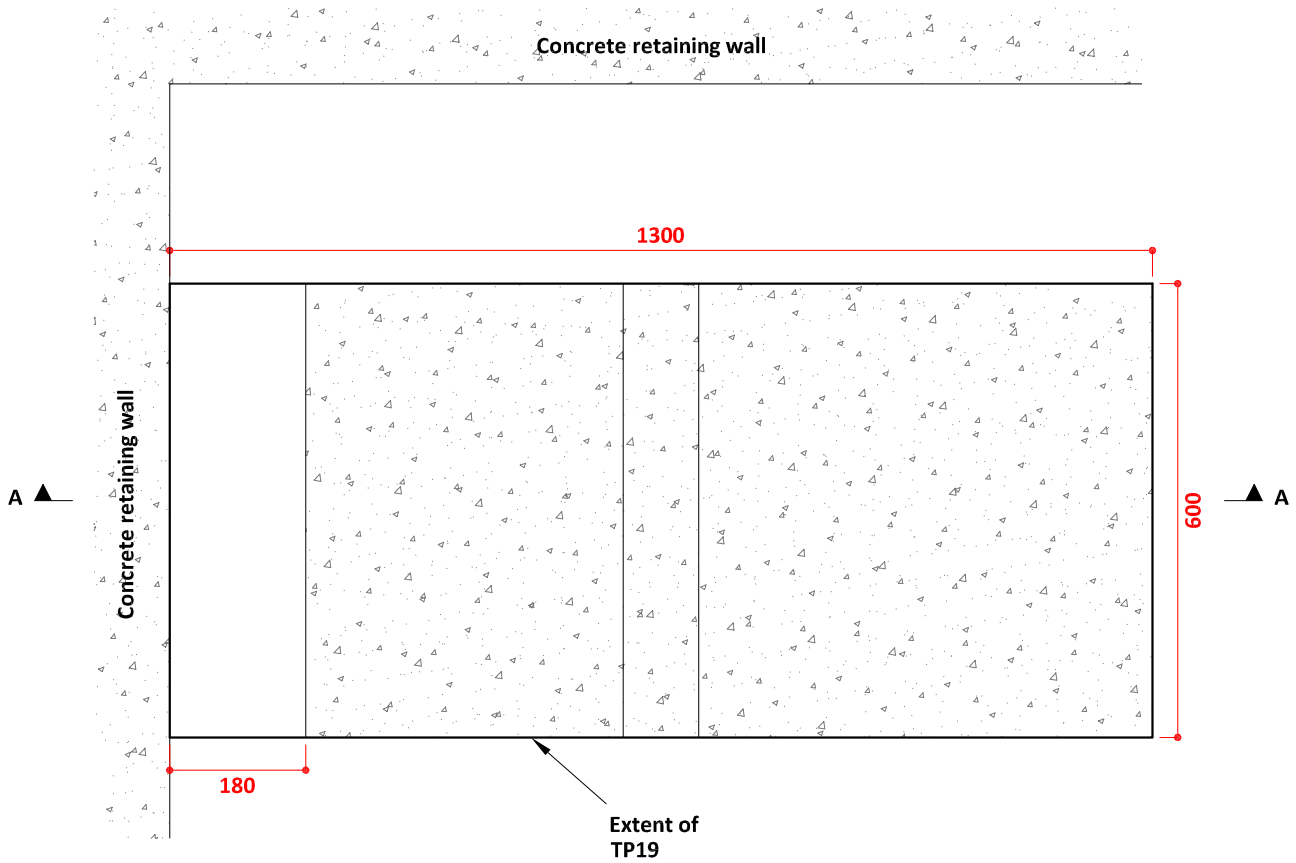
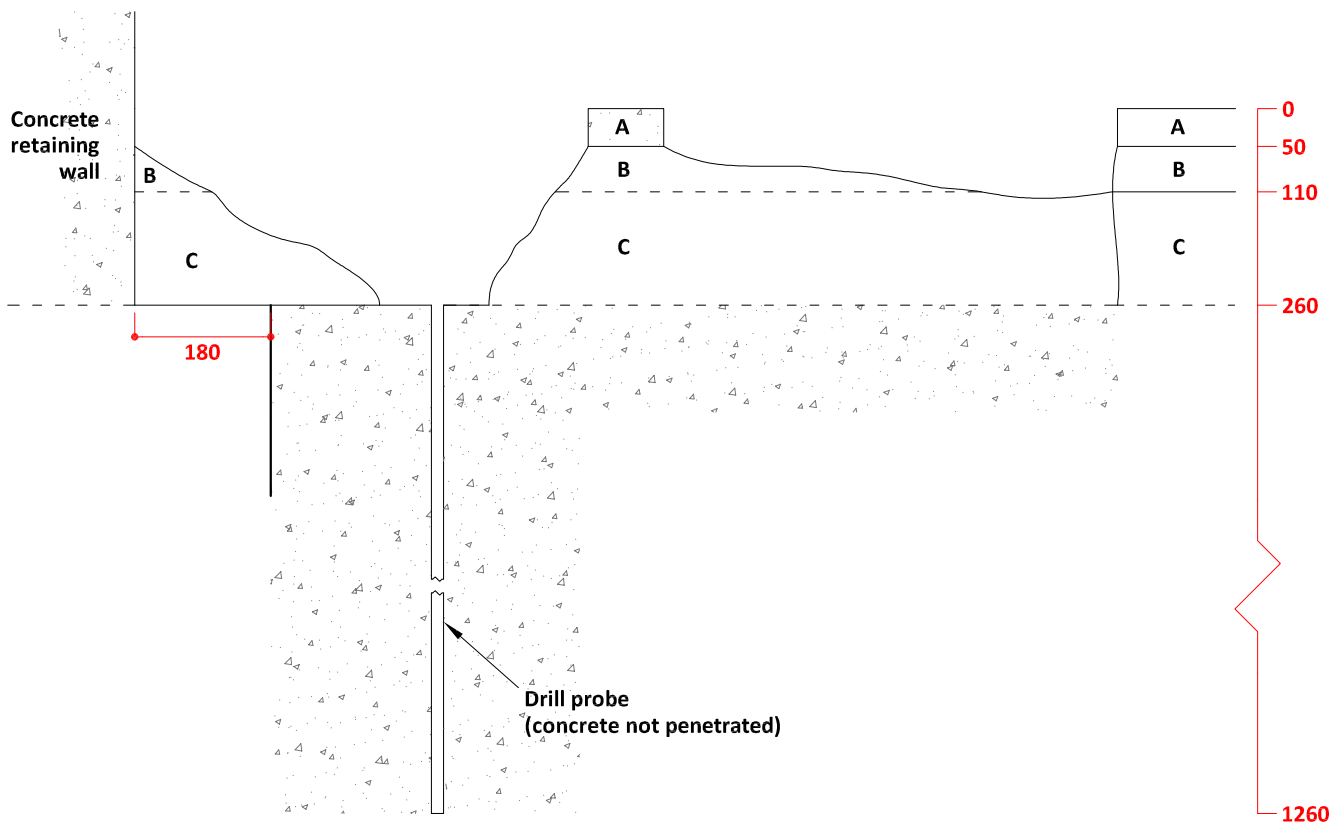
soiltechnics
environmental and geotechnical consultants

Plan



Section A-A



Photographic record

Key

A. CONCRETE paving slab.
(MADE GROUND)

B. Orange brown SAND.
(MADE GROUND)

C. Grey slightly clayey GRAVEL. Gravel consists of igneous rock.
(MADE GROUND)

——— Observed features
– – – – – Assumed features

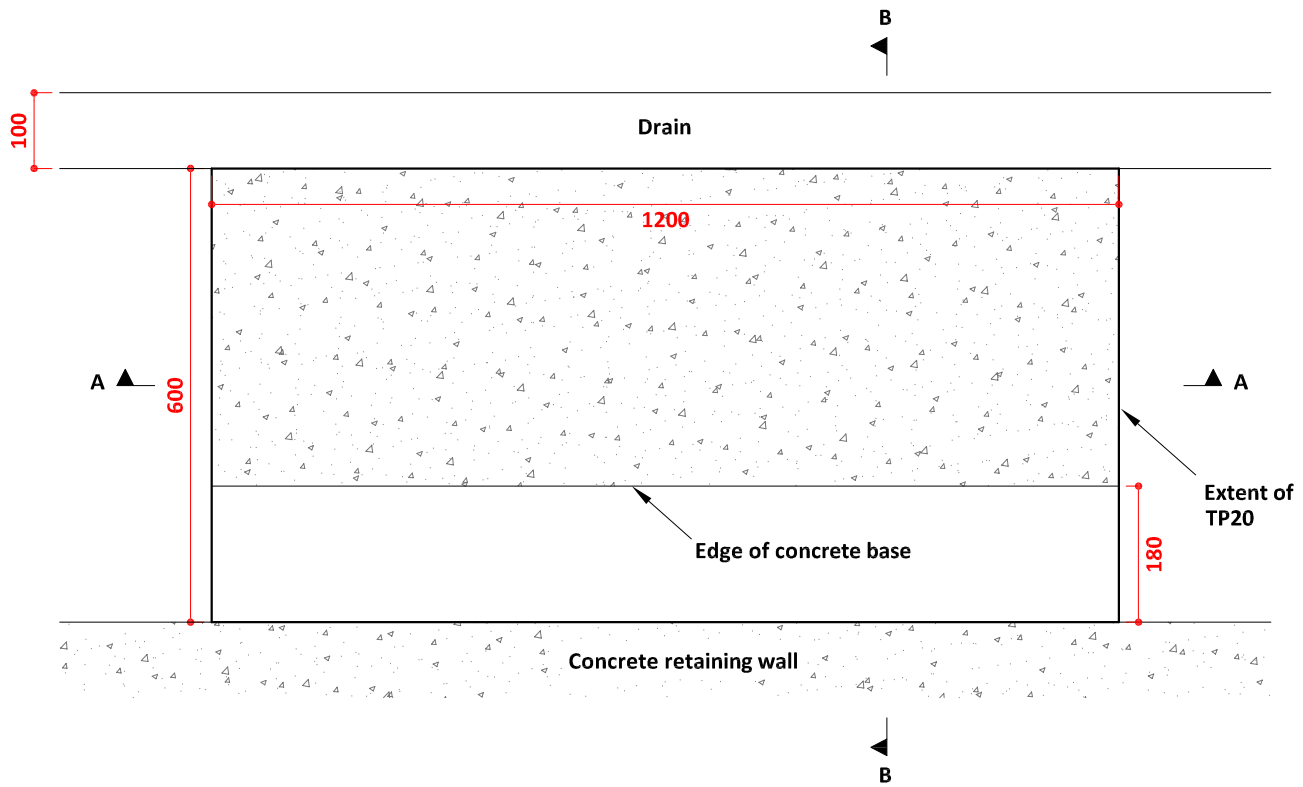
Denotes concrete

Notes

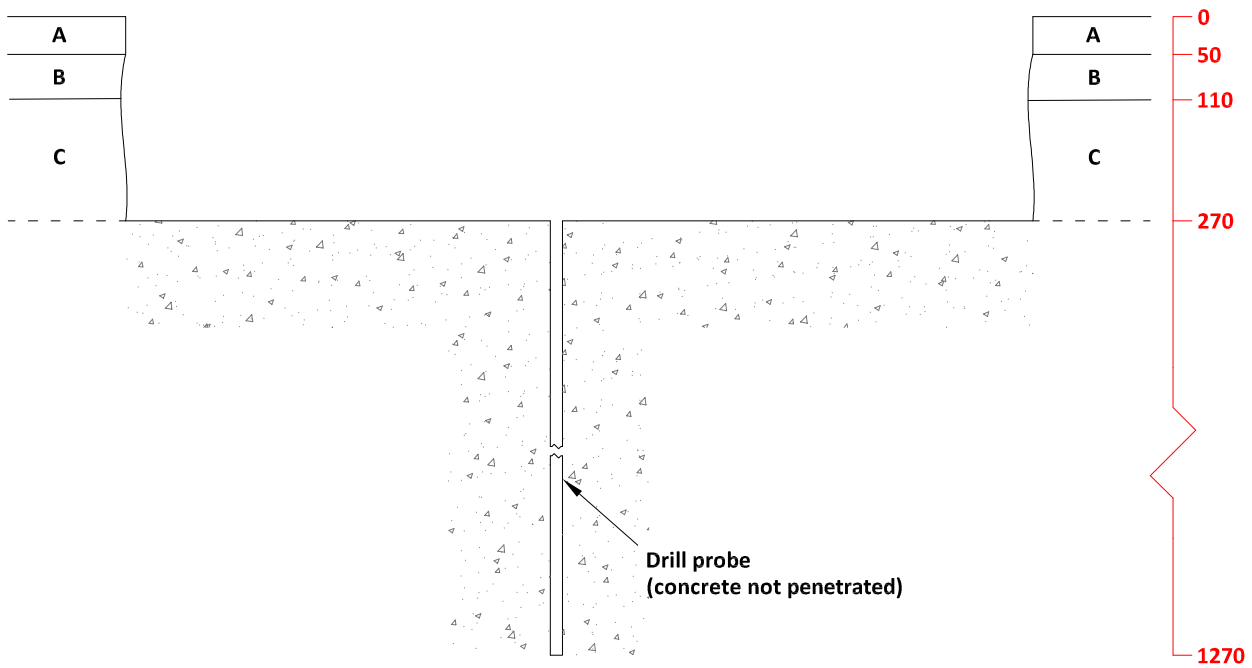
1. All dimensions shown in millimetres

Method of excavation		Title	Location reference
Hand tools		Trial pit record	TP19
Dimensions		Date of works	Location plan on drawing number
As shown		14.07.2016	01b
Groundwater observations		Scale	Appendix
No groundwater encountered		1:10 at A3	C

Plan

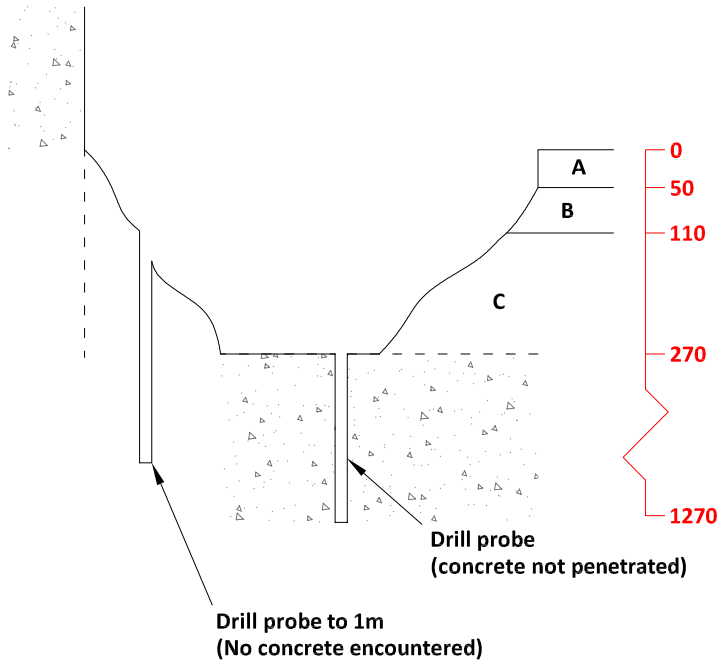


Section A-A



Photographic record

Section B-B



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———— Observed features
– – – – – Assumed features

Denotes concrete

Notes

1. All dimensions shown in millimetres

Method of excavation	Hand tools
Dimensions	As shown
Groundwater observations	No groundwater encountered

Title	Trial pit record
Date of works	14.07.2016
Scale	1:10 at A3

Location reference	TP20
Location plan on drawing number	01b
Appendix	C

F2 Chemical Data

Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.co.uk

Final Report

Report No.:	16-17204-1
Initial Date of Issue:	26-Jul-2016
Client	Soiltechnics Limited
Client Address:	Cedar Barn White Lodge Walgrave Northampton Northamptonshire NN6 9PY
Contact(s):	Rachel Brown Sara Bertholdson
Project	STN3652G - Astor College UCL London

Quotation No.:		**Date Received:**	20-Jul-2016
Order No.:	21893	**Date Instructed:**	20-Jul-2016
No. of Samples:	6		
Turnaround (Wkdays):	5	**Results Due:**	26-Jul-2016
Date Approved:	26-Jul-2016		

Approved By:

Details: Keith Jones, Technical Manager

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3652G - Astor College UCL London

Client: Soiltechnics Limited		**Chemtest Job No.:**			16-17204	16-17204	16-17204	16-17204	16-17204	16-17204
Quotation No.:		**Chemtest Sample ID.:**			325817	325818	325819	325820	325821	325822
Order No.: 21893		Client Sample Ref.:			TP05	TP06	TP07	TP08	TP09	TP11
		Client Sample ID.:			1-001	1-002	1-003	1-004	1-005	1-006
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.50	0.50	0.40	0.90	1.00	0.50
		Date Sampled:			13-Jul-2016	13-Jul-2016	13-Jul-2016	13-Jul-2016	13-Jul-2016	13-Jul-2016
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**						
ACM Type	U	2192		N/A	Lagging	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	Amosite	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	7.5	18	20	12	10	21
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Beige	Brown	Brown
Other Material	N	2040		N/A	Sand	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Clay	Clay	Sand	Clay	Clay
pH	M	2010		N/A	10.4	9.5	8.7	10.5	9.3	10.4
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	< 0.40	0.42	< 0.40	< 0.40	< 0.40	< 0.40
Cyanide (Complex)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50
Arsenic	M	2450	mg/kg	1.0	19	22	22	11	11	18
Beryllium	U	2450	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1
Cadmium	M	2450	mg/kg	0.10	0.39	0.41	0.12	< 0.10	< 0.10	0.97
Chromium	M	2450	mg/kg	1.0	11	27	16	18	14	34
Copper	M	2450	mg/kg	0.50	16	100	130	15	19	40
Mercury	M	2450	mg/kg	0.10	0.82	2.3	11	0.36	1.1	0.66
Nickel	M	2450	mg/kg	0.50	10	28	21	12	13	34
Lead	M	2450	mg/kg	0.50	79	740	630	48	120	93
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20	0.27	< 0.20	< 0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	22	43	46	26	25	53
Zinc	M	2450	mg/kg	0.50	41	270	110	24	27	170
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	M	2625	%	0.40	1.6	4.0	11	0.69	1.5	2.1
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14
Phenanthrene	M	2800	mg/kg	0.10	< 0.10	0.52	0.19	< 0.10	< 0.10	2.2
Anthracene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.45
Fluoranthene	M	2800	mg/kg	0.10	< 0.10	1.5	0.38	< 0.10	< 0.10	4.2
Pyrene	M	2800	mg/kg	0.10	< 0.10	1.2	0.49	< 0.10	< 0.10	3.4
Benzo[a]anthracene	M	2800	mg/kg	0.10	< 0.10	0.17	0.43	< 0.10	< 0.10	1.2
Chrysene	M	2800	mg/kg	0.10	< 0.10	0.16	2.7	< 0.10	< 0.10	1.0
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	< 0.10	0.18	6.9	< 0.10	< 0.10	1.2
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	1.2	< 0.10	< 0.10	0.26
Benzo[a]pyrene	M	2800	mg/kg	0.10	< 0.10	0.10	7.4	< 0.10	< 0.10	0.93

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3652G - Astor College UCL London

Client: Soiltechnics Limited					**Chemtest Job No.:**	16-17204	16-17204	16-17204	16-17204	16-17204	16-17204
Quotation No.:					**Chemtest Sample ID.:**	325817	325818	325819	325820	325821	325822
Order No.: 21893					Client Sample Ref.:	TP05	TP06	TP07	TP08	TP09	TP11
					Client Sample ID.:	1-001	1-002	1-003	1-004	1-005	1-006
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.50	0.50	0.40	0.90	1.00	0.50
					Date Sampled:	13-Jul-2016	13-Jul-2016	13-Jul-2016	13-Jul-2016	13-Jul-2016	13-Jul-2016
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**							
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10		< 0.10	< 0.10	7.0	< 0.10	< 0.10	0.45
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	0.76	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10		< 0.10	< 0.10	7.0	< 0.10	< 0.10	0.60
Total Of 16 PAH's	N	2800	mg/kg	2.0		< 2.0	3.8	35	< 2.0	< 2.0	16
Total Phenols	M	2920	mg/kg	0.30		< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Report Information

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I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at our Coventry laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.co.uk

F3 Waste Acceptance Criteria Testing

Chemtest
The right chemistry to deliver results
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.co.uk

UKAS TESTING
2183

Final Report

Report No.:	16-17207-1
Initial Date of Issue:	29-Jul-2016
Client	Soiltechnics Limited
Client Address:	Cedar Barn White Lodge Walgrave Northampton Northamptonshire NN6 9PY
Contact(s):	Rachel Brown Sara Bertholdson
Project	STN3652G - Astor College UCL London

Quotation No.:		**Date Received:**	20-Jul-2016
Order No.:	21894	**Date Instructed:**	20-Jul-2016
No. of Samples:	1		
Turnaround (Wkdays):	7	**Results Due:**	28-Jul-2016
Date Approved:	29-Jul-2016		

Approved By:

Details: Glynn Harvey, Laboratory Manager

Results - 2 Stage WAC

Project: STN3652G - Astor College UCL London

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	16-17207						**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Chemtest Sample ID:	325826								
Sample Ref:	CS1								
Sample ID:	1-007								
Top Depth(m):									
Bottom Depth(m):									
Sampling Date:	13-Jul-2016								
Determinand	**SOP**	**Accred.**	**Units**						
Total Organic Carbon	2625	U	%			1.7	3	5	6
Loss On Ignition	2610	U	%			2.5	--	--	10
Total BTEX	2760	U	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg			< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg			1800	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	U				10.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.025	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
Arsenic	1450	U	0.0098	0.013	< 0.050	0.13	0.5	2	25
Barium	1450	U	0.023	0.011	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.038	0.0078	0.075	0.12	0.5	10	70
Copper	1450	U	0.012	0.0023	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.010	0.0026	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	0.0016	0.0013	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	0.0012	< 0.010	0.010	0.5	10	50
Antimony	1450	U	0.0044	0.0030	< 0.010	0.032	0.06	0.7	5
Selenium	1450	U	0.0011	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.0010	< 0.50	< 0.50	4	50	200
Chloride	1220	U	6.2	1.8	12	24	800	15000	25000
Fluoride	1220	U	0.28	0.21	< 1.0	2.2	10	150	500
Sulphate	1220	U	83	19	170	280	1000	20000	50000
Total Dissolved Solids	1020	N	160	90	320	1000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	14	13	< 50	130	500	800	1000

Soild Information	
Dry mass of test portion/kg	0.175
Moisture (%)	12

Leachate Test Information	
Leachant volume 1st extract/l	0.326
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.244

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