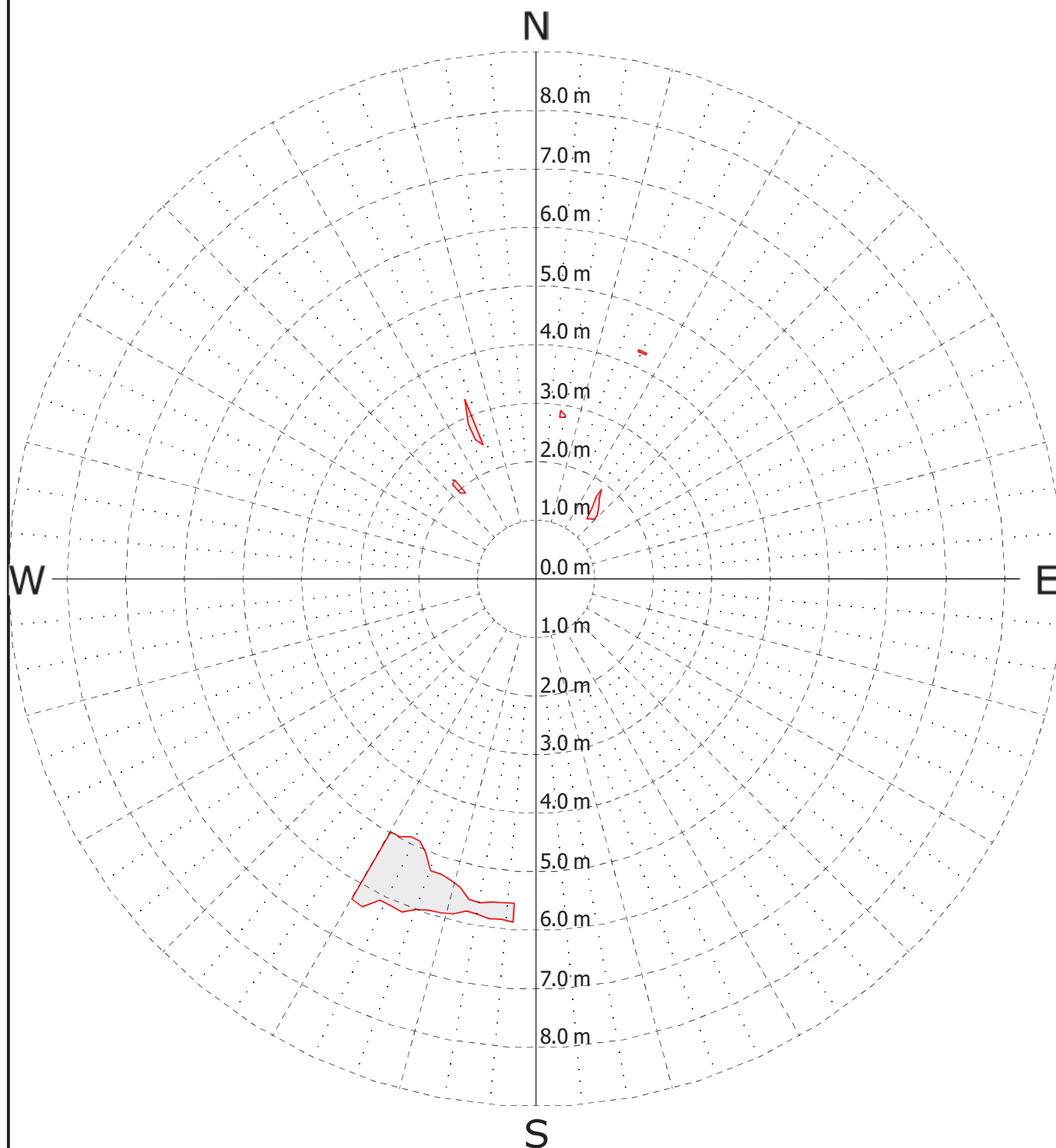
CAVITY :WELL1
OPERATION # :1



Horizontal section

2.1 m

SCALE 1/100



— Operation # 1

Maximum radius	: 6.33 m
Orientation maxi. radius	: 208 °
Surface	: 1.90 m ²
Maximum distance	: 10.58 m



CUSTOMER :STRUCTURAL SOILS
DATE :10/01/2018

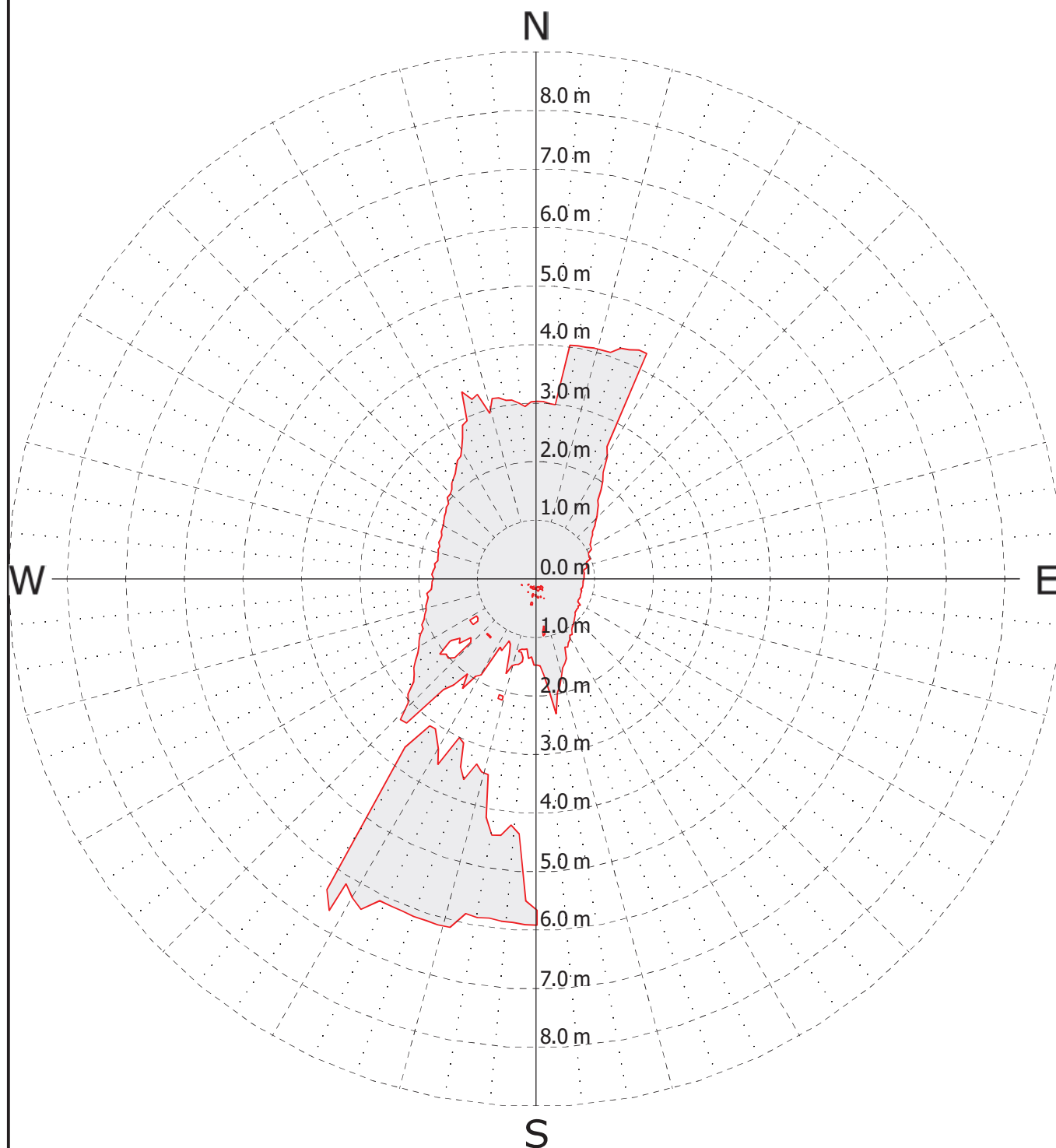
CAVITY :WELL1
OPERATION # :1



Horizontal section

2.2 m

SCALE 1/100



— Operation # 1

Maximum radius	: 6.67 m
Orientation maxi. radius	: 212 °
Surface	: 20.07 m ²
Maximum distance	: 10.91 m



CUSTOMER :STRUCTURAL SOILS
DATE :10/01/2018

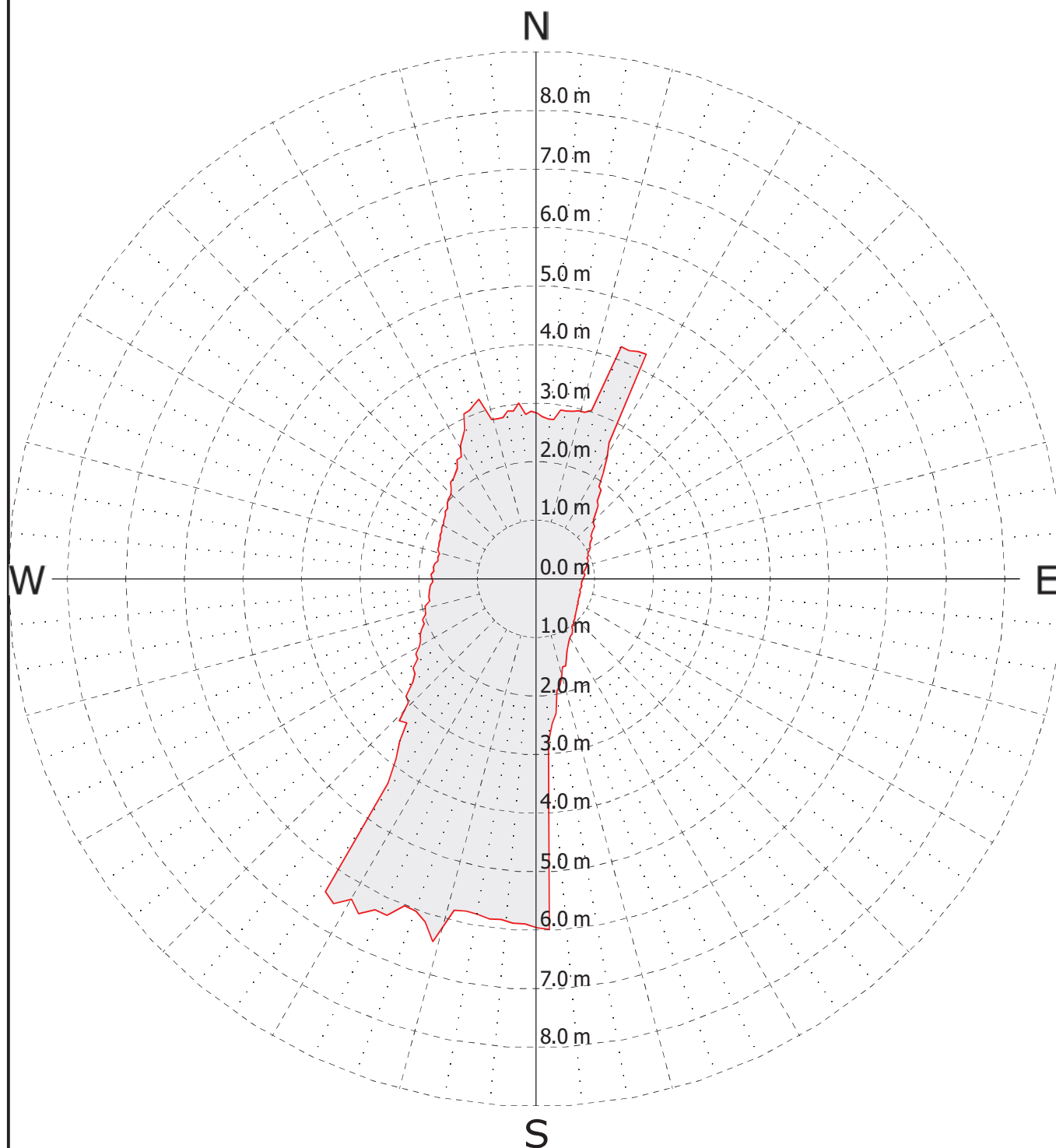
CAVITY :WELL1
OPERATION # :1



Horizontal section

2.3 m

SCALE 1/100



— Operation # 1

Maximum radius	: 6.53 m
Orientation maxi. radius	: 212 °
Surface	: 24.25 m ²
Maximum distance	: 10.75 m