Port of Ardersier

Whiteness
Sediment Sampling

April 2013

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1. INTRODUCTION

1.1 Background

A.F. Cruden Associates on behalf of Port of Ardersier contracted Envirocentre Ltd. to undertake the collection of samples from 6 borehole and 18 grab sediment samples from a site at Whiteness. The boreholes were to be sub sampled and the grab samples analysed in accordance with Marine Scotland's analysis suite as detailed within their guidance document "Draft guidance for the Sampling and Analysis of Sediment and Dredged material to be Submitted in Support of Applications for Sea Disposal of Dredged material"

The purpose of these samples is to provide supporting information to Marine Scotland during the licensing process on sediment quality within the proposed dredge area. The dredging and disposal activities are regulated by Marine Scotland under the Marine (Scotland) Act 2010 The licensing conditions require representative samples to be collected and the nature (i.e. physical composition), quality and contamination status to be determined.

1.2 Scope of Report

The following report details the sampling methodology, field and laboratory analysis and provides a summary of the sediment quality present within the proposed dredge area.

2. SEDIMENT SAMPLING REQUIREMENTS

2.1 Sampling Locations

Figure 1 in Appendix A details the sample locations.

Six borehole locations and 18 grab locations were located within the proposed dredge area were identified by the Client as identified in Figure 1.

The following table summarises the sample location information:

Name	Easting	Northing	Comment
Grab 1	279665	859342	Retained by EnviroCentre for analysis
Grab 3	279569	859291	Retained by EnviroCentre for analysis
Grab 5	279687	859184	Retained by EnviroCentre for analysis
Grab 7	279806	859077	Retained by EnviroCentre for analysis
Grab 9	279710	859026	Retained by EnviroCentre for analysis
Grab 11	279828	858919	Retained by EnviroCentre for analysis
Grab 13	279947	858812	Retained by EnviroCentre for analysis
Grab 15	279851	858761	Retained by EnviroCentre for analysis
Grab 16	279997	858617	Retained by EnviroCentre for analysis
Grab 17	280103	858617	Retained by EnviroCentre for analysis
Grab 18	280044	858518	Retained by EnviroCentre for analysis
Grab 19	280166	858542	Retained by EnviroCentre for analysis
Grab 20	280300	858585	Retained by EnviroCentre for analysis
Grab 21	280230	858466	Retained by EnviroCentre for analysis
Grab 22	280366	858466	Retained by EnviroCentre for analysis
Grab 23	280502	858465	Retained by EnviroCentre for analysis
Grab 24	280431	858347	Retained by EnviroCentre for analysis
Grab 25	280241	858415	Retained by EnviroCentre for analysis
Grab 26	280346	858353	Retained by EnviroCentre for analysis
BH10	279982	858750	Retained by EnviroCentre for analysis
BH11	279932	858724	Retained by EnviroCentre for analysis
BH12	279982	858697	Retained by EnviroCentre for analysis
BH15	280029	858526	Retained by EnviroCentre for analysis
BH18	280172	858438	Retained by EnviroCentre for analysis
BH24	280400	858303	Retained by EnviroCentre for analysis

2.2 Field Information

The draft sampling guidance issued by Marine Scotland required specific field data to be recorded for each sample obtained. This field data included the following information:-

- A unique sample ID;
- Sample location;
- Sample co-ordinates in latitude and longitude in degrees, minutes and decimals of minutes;
- Sample type i.e. sediment chemistry or sediment biology;
- Date, time and depth of collection;
- Sampler's ID;
- Sediment description; and
- Details of any deviation from sampling protocol.

2.3 Sampling Requirements

The laboratory analysis required by the draft guidance document, and undertaken as part of this investigation, included metal, organic and particle size analysis. Samples for metal and particle size analysis were sub-sampled using a plastic spoon and stored in polyethylene containers. Samples for organic analysis were collected using stainless steel spoons and stored in amber glass jars.

Following the sub-sampling of sediment cores, sample containers were placed within cool boxes with bags of ice to cool as quickly as possible and frozen within 24 hours.

3. SAMPLING METHODOLOGY

Grab sampling was undertaken on 12th and 13th March 2013 during daylight hours. Borehole drilling was undertaken over two periods, from 5th -12th February 2013 (BH10, 11 and 12) and 11th- 13th March (BH 15, 18 and 24). The following sections detail the sampling methodology used to retrieve sediment samples from the harbour and boreholes.

3.1 Sampling

Grab sampling was undertaken from a boat hired from Caley Marina. Borehole drilling works was undertaken by Blake Geoservices Limited. A shell and auger drill rig was utilised for the drilling works to allow collection of samples. Sampling was undertaken by EnviroCentre Limited and Blake Geoservices under supervision of EnviroCentre Limited.

3.2 Navigation and Sample Location

The vessel was navigated to the sampling location using GPS equipment. Sample co-ordinates are provided in Appendix B. The borehole locations were identified on site utilising GPS equipment and staked out prior to drilling.

3.3 Sample Retrieval

Once on location, grab samples were procured utilising a Van Veen grab. The grab can procure 0.045m3 of sediment upon deployment.

Sampling from borehole locations was undertaken by hand.

Table 1.1: Summary of Samples

Sample Location	Sample Recovery Time	Sampled Core Recovery Length (m)	Number of Attempts & Return Depths	Sediment Description	Comments
Grab 1	9.45am	0.1m	2	Fine to medium brown sand	-
Grab 3	12.30pm	0.1m	7	Medium brown sand and gravel	–
Grab 5	12.15pm	0.1m	2	Fine to medium sand	-
Grab 7	12.10pm	0.1m	1	Fine to medium sand	-
Grab 9	12.05pm	0.1m	1	Fine to medium sand	-
Grab 11	10.50am	0.1m	2	Fine to medium sand	-
Grab 13	10.35am	0.1m	2	Fine to medium sand	-
Grab 15	13.00pm	0.1m	2	Fine to medium sand	-
Grab 16	11.00am	0.1m	2	Fine to medium sand	-
Grab 17	11.15am	0.1m	2	Fine to coarse sand	-
Grab 19	13.20pm	0.1m	2	Medium to coarse sand	-
Grab 20	11.45am	0.1m	1	Fine to medium sand	-
Grab 21	10.40am	0.1m	1	Fine to medium sand	-
Grab 22	12.00pm	0.1m	1	Fine to medium sand	-
Grab 23	11.30am	0.1m	1	Fine to medium sand	-
Grab 24	11.00am	0.1m	2	Fine sand	-

Grab 25	10.20am	0.1m	1	Fine to medium sand	-
Grab 26	10.30am	0.1m	1	Fine to medium sand	-
BH10	05/02/13	15.00m	1	Varies from gravel to fine sand	-
BH11	07/02/13	15.00m	1	Fine to coarse sand	-
BH12	12/02/13	15.00m	1	Fine to coarse sand	-
BH15	11/3/13	15.00m	1	Ranging from made ground to fine sand (note made ground above mean high water spring)	-
BH18	13/3/13	14.00m	1	Ranging from made ground to fine sand (note made ground above mean high water spring)	-
BH24	12/3/13	14.50m	1	Ranging from made ground to fine sand (note made ground above mean high water spring)	-

Sample Preparation

Grabs were collected as a single sample for analysis while borehole locations were subdivided into samples from every metre. Key samples throughout the borehole core (deemed to be top, middle and bottom – 0.5m, 8.0m and 14m) were also scheduled. In addition samples at 6.0m were scheduled within boreholes BH10, BH11 and BH12 to provide further information for samples in the middle of the core.

The stainless steel (organic analysis) and plastic sampling spoons (inorganic analysis) were cleaned with seawater between samples. Once samples had been placed within appropriate containers, they were labelled and placed immediately into cool boxes with 2 x 2kg bags of ice to cool the samples prior to dispatch to ESG Scientifics for analysis.

4. ANALYTICAL RESULTS

The analytical results are detailed in the following sections. The analytical results are provided within Appendix 2.

4.1 Physical Analysis

4.1.1 Particle Size Distribution (PSD)

Particle Size Distribution data for each sample is included within Appendix 2. Sediments sampled within the harbour are reported as being gravels to silts. Field descriptions of the sediments and accompanying comment on sedimentology are included within Appendix 1 within the logs. Descriptions for each of the samples are provided in Table 4.1.

Table 4.1: Particle Size Analysis Results

Sample ID	Description
Grab 1	Sand
Grab 3	Silt with gravel
Grab 5	Sand
Grab 7	Sand
Grab 9	Sand
Grab 11	Sand
Grab 13	Sand with gravel
Grab 15	Sand with gravel
Grab 16	Sand with gravel
Grab 17	Sand
Grab 19	Silt with gravel
Grab 20	Sand
Grab 21	Sand
Grab 22	Sand
Grab 23	Sand
Grab 24	Sand with gravel
Grab 25	Sand
Grab 26	Sand
BH10-0.8	Gravelly silty sand
BH10-6.0	Sand and gravel
BH10-8.0	Gravelly sand
BH10-14.0	Sand
BH11-0.5	Gravelly sand
BH11-6.0	Sand
BH11-8.0	Sand
BH11-14.0	Sand
BH12-0.5	Clayey sand and gravel
BH12-6.0	Sand
BH12-8.0	Sand
BH12-14.0	Sand
BH15-0.5	Sand
BH15-8.0	Sand
BH15-15.0	Sand

BH18-0.5	Sand with gravel
BH18-10.0	Sand
BH18-14.0	Sand
BH24-0.5	Sand with gravel
BH24-8.0	Sand
BH24-14.0	Sand

4.1.2 Total Organic Carbon (TOC)

Table 4.2: TOC Results

Sample ID	Analysis*	Value[1]	Units
Grab 1	TOC	0.24	%w/w
Grab 3		0.14	
Grab 5		0.11	
Grab 7		0.09	
Grab 9		0.09	
Grab 11		0.08	
Grab 13		0.08	
Grab 15		0.07	
Grab 16		0.09	
Grab 17		0.10	
Grab 19		0.08	
Grab 20		0.08	
Grab 21		0.11	
Grab 22		0.09	
Grab 23		0.14	
Grab 24		0.27	
Grab 25		0.08	
Grab 26		0.15	
BH10-0.8		0.20	
BH10-6.0		0.12	
BH10-8.0		0.12	
BH10-14.0		0.25	
BH11-0.5		0.08	
BH11-6.0		0.12	
BH11-8.0		0.09	
BH11-14.0		0.16	
BH12-0.5		0.08	
BH12-6.0		0.09	
BH12-8.0		0.10	
BH12-14.0		0.12	

BH15-0.5		0.13	
BH15-8.0		0.09	
BH15-15.0		0.08	
BH18-0.5		0.12	
BH18-10.0		0.08	
BH18-14.0		0.08	
BH24-0.5		0.5	
BH24-8.0		0.07	
BH24-14.0		0.07	

4.2.1 Moisture Content

Table 4.3: Moisture Content

Sample ID	Analysis*	Value[1]	Units
Grab 1	Total Moisture	22.2	%
Grab 3		10.4	
Grab 5		17.1	
Grab 7		19.3	
Grab 9		17.7	
Grab 11		19.2	
Grab 13		16.7	
Grab 15		16.8	
Grab 16		17.4	
Grab 17		17.7	
Grab 19		14.2	
Grab 20		18.7	
Grab 21		18.5	
Grab 22		17.9	
Grab 23		20.8	
Grab 24		21.7	
Grab 25		17.2	
Grab 26		20.4	
BH10-0.8		8.5	
BH10-6.0		9.6	
BH10-8.0		11.8	
BH10-14.0		20.4	
BH11-0.5		3.7	
BH11-6.0		19.1	
BH11-8.0		16.3	
BH11-14.0		8.4	
BH12-0.5		8.3	
BH12-6.0		17.3	
BH12-8.0		16.3	
BH12-14.0		19.6	
BH15-0.5		4.6	
BH15-8.0		17.0	
BH15-15.0		12.3	
BH18-0.5		5.2	
BH18-10.0		18.5	
BH18-14.0		18.6	

BH24-0.5		4.5	
BH24-8.0		18.1	
BH24-14.0		19.3	

4.3 Chemical Analysis

4.3.1 Chemical Analysis Assessment Criteria

All chemical analytical results were assessed against Revised Action levels criteria as adopted by Marine Scotland. All exceedances are highlighted in red with any Action Level 2 exceedances both marked in red and highlighted in bold. Analytical Certificates are provided in Appendix C. The results have been adjusted to dry weight in line with the recorded moisture contents noted in Table 4.2.

4.3.2 Metals

A summary of the results is provided in Appendix C. One sample (Grab 24) recorded a concentration of zinc which exceeded the Action Level 1. The concentration did not exceed the Action Level 2. No other exceedances were recorded

4.3.3 Tributyl Tin (TBT)

A summary of the results is provided in Appendix C. No samples were recorded with values in excess of either Action Level 1 or Action Level 2.

4.3.4 Polyaromatic Hydrocarbons (PAHs)

A summary of the results is provided in Appendix C. The following samples recorded concentrations in exceedance of Action Level 1:

- BH10-14.0
- BH11-0.5
- BH11-8.0
- BH11-14.0
- Grab 3

There are no Action Level 2 values for PAHs.

4.3.5 Polychlorinated Biphenyls (PCBs) ICEs 7

No PCB congeners from the ICEs 7 list were recorded above AL1 in any of the samples collected.

5. SUMMARY

The sediment sampling can be summarized as follows:

- Nineteen grabs and six borehole cores were collected from Whiteness. The cores were collected up to a depth of 14m.
- The sediment material was classified as varying from gravel through to gravelly silt.

Table 5.1 summarises the results of the laboratory analysis with respect to the Action Levels adopted by Marine Scotland.

Table 5.1: Chemical Analysis Screening Summary

Sample ID	Metals		TBT		PAHs	PCBs	
Action Level	AL1	AL2	AL1	AL2	AL1	AL1	AL2
Grab 1	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 3	Pass	Pass	Pass	Pass	Fail for a few PAHS	Pass	Pass
Grab 5	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 7	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 9	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 11	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 13	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 15	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 16	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 17	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 19	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 20	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 21	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 22	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 23	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 24	Fail for zinc	Pass	Pass	Pass	Pass	Pass	Pass
Grab 25	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Grab 26	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH10-0.8	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH10-6.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH10-8.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH10-14.0	Pass	Pass	Pass	Pass	Fail for a few PAHS	Pass	Pass
BH11-0.5	Pass	Pass	Pass	Pass	Fail for a few PAHS	Pass	Pass
BH11-6.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH11-8.0	Pass	Pass	Pass	Pass	Fail for a few PAHS	Pass	Pass
BH11-14.0	Pass	Pass	Pass	Pass	Fail for a few PAHS	Pass	Pass
BH12-0.5	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH12-6.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH12-8.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH12-14.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH15-0.5	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH15-8.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH15-15.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH18-0.5	Pass	Pass	Pass	Pass	Pass	Pass	Pass

BH18-10.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH18-14.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH24-0.5	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH24-8.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass
BH24-14.0	Pass	Pass	Pass	Pass	Pass	Pass	Pass

6. REFERENCES

Marine Scotland, Dredging and Deposit of Solid Waste in the Territorial Sea and UK Controlled Waters Adjacent to Scotland Marine (Scotland) Act 2010;

Marine Scotland, Draft guidance for the Sampling and Analysis of Sediment and Dredged material to be Submitted in Support of Applications for Sea Disposal of Dredged material.

Appendix A
Figures

BOREHOLE SCHEDULE

REF.	LOCATION	SEABED LEVEL (C.D.)	BOREHOLE DEPTH (m)
BH10	279982.24E 858750.66N		
BH11	279932.27E 858724.05N		
BH12	279882.30E 858697.44N		
BH15	280129.03E 858467.90N	+5.9	16m
BH18	280172.84E 858438.91N	+5.9	30m
BH24	280400.83E 858303.84N	+5.9	16m

ALREADY COMPLETE

GRAB SAMPLE SCHEDULE

REF.	APPROX. LOCATION	REF.	APPROX. LOCATION	REF.	APPROX. LOCATION	REF.	APPROX. LOCATION	REF.	APPROX. LOCATION
G1	279665E 859342N	G7	279806E 859077N	G13	279947E 858812N	G19	280166E 858542N	G25	280241E 858415N
G2	REMOVED	G8	REMOVED	G14	REMOVED	G20	280300E 858585N	G26	280346E 858353N
G3	279569E 859291N	G9	279710E 859026N	G15	279851E 858761N	G21	280230E 858466N		
G4	REMOVED	G10	REMOVED	G16	279997E 858617N	G22	280366E 858466N		
G5	279687E 859184N	G11	279828E 858919N	G17	280103E 858617N	G23	280502E 858465N		
G6	REMOVED	G12	REMOVED	G18	280044E 858518N	G24	280431E 858347N		

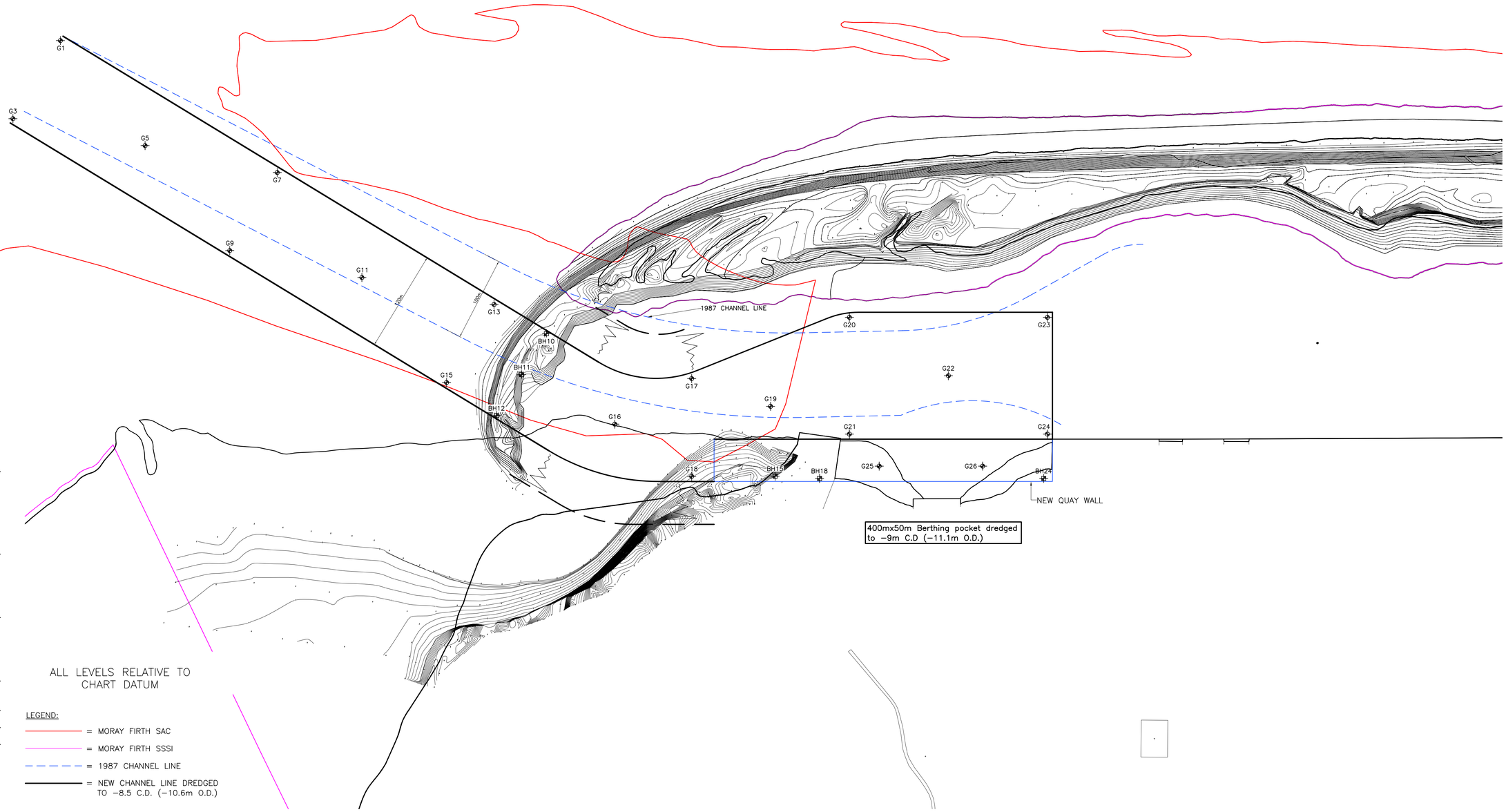
Yard Level +4.53m O.D. ▽ ▽ +6.6m C.D.

(2012) MHWS +2.1m O.D. ▽ ▽ +4.2m C.D.

O.D. ▽ ▽ +2.1m C.D.

MLWS −1.2m O.D. ▽ ▽ +0.9m C.D.

−2.1m O.D. ▽ ▽ C.D.



ALL LEVELS RELATIVE TO CHART DATUM

LEGEND:

= MORAY FIRTH SAC

= MORAY FIRTH SSSI

= 1987 CHANNEL LINE

= NEW CHANNEL LINE DREDGED TO −8.5 C.D. (−10.6m O.D.)

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PORT OF ARDERSIER

Project:
ARDERSIER PORT DEVELOPMENT

Drawing
CHANNEL DREDGE
PROPOSED BOREHOLE
& GRAB SAMPLE LOCATIONS

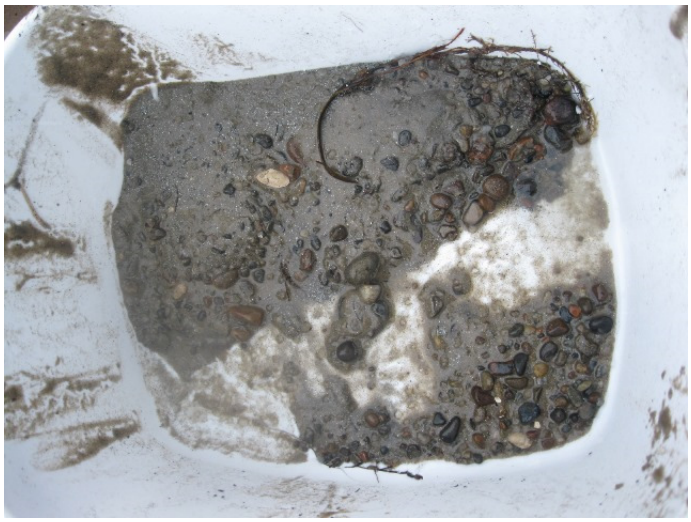
Drawing No. CA4393/1703
Drawn By BT
Date 04/03/13
Scale 1:2500
REV. A

Revisions	Date	By
A G2, G4, G6, G8, G10, G12 & G14 REMOVED. G25 & G26 ADDED.	05/03/13	BT
B B15 MOVED.	08/03/13	BT

Appendix B
Vibrocore Logs

Whiteness	Grab 1
Sample Date/Time:	13 March 2013 09:45 GMT
Position:	279665 859342
Number of Grabs :	2
Remarks:	Fine to medium brown sand with minor shell fragments and minor black specks (potentially black sand).

Whiteness	Grab 3
Sample Date/Time:	13 March 2013 12:30 GMT
Position:	279569 859291
Number of Grabs :	7
Remarks:	Medium brown sand and gravel with frequent shells, pebbles and twigs. Low volume recovered.



Whiteness	Grab 5
Sample Date/Time:	13 March 2013 12:15 GMT
Position:	279687 859184
Number of Grabs :	2
Remarks:	Fine to medium, light to medium brown sand with occasional shell fragments and bands of soft black sediment.

Whiteness	Grab 7
Sample Date/Time:	13 March 2013 12:10 GMT
Position:	279806 859077
Number of Grabs :	1
Remarks:	Fine to medium, light to medium brown sand with minor shell fragments and occasional pebbles.

Whiteness	Grab 9
Sample Date/Time:	13 March 2013 12:05 GMT
Position:	279710 859026
Number of Grabs :	1
Remarks:	Fine to medium, light brown sand with occassional shell fragments.

Whiteness	Grab 11
Sample Date/Time:	13 March 2013 10:50 GMT
Position:	279828 858919
Number of Grabs :	2
Remarks:	Fine to medium, light to medium brown sand with minor shell fragments.

Whiteness	Grab 13
Sample Date/Time:	12 March 2013 12:35 GMT
Position:	279947 858812
Number of Grabs :	2
Remarks:	Fine to medium, light to brown sand with minor shell fragments and rare black sediment lenses

Whiteness	Grab 15
Sample Date/Time:	12 March 2013 13:00 GMT
Position:	279851 858761
Number of Grabs :	2
Remarks:	Fine to medium, light to medium brown sand with frequent black specks and small pebbles.

Whiteness	Grab 16
Sample Date/Time:	13 March 2013 11:00 GMT
Position:	279997 858617
Number of Grabs :	2
Remarks:	Fine to medium, medium brown sand with frequent shell fragments.

Whiteness	Grab 17
Sample Date/Time:	13 March 2013 11:15 GMT
Position:	280103 858617
Number of Grabs :	2
Remarks:	Fine to coarse medium brown to dark grey sand with frequent black strata and strong sulphur odour.

Whiteness	Grab 19
Sample Date/Time:	12 March 2013 13:20 GMT
Position:	280166 858542
Number of Grabs :	2
Remarks:	Medium brown, medium to coarse sand with frequent shell fragments and small pebbles.

Whiteness	Grab 20
Sample Date/Time:	12 March 2013 11:45 GMT
Position:	280300 858585
Number of Grabs :	1
Remarks:	Fine to medium, light brown sand with minor shell fragments and minor black specks (potentially black sand).

Whiteness	Grab 21
Sample Date/Time:	12 March 2013 10:40 GMT
Position:	280230 858466
Number of Grabs :	1
Remarks:	Fine to medium, light brown sand with minor shell fragments and minor black specks (potentially black sand).

Whiteness	Grab 22
Sample Date/Time:	13 March 2013 12:00 GMT
Position:	280366 858466
Number of Grabs :	1
Remarks:	Fine to medium, light to medium brown sand with frequent minor black specks (potentially black sand).

Whiteness	Grab 23
Sample Date/Time:	12 March 2013 11:30 GMT
Position:	250502 858465
Number of Grabs :	1
Remarks:	Light to medium brown, fine to medium sand with rare fine black sediment lenses and minor shell fragments.

Whiteness	Grab 24
Sample Date/Time:	12 March 2013 11:00 GMT
Position:	280431 858347
Number of Grabs :	2
Remarks:	Fine brown sand with fine soft black sediment. Crabs and worms noted with minor shell fragments.

Whiteness	Grab 25
Sample Date/Time:	12 March 2013 10:20 GMT
Position:	280241 858415
Number of Grabs :	1
Remarks:	Fine to medium, light brown sand with minor shell fragments.

Whiteness	Grab 26
Sample Date/Time:	12 March 2013 10:30 GMT
Position:	280346 858353
Number of Grabs :	1
Remarks:	Fine to medium, light to medium brown sand with minor shell fragments and small black specks (potentially anthropogenic).

BOREHOLE LOG

Project				BOREHOLE No
Whiteness Spit, Ardersier				10
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12159-01	05-02-13	4.81		
Contractor				Sheet
Blake Geoservices Ltd - www.blake-geoservices.co.uk -				1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
0.50	ES			4.01		(0.80) 0.80	Brown, slightly sandy, GRAVEL, with many rounded cobbles. Gravel and cobbles of mixed lithologies, sand is fine to coarse, gravel is well rounded to subangular.		
1.00	B/T						Brown, SAND & GRAVEL, with occasional rounded cobbles. Gravel and cobbles of mixed lithologies, sand is fine to coarse, gravel is well rounded to subangular.		
2.00	B/T								
2.00	ES					(3.20)			
3.00	B/T		1						
				0.81		4.00			
4.00	B/T						Reddish brown, very gravelly SAND, with occasional rounded cobbles. Gravel and cobbles of mixed lithologies, sand is fine to coarse, gravel is well rounded to subangular.		
4.00	ES								
5.00	B/T					(2.50)			
6.00	B/T								
6.00	ES			-1.69		6.50			
7.00	B/T					(1.20)	Grey, slightly gravelly SAND. Gravel of mixed lithologies, sand is fine to coarse, gravel is well rounded to subangular.		
				-2.89		7.70			
8.00	B/T						Grey, fine to coarse SAND.		
8.00	ES								
9.00	B/T								
10.00	B/T								
10.00	ES								
11.00	B/T					(7.30)			
12.00	B/T								
12.00	ES								
13.00	B/T								
14.00	B/T								
14.00	ES								
				-10.19		15.00			
15.00	B/T								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
06-02-13	10.00	15.00	15.00		3.50						Borehole backfilled with arisings.

All dimensions in metres Scale 1:100	Client Envirocentre Ltd	Method/ Plant Used Cable Percussive	Logged By RC

AGS3 UK BH 12159 ARDERSIER SPIT.GPJ AGS 3_1.GDT 19/2/13

BOREHOLE LOG

Project				BOREHOLE No
Whiteness Spit, Ardersier				11
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12159-01	07-02-13	4.10		
Contractor				Sheet
Blake Geoservices Ltd - www.blake-geoservices.co.uk -				1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
0.50	ES						Brown, gravelly SAND, with many rounded cobbles. Gravel and cobbles of mixed lithologies, sand is fine to coarse, gravel is well rounded to subangular.		
1.00	B/T								
2.00	B/T					(4.00)			
2.00	ES								
3.00	B/T								
				0.10		4.00			
4.00	B/T						Grey, slightly gravelly, fine to coarse SAND, gravel is subrounded to subangular of mixed lithologies.		
4.00	ES								
5.00	B/T					(2.00)			
				-1.90		6.00			
6.00	B/T						Grey, fine to coarse SAND.		
6.00	ES								
7.00	B/T								
8.00	B/T								
8.00	ES								
9.00	B/T								
10.00	B/T								
10.00	ES					(9.00)			
11.00	B/T								
12.00	B/T								
12.00	ES								
13.00	B/T								
14.00	B/T								
14.00	ES								
				-10.90		15.00			
15.00	B/T								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
10-02-13	10.00	15.00	15.00		2.00						Borehole backfilled with arisings.

All dimensions in metres Scale 1:100	Client Envirocentre Ltd	Method/ Plant Used Cable Percussive	Logged By RC

AGS3 UK BH 12159 ARDERSIER SPIT.GPJ AGS 3_1.GDT 19/2/13

BOREHOLE LOG

Project				BOREHOLE No
Whiteness Spit, Ardersier				12
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12159-01	12-02-13	5.20		
Contractor				Sheet
Blake Geoservices Ltd - www.blake-geoservices.co.uk -				1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
0.50	ES						Brown, gravelly SAND, with many rounded cobbles. Gravel and cobbles of mixed lithologies, sand is fine to coarse, gravel is well rounded to subangular.		
1.00	B/T								
2.00	B/T					(4.50)			
2.00	ES		1						
3.00	B/T								
4.00	B/T			0.70		4.50			
4.00	ES						Grey, slightly gravelly, fine to coarse SAND, gravel is subrounded to subangular of mixed lithologies.		
5.00	B/T					(2.00)			
6.00	B/T			-1.30		6.50			
6.00	ES						Grey, fine to coarse, SAND.		
7.00	B/T								
8.00	B/T								
8.00	ES								
9.00	B/T								
10.00	B/T								
10.00	ES					(8.50)			
11.00	B/T								
12.00	B/T								
12.00	ES								
13.00	B/T								
14.00	B/T								
14.00	ES			-9.80		15.00			

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
19-02-13	11.00	15.00	15.00		2.70						Borehole backfilled with arisings.

All dimensions in metres Scale 1:100	Client Envirocentre Ltd	Method/ Plant Used Cable Percussive	Logged By CB

AGS3 UK BH 12159 ARDERSIER SPIT.GPJ AGS 3_1.GDT 19/2/13

BOREHOLE LOG

Project				BOREHOLE No
Whiteness Yard, Ardersier				15
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12159-02	11-03-13			
Contractor				Sheet
Blake Geoservices Ltd - www.blake-geoservices.co.uk -				1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
						0.60	MADE GROUND (Light brown SAND & GRAVEL, with occasional subrounded boulders of schist, angular boulder sized fragments of concrete, and occasional cobble sized angular fragments of metal, plastic and textile)		
0.50	ES								
1.00	B								
1.00	D					(1.90)	Light brown, dense, gravelly to very gravelly, SAND. Sand is fine to coarse, gravel is rounded to angular of mixed lithologies.		
1.50		N48	1						
2.00	B					2.50			
2.00	D								
2.00	ES						Light brown, dense, fine to coarse, SAND.		
3.00	B								
3.00	D					(2.00)			
3.00		N32							
4.00	B					4.50			
4.00	D								
4.00	ES						Light brown, loose, fine to coarse, SAND.		
4.50		N9				(1.50)			
						6.00			
6.00	B						Light brown, dense, fine to coarse, SAND.		
6.00	D								
6.00	ES					(1.50)			
6.00		N33							
						7.50			
7.50		N9					Light brown, loose, fine to coarse, SAND.		
8.00	B								
8.00	D					(2.00)			
8.00	ES								
9.00	B					9.50			
9.00	D								
							Light grey, fine to coarse, SAND.		
10.00	B								
10.00	D								
10.00	ES								
11.00	B								
11.00	D								
12.00	B					(5.50)			
12.00	D								
12.00	ES								
14.00	B								
14.00	D								
14.00	ES					15.00			
15.00	B								
15.00	D								
15.00	ES								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
11-03-13	17.00	9.50	9.50		2.00						Borehole backfilled with arisings. Borehole casing backfilling with upwelling sand.
12-03-13	12.00	15.00	15.00		2.00						

All dimensions in metres Scale 1:100	Client Envirocentre Ltd	Method/ Plant Used Cable Percussive	Logged By RC

AGS3 UK BH 12159-02 WHITENESS.GPJ AGS 3_1.GDT 18/3/13

BOREHOLE LOG

Project				BOREHOLE No
Whiteness Yard, Ardersier				18
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12159-02	13-03-13			
Contractor				Sheet
Blake Geoservices Ltd - www.blake-geoservices.co.uk -				1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
						0.50	MADE GROUND (Light brown SAND & GRAVEL, with occasional cobble sized angular fragments of metal & wood)		
0.50	ES						Light brown, dense, gravelly, SAND. Sand is fine to coarse, gravel is rounded to angular of mixed lithologies.		
1.00	B					(1.20)			
1.00	D					1.70			
1.50		N35					Light brown, very dense, fine to coarse, SAND.		
2.00	B		1						
2.00	D					(1.70)			
2.00	ES								
3.00		N>50				3.40			
							Light grey, very dense, fine to coarse, SAND.		
4.00	B								
4.00	D								
4.00	ES								
4.50		N>50							
6.00	B								
6.00	D								
6.00	ES								
6.00		N>50				(7.10)			
7.00	ES								
7.50		N>50							
8.00	B								
8.00	D								
9.00		N>50							
10.00	B								
10.00	D					10.50			
10.00	ES						Light grey, fine to coarse, SAND.		
10.50		N>50							
12.00	B					(3.50)			
12.00	D								
12.00	ES								
						14.00			
14.00	B								
14.00	D								
14.00	ES								

Boring Progress and Water Observations						Chiselling			Water Added	
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To
13-03-13	17.00	14.00	14.00		2.50					

GENERAL REMARKS

Borehole backfilled with arisings. Borehole casing backfilling with upwelling sand.

All dimensions in metres Scale 1:100	Client Envirocentre Ltd	Method/ Plant Used Cable Percussive	Logged By RC

AGS3 UK BH 12159-02 WHITENESS.GPJ AGS 3_1.GDT 18/3/13

BOREHOLE LOG

Project				BOREHOLE No
Whiteness Yard, Ardersier				**24**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12159-02	12-03-13			
Contractor				Sheet
Blake Geoservices Ltd - www.blake-geoservices.co.uk -				1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
						0.30	MADE GROUND (Light brown SAND & GRAVEL, with occasional cobble sized angular fragments of metal, wood and textile)		
0.50	ES					1.00	Light brown, gravelly, SAND. Sand is fine to coarse, gravel is rounded to angular of mixed lithologies.		
1.00	B						Light brown, dense, fine to coarse, SAND.		
1.00	D								
1.50		N34							
2.00	B		▼1						
2.00	D					(3.00)			
2.00	ES								
3.00	B								
3.00	D								
3.00		N40				4.00			
4.00	B						Light grey, very dense, fine to coarse, SAND.		
4.00	D								
4.00	ES								
4.50		N>50							
						(3.50)			
6.00	B								
6.00	D								
6.00	ES								
6.00		N>50				7.50			
7.50		N>50					Light grey, fine to coarse, SAND.		
8.00	B								
8.00	D								
8.00	ES								
10.00	B								
10.00	D								
10.00	ES					(7.00)			
12.00	B								
12.00	D								
12.00	ES								
14.00	B								
14.00	D					14.50			
14.00	ES								
14.50	ES								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
12-03-13	17.00	14.50	14.50		2.50						Borehole backfilled with arisings. Borehole casing backfilling with upwelling sand.

All dimensions in metres Scale 1:100	Client Envirocentre Ltd	Method/ Plant Used Cable Percussive	Logged By RC

AGS3 UK BH 12159-02 WHITENESS.GPJ AGS 3_1.GDT 18/3/13

Appendix C
Analytical Results

		Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Zinc (MS)	^Dibutyltin	^Tributyltin	^Triphenyltin	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo[a]anthracene	Chrysene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene	Dibenzo[a,h]anthracene	Benzo[g,h,i]perylene	Total (USEPA16) PAHs	PCB28	PCB52	PCB101	PCB118	PCB153	PCB138	PCB180
		ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	Sub005	Sub005	Sub005	AH_MS-SIM_8	PAH_MS-SIM_80	PAH_MS-SIM_80	H_MS-SIM	PAH_MS-SIM_80	PAH_MS-SIM_80	PAH_MS-SIM_80	H_MS-SIM	PAH_MS-SIM_80	PAH_MS-SIM_80	PAH_MS-SIM_80	PAH_MS-SIM_80	PAH_MS-SIM_80	PAH_MS-SIM_80	PAH_MS-SIM_80	PAH_MS-SIM_80	PAH_MS-SIM_80	PCB_CON	PCB_CON	PCB_CON	PCB_CON	PCB_CON	PCB_CON	PCB_CON
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
	Action Level 1	20	0.4	50	30	50	0.25	30	130	100		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	20	20	20	20	20	20	20	20
	Action Level 2	70	4	370	300	400	1.5	150	600	500																			180	180	180	180	180	180	180	180
BH10 0.80		2.076502732	<0.1	11.14754098	6.01092896	5.355191	0.142076503	7.21311475	24.2623	27.32240437	42.62295082		<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH10 8.00		1.473922902	<0.1	6.12244898	2.72108844	2.947846	<0.1	3.62811791	14.05896	<5.0	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH10 14.00		1.507537688	<0.1	7.663316583	2.38693467	4.773869	<0.1	4.0201005	39.82412	<5.0	54.0201005	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	0.33919598	0.238693	0.653266332	0.452261307	0.929648241	0.376884422	0.690954774	0.351758794	<0.08	0.326633166	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH11 0.50		1.038421599	<0.1	5.919003115	1.45379024	2.492212	<0.1	2.18068536	13.49948	<5.0	42.57528557	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	0.114226376	<0.08	0.218068536	0.15576324	0.446521288	0.197300104	0.342679128	0.20768432	<0.08	0.20768432	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH11 14.00		1.200873362	<0.1	5.349344978	0.98253275	2.292576	<0.1	2.72925764	31.00437	<5.0	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	0.305676856	0.131004367	0.229257642	0.174672489	<0.08	0.141921397	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH11 8.00		1.314217443	<0.1	5.615292712	1.07526882	2.150538	<0.1	3.22580645	20.66906	<5.0	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	0.143369176	0.107526882	0.442054958	0.191158901	0.334528076	0.215053763	<0.08	0.191158901	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH12 0.50		1.417666303	<0.1	13.84950927	6.76117775	5.343511	<0.1	8.28789531	23.00981	102.5081788	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH12 14.00		2.114427861	<0.1	7.711442786	5.2238806	9.577114	<0.1	10.9452736	40.29851	186.5671642	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH12 8.00		1.433691756	<0.1	5.615292712	1.67264038	2.270012	<0.1	2.98685783	16.60693	47.78972521	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH10 6.00		1.659292035	<0.1	7.743362832	4.86725664	5.420354	<0.1	4.6460177	23.11947	50.88495575	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH11 6.00		1.483312732	<0.1	5.686032138	2.1013597	2.224969	<0.1	2.96662546	30.53152	55.62422744	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH12 6.00		1.088270859	<0.1	4.836759371	1.69286578	2.055623	<0.1	2.66021765	14.51028	53.20435308	<20	<20	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.28	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BH15 0.50		2.725366876	<0.2	13.73165618	28.3018868	19.81132	<0.5	7.65199161	161.3208	<21.0	<21.0	<21.0	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.34	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99
BH15 15.00		1.482326112	<0.2	5.131128848	<1.6	2.052452	<0.5	2.62257697	22.12087	<22.8	<22.8	<22.8	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<1.46	<4.88	<4.88	<4.88	<4.88	<4.88	<4.88	<4.88
BH15 8.00		1.56626506	<0.2	4.939759036	2.04819277	2.409639	<0.5	2.65060241	<15.9	<24.1	<24.1	<24.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.54	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96
BH18 10.00		0.981595092	<0.2	4.539877301	2.08588957	2.331288	<0.5	2.45398773	26.99387	60.1	<21.1	<21.1	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.35	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95
BH18 14.00		5.97826087	<0.2	22.82608696	<1.6	9.23913	<0.5	11.41130435	138.0435	47.9	<24.5	<24.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.57	<4.92	<4.92	<4.92	<4.92	<4.92	<4.92	<4.92
BH24 0.50		1.047120419	<0.2	3.560209424	2.19895288	2.408377	<0.5	<2	18.84817	115.5	<24.6	<24.6	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.57	<5.07	<5.07	<5.07	<5.07	<5.07	<5.07	<5.07
BH24 14.00		1.36307311	<0.2	4.089219331	<1.6	1.858736	<0.5	2.47831475	21.56134	37.7	<20.9	<20.9	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<1.34	<4.97	<4.97	<4.97	<4.97	<4.97	<4.97	<4.97
BH24 8.00		1.221001221	<0.2	3.540903541	<2	1.709402	<0.5	<2	<15.8	38.4	<24.8	<24.8	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.59	<4.90	<4.90	<4.90	<4.90	<4.90	<4.90	<4.90
G1		2.956298201	0.347043702	8.997429306	4.24164524	5.012853	<0.5	4.88431877	<15.8	<24.4	<24.4	<24.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.56	<4.93	<4.93	<4.93	<4.93	<4.93	<4.93	<4.93
G11		1.485148515	<0.2	3.836633663	<1.6	1.856436	<0.5	<2	<15.8	<24.8	<37.1	<24.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.58	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98
G13		1.320528211	<0.2	7.202881152	<1.6	2.761104	<0.5	<2	<15.8	<24.0	<36.0	<24.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.54	<4.92	<4.92	<4.92	<4.92	<4.92	<4.92	<4.92
G15		1.442307692	<0.2	5.649038462	2.04326923	2.283654	<0.5	<2	<15.8	<24.0	<36.1	<24.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.54	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25
G16		1.452784504	<0.2	4.842615012	2.05811138	2.179177	<0.5	<2	<15.8	41.2	<36.3	<24.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.55	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95
G17		1.44057623	<0.2	3.961584634	<1.6	1.920768	<0.5	<2	<15.8	<24.3	<36.5	<24.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.56	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96
G19		1.981351981	<0.2	5.011655012	7.22610723	5.011655	<0.5	3.61305361	33.79953	78.1	<35.0	<23.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.49	<4.90	<4.90	<4.90	<4.90	<4.90	<4.90	<4.90
G20		1.2300123	<0.2	3.19803198	<1.6	1.599016	<0.5	<2	<15.8	30.8	<36.9	<24.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.57	<5.04	<5.04	<5.04	<5.04	<5.04	<5.04	<5.04
G21		1.226993865	<0.2	4.171779141	2.6993865	2.331288	<0.5	<2	<15.8	42.9	<36.8	<24.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.57	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98
G22		1.218026797	<0.2	4.019488429	2.31425091	2.070646	<0.5	<2	<15.8	30.5	<36.5	<24.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.56	<4.97	<4.97	<4.97	<4.97	<4.97	<4.97	<4.97
G23		1.641414141	<0.2	4.797979798	2.02020202	2.020202	<0.5	2.65151515	<15.8	<25.3	<37.9	<25.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.62	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
G24		4.853128991	<0.2	14.55938697	73.6909323	46.10473	<0.5	8.81226054	526.8199	90.7	<38.3	<25.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.63	<5.10	<5.10	<5.10	<5.10	<5.10	<5.10	<5.10
G25		1.449275362	<0.2	3.743961353	3.38164251	2.536232	<0.5	<2	<15.8	<24.2	<36.2	<24.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.55	<5.05	<5.05	<5.05	<5.05	<5.05	<5.05	<5.05
G26		2.010050251	<0.2	7.914572864	3.22633166	5.011655	<0.5	3.76884422	20.60302	<25.1	<37.7	<25.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.61	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99
G27		1.734820322	<0.2	5.824039653	2.9739777	2.230483	<0.5	2.9739777	<15.8	27.3	<37.2	<24.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.59	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95
G28		1.356350185	<0.2	5.055487053	<1.6	2.096178	<0.5	<2	<15.8	39.5	<37.0	<24.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.58	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99
G3		2.34375	<0.2	8.147321429	2.90178571	4.241071	<0.5	4.46428571	<15.8	70.3	<33.5	<22.3	<0.1	<0.1	<0.1	0.111607	<0.1	0.357142857	0.301339286	0.178571	0.178571429	0.145089286	#VALUE!	0.145089286	<0.1	<0.1	<0.1	<0.1	<2.09	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98
G5		1.326899879	<0.2	3.860072376	<1.6	2.291918	<0.5	<2	<15.8	68.8	<36.2	<24.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.54	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96
G7		1.36307311	<0.2	3.965303594	<1.6	2.106568	<0.5	<2	<15.8	58.2	<37.2	<24.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.59	<5.02	<5.02	<5.02	<5.02	<5.02	<5.02	<5.02
G9		1.336573512	<0.2	3.645200486	<1.6	1.8226	<0.5	<2	<15.8	94	<36.5	<24.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.56	<5.01	<5.01	<5.01	<5.01	<5.01	<5.01	<5.01

Our Ref: EFS/131009 (Ver. 2)
Your Ref:

March 21, 2013

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

[Redact
EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

For the attention of [Redact

Dear [Reda

Soil Sample Analysis - Whiteness

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 29/03/13 when they will be discarded. Please call 01283 554467 for an extension of this date.
Please be aware that our policy for the retention of paper based laboratory records and analysis reports is 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Laboratory and Analytical) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for ESG
[Redacted]

Project Co-ordinator
[Redacted]

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Report No. EFS/131009 (Ver. 2)

EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

Site: Whiteness

The 4 samples described in this report were registered for analysis by ESG on 15-Feb-2013. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 21-Mar-2013

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by ESG.

The following tables are contained in this report:

[Redacted]

On behalf of
ESG :

Date of Issue: 21-Mar-2013

[Redacted] Operations Director
Laboratory and Analytical Business

Tests marked '^' have been subcontracted to another laboratory.

ESG accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	ug/kg	ug/kg	ug/kg		% M/M	mg/kg
Method Codes :			ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	TMSS	PCBUSECDAR	Sub005	Sub005	Sub005	Sub018	WSLM59	PAHMSUS
Method Reporting Limits :			0.3	0.1	0.5	0.5	0.5	0.1	0.5	3	0.2		5	5	20		0.02	
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	Yes
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Zinc (MS)**	**Tot.Moisture @ 105C**	**PCB-7 Congeners Analysis**	**^Dibutyltin**	**^Tributyltin**	**^Triphenyltin**	**^Particle Size Dist**	**Total Organic Carbon**	**PAH (16) by GCMS**
1304163	BH10 14.00	05-Feb-13	1.2	<0.1	6.1	1.9	3.8	<0.1	3.2	31.7	20.4	Req	<5.0	43.0	<20.0	Req	0.20	Req
1304164	BH11 0.50	06-Feb-13	1	<0.1	5.7	1.4	2.4	<0.1	2.1	13	3.7	Req	<5.0	41.0	<20.0	Req	0.08	Req
1304166	BH11 14.00	06-Feb-13	1.1	<0.1	4.9	0.9	2.1	<0.1	2.5	28.4	8.4	Req	<5.0	<5.0	<20.0	Req	0.15	Req
1304165	BH11 8.00	06-Feb-13	1.1	<0.1	4.7	0.9	1.8	<0.1	2.7	17.3	16.3	Req	<5.0	<5.0	<20.0	Req	0.08	Req

ESG Environmental Scientifics Group
Bretby Business Park, Ashby Road
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Client Name EnviroCentre Ltd

Contact [Redac

Whiteness

Soil Sample Analysis

Date Printed	**21-Mar-2013**
Report Number	**EFS/131009**
Table Number	**1**

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH10 14.00	**Job Number:**	S13_1009
LIMS ID Number:	CL1304163	**Date Booked in:**	15-Feb-13
QC Batch Number:	130124	**Date Extracted:**	18-Feb-13
Quantitation File:	Initial Calibration	**Date Analysed:**	19-Feb-13
Directory:	1913PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	5.79	0.18	98
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	7.16	0.27	100
Pyrene	129-00-0	7.45	0.19	97
Benzo[a]anthracene	56-55-3	9.16	0.52	98
Chrysene	218-01-9	9.21	0.36	96
Benzo[b]fluoranthene	205-99-2	10.70	0.74	90
Benzo[k]fluoranthene	207-08-9	10.74	0.30	94
Benzo[a]pyrene	50-32-8	11.13	0.55	98
Indeno[1,2,3-cd]pyrene	193-39-5	12.52	0.28	96
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-
Benzo[g,h,i]perylene	191-24-2	12.83	0.26	98
Total (USEPA16) PAHs	-	-	< 4.13	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	88
Acenaphthene-d10	88
Phenanthrene-d10	89
Chrysene-d12	82
Perylene-d12	80

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	106
Terphenyl-d14	90

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH11 0.50	**Job Number:**	S13_1009
LIMS ID Number:	CL1304164	**Date Booked in:**	15-Feb-13
QC Batch Number:	130124	**Date Extracted:**	18-Feb-13
Quantitation File:	Initial Calibration	**Date Analysed:**	19-Feb-13
Directory:	1913PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	5.79	0.10	99
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	7.16	0.11	96
Pyrene	129-00-0	-	< 0.08	-
Benzo[a]anthracene	56-55-3	9.16	0.21	96
Chrysene	218-01-9	9.21	0.15	97
Benzo[b]fluoranthene	205-99-2	10.70	0.43	92
Benzo[k]fluoranthene	207-08-9	10.74	0.19	91
Benzo[a]pyrene	50-32-8	11.13	0.33	99
Indeno[1,2,3-cd]pyrene	193-39-5	12.52	0.20	98
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-
Benzo[g,h,i]perylene	191-24-2	12.83	0.20	94
Total (USEPA16) PAHs	-	-	< 2.48	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	93
Acenaphthene-d10	90
Phenanthrene-d10	91
Chrysene-d12	83
Perylene-d12	81

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	104
Terphenyl-d14	90

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH11 8.00	**Job Number:**	S13_1009
LIMS ID Number:	CL1304165	**Date Booked in:**	15-Feb-13
QC Batch Number:	130124	**Date Extracted:**	18-Feb-13
Quantitation File:	Initial Calibration	**Date Analysed:**	19-Feb-13
Directory:	1913PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	-	< 0.08	-
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	-	< 0.08	-
Pyrene	129-00-0	-	< 0.08	-
Benzo[a]anthracene	56-55-3	9.16	0.12	92
Chrysene	218-01-9	9.21	0.09	94
Benzo[b]fluoranthene	205-99-2	10.70	0.37	82
Benzo[k]fluoranthene	207-08-9	10.74	0.16	83
Benzo[a]pyrene	50-32-8	11.13	0.28	99
Indeno[1,2,3-cd]pyrene	193-39-5	12.52	0.18	98
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-
Benzo[g,h,i]perylene	191-24-2	12.83	0.16	96
Total (USEPA16) PAHs	-	-	< 2.08	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	88
Acenaphthene-d10	87
Phenanthrene-d10	86
Chrysene-d12	76
Perylene-d12	70

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	97
Terphenyl-d14	83

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH11 14.00	**Job Number:**	S13_1009
LIMS ID Number:	CL1304166	**Date Booked in:**	15-Feb-13
QC Batch Number:	130124	**Date Extracted:**	18-Feb-13
Quantitation File:	Initial Calibration	**Date Analysed:**	19-Feb-13
Directory:	1913PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	-	< 0.08	-
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	-	< 0.08	-
Pyrene	129-00-0	-	< 0.08	-
Benzo[a]anthracene	56-55-3	-	< 0.08	-
Chrysene	218-01-9	-	< 0.08	-
Benzo[b]fluoranthene	205-99-2	10.70	0.28	66
Benzo[k]fluoranthene	207-08-9	10.74	0.12	92
Benzo[a]pyrene	50-32-8	11.13	0.21	99
Indeno[1,2,3-cd]pyrene	193-39-5	12.51	0.16	99
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-
Benzo[g,h,i]perylene	191-24-2	12.83	0.13	98
Total (USEPA16) PAHs	-	-	< 1.78	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	92
Acenaphthene-d10	91
Phenanthrene-d10	92
Chrysene-d12	83
Perylene-d12	79

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	101
Terphenyl-d14	88

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polychlorinated Biphenyls (congeners)

Customer and Site Details:	EnviroCentre Ltd: Whiteness	**Matrix:**	SOIL
Job Number:	S13_1009	**Date Booked in:**	15-Feb-13
QC Batch Number:	130035	**Date Extracted:**	18-Feb-13
Directory:	0218PCB.GC8	**Date Analysed:**	19-Feb-13
Method:	Ultrasonic		

*** This sample data is not UKAS accredited.**

			Concentration, (µg/kg)						
	Sample ID	**Customer ID**	**PCB28**	**PCB52**	**PCB101**	**PCB118**	**PCB153**	**PCB138**	**PCB180**
*	CL1304163	BH10 14.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
*	CL1304164	BH11 0.50	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
*	CL1304165	BH11 8.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
*	CL1304166	BH11 14.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00

Where individual results are flagged see report notes for status.

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ESG Environmental Scientifics Group

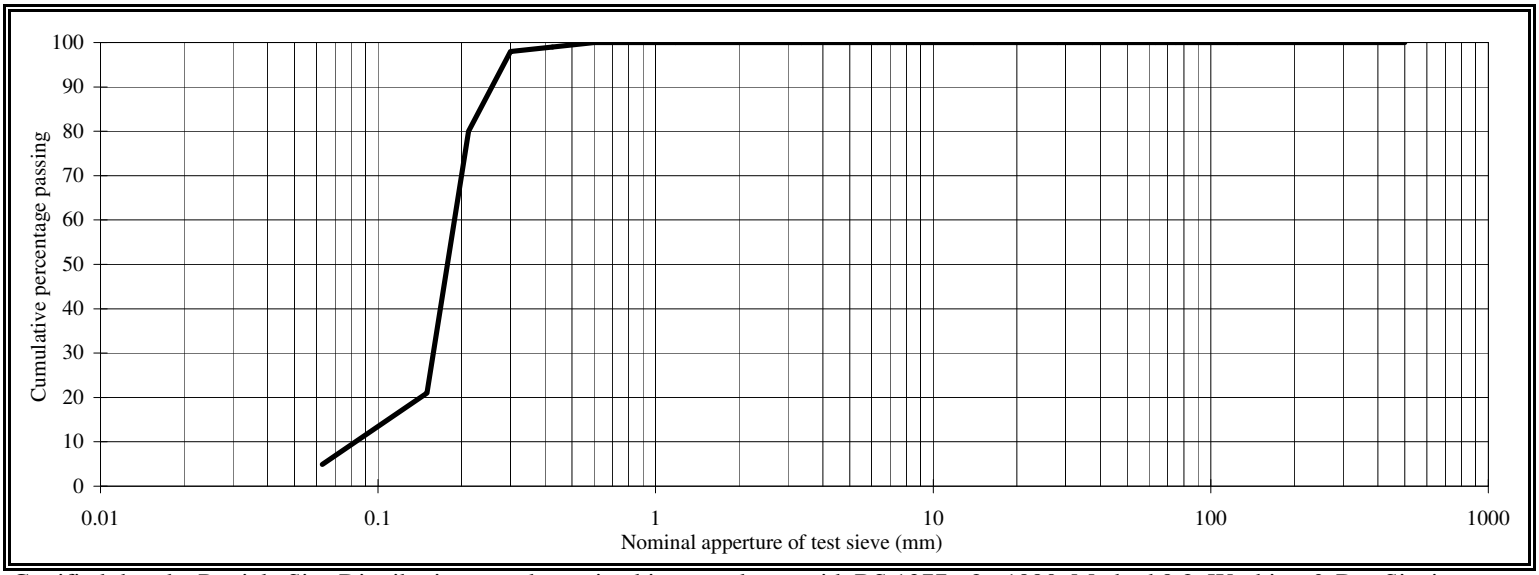
UKAS TESTING
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50170642/13/01
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040049 45178397
Postcode:	DE15 0XD	Client Ref:	S1304163
		Location:	BH10
		Depth (m):	14.00
Site:	Job Number: S131009		
		Date Sampled:	Not Advised
Sampled by:	Client	Date Received:	20.02.13
Sampled from:	Site	Date Tested:	22.02.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.2
Description:	Grey brown SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	99	
0.300	98	
0.212	80	
0.150	21	
0.063	4.9	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

[Redacted]

Page: 1 of 1
Date: 26.02.13

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

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ESG Environmental Scientifics Group

UKAS TESTING
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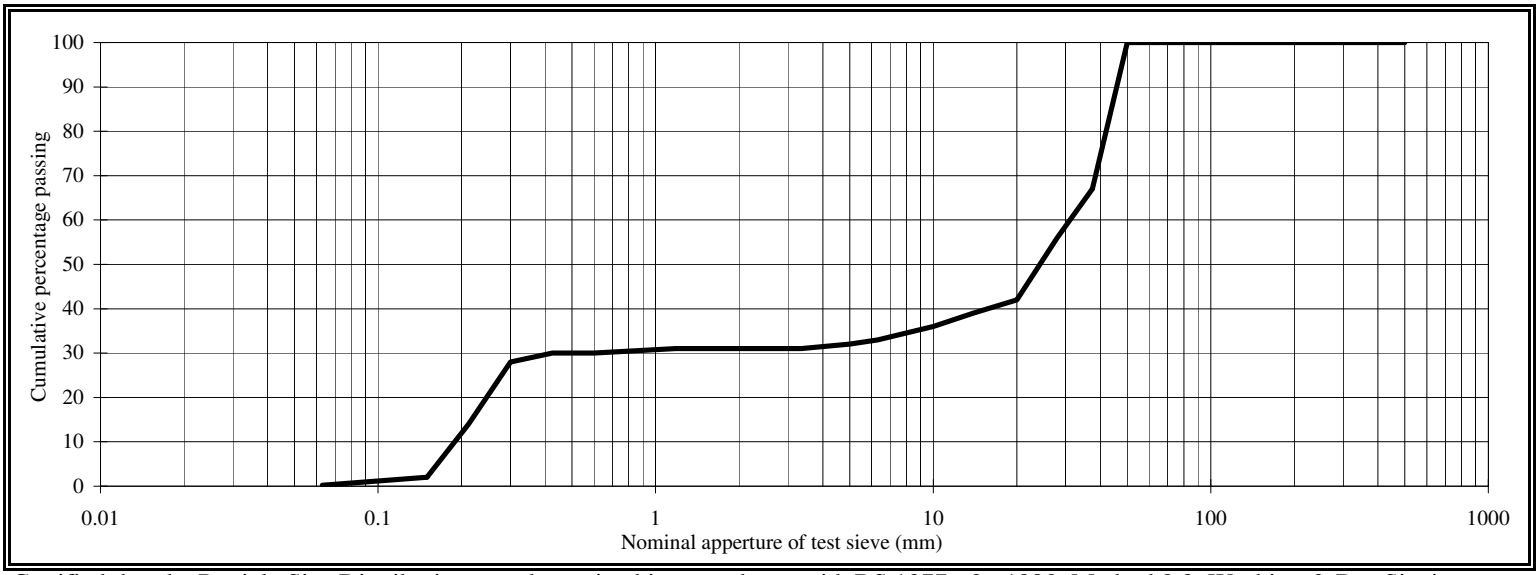
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50170642/13/02
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040049 45178398
Postcode:	DE15 0XD	Client Ref: Location: Depth (m):	S1304164 BH11 0.50
Site:	Job Number: S131009		
		Date Sampled:	Not Advised
Sampled by:	Client	Date Received:	20.02.13
Sampled from:	Site	Date Tested:	22.02.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.2
Description:	Brown gravelly SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS

BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	67	
28	56	
20	42	
14	39	
10	36	
6.3	33	
5	32	
3.35	31	
2	31	
1.18	31	
0.600	30	
0.425	30	
0.300	28	
0.212	14	
0.150	2	
0.063	0.2	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

[Redacted]

Page: 1 of 1
Date: 26.02.13

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

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ESG Environmental Scientifics Group

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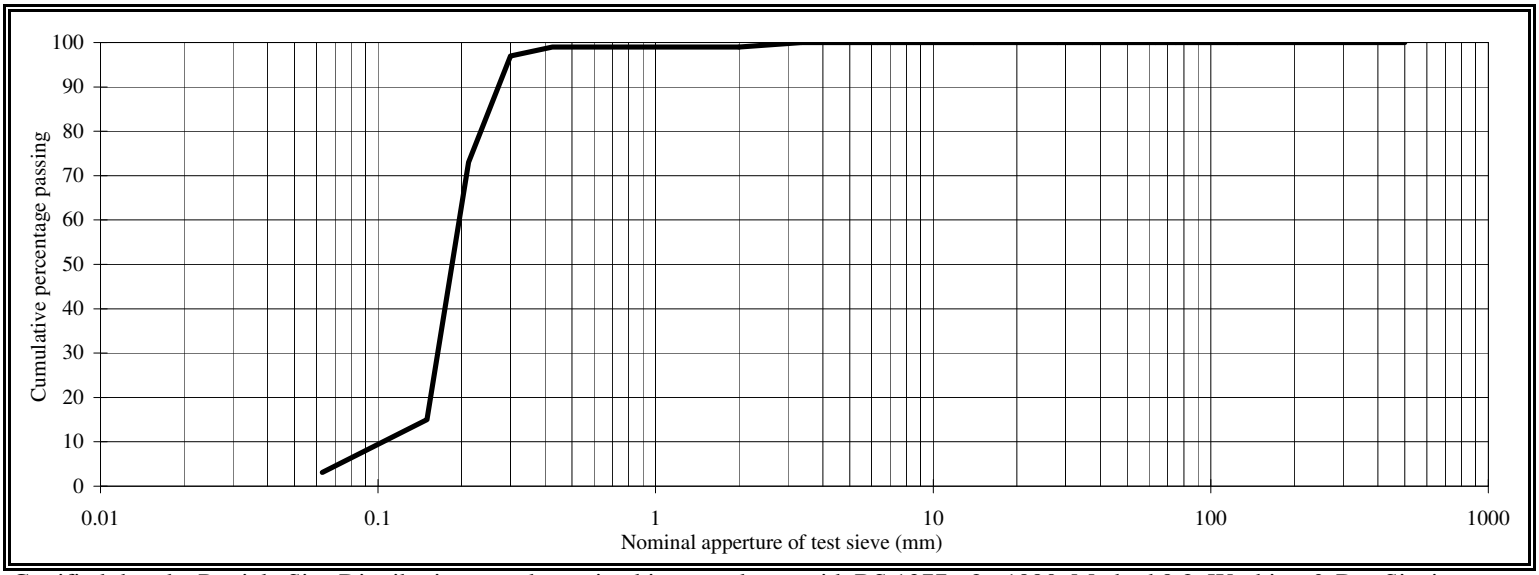
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50170642/13/03
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040049 45178399
Postcode:	DE15 0XD	Client Ref: Location: Depth (m):	S1304165 BH11 8.00
Site:	Job Number: S131009		
		Date Sampled:	Not Advised
Sampled by:	Client	Date Received:	20.02.13
Sampled from:	Site	Date Tested:	22.02.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.1
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS

BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	99	
1.18	99	
0.600	99	
0.425	99	
0.300	97	
0.212	73	
0.150	15	
0.063	3.1	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 26.02.13

[Redacted]

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

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Northants NN11 8RR
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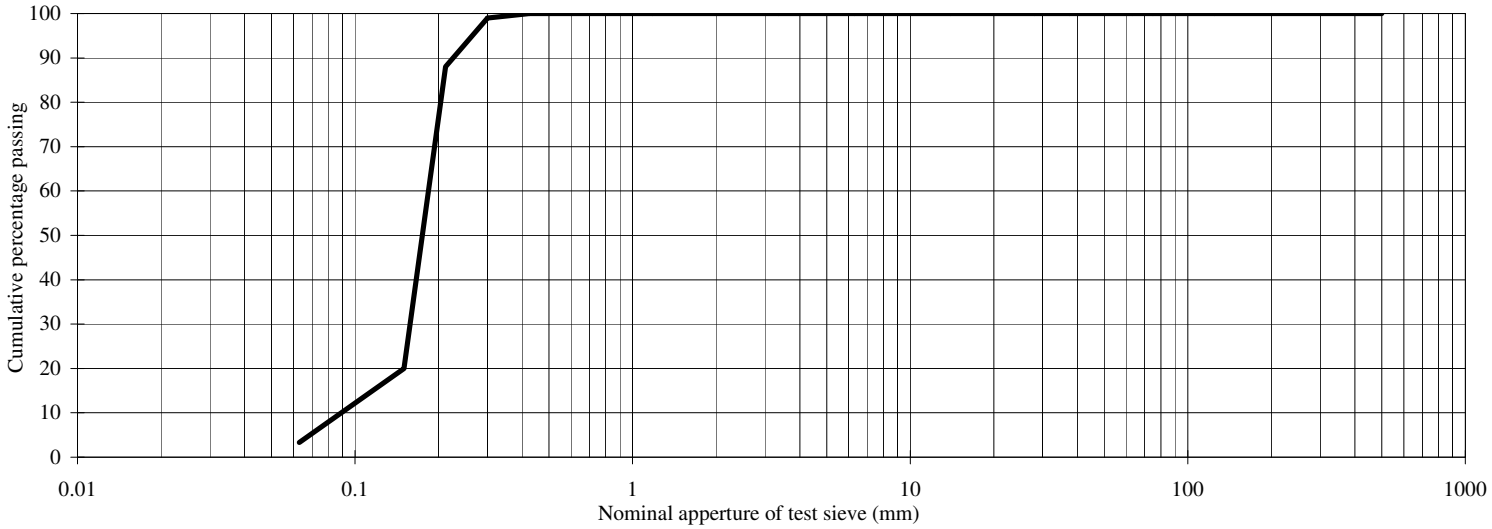
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50170642/13/04
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040049 45178400
Postcode:	DE15 0XD	Client Ref:	S1304166
		Location:	BH11
		Depth (m):	14.00
Site:	Job Number: S131009		
		Date Sampled:	Not Advised
Sampled by:	Client	Date Received:	20.02.13
Sampled from:	Site	Date Tested:	22.02.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.3
Description:	Grey brown SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	100	
0.300	99	
0.212	88	
0.150	20	
0.063	3.3	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 26.02.13

[Redacted]

Signed: _____

For and on behalf of Environmental Scientifics Group

[ ] [Reda - Section Manager
[✓] [Redacte Laboratory Manager

Customer EnviroCentre Ltd
Site Whiteness
Report No S131009

Consignment No S33551
Date Logged 15-Feb-2013

Report Due 21-Mar-2013

ID Number	Description	MethodID	CustServ	ICPMSS								PAHMSUS	PCBUSEDAR	Sub005			Sub018	TMSS	WSLM59
		Sampled	REPORT A	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Zinc (MS)	PAH (16) by GCMS	PCB-7 Congeners Analysis	^Dibutyltin	^Tributyltin	^Triphenyltin	^Particle Size Dist	Tot.Moisture @ 105C	Total Organic Carbon
Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	
CL/1304163	BH10 14.00	05/02/13																	
CL/1304164	BH11 0.50	06/02/13																	
CL/1304165	BH11 8.00	06/02/13																	
CL/1304166	BH11 14.00	06/02/13																	

Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.

In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PCBUSECDAR	As Received	Determination of Polychlorinated Biphenyl (PCB) congeners/aroclors by hexane/acetone extraction followed by GCECD detection
Soil	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	WSLM59	Air Dried	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined **N.Det** Not detected
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EFS/131670M (Ver. 3)
Your Ref: 363854j

April 9, 2013

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

[Redacted]
EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

For the attention of [Redacted]

Dear [Redacte

Soil Sample Analysis - Whiteness Grabs

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 26/04/13 when they will be discarded. Please call 01283 554467 for an extension of this date.
Please be aware that our policy for the retention of paper based laboratory records and analysis reports is 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Laboratory and Analytical) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for ESG
[Redacted]

Project Co-ordinator
01283 554467

Environmental Chemistry, ESG, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Environmental Scientifics Group Limited.
Registered No: 2880501

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Interim Report
Report No. EFS/131670M (Ver. 3)

EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

Site: Whiteness Grabs

The 1 sample described in this report were registered for analysis by ESG on 15-Mar-2013. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Apr-2013

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by ESG.

The following tables are contained in this report:

[Redacted]

On behalf of
ESG :

Date of Issue: 09-Apr-2013

[Redacted] Operations Director
Laboratory and Analytical Business

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105^{o}C unless otherwise stated. (except QC samples)
ESG accepts no responsibility for any sampling not carried out by our personnel.

Units :			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	pH Units		%	µg/kg	ug/kg	ug/kg	ug/kg
Method Codes :			AMMAR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	PHSOIL	Sub002a	TMSS	PCBUSECDAR	Sub005	Sub005	Sub005
Method Reporting Limits :			0.5	0.3	0.2	1.2	1.6	0.7	0.5	2	16			0.2		5	5	20
Accreditation Code:			UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	U	U		N	N	N
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Exchange.Ammonium AR**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Zinc (MS)**	**pH units (AR)**	**^Asbestos Screen**	**Tot.Moisture @ 105C**	**PCB-7 Congeners Analysis**	**^Dibutyltin**	**^Tributyltin**	**^Triphenyltin**
1307149	G29	13-Mar-13	15.8	5.7	<0.2	13.3	7.9	10.8	<0.50	7.6	47.6	7.5	NAIIS	47.0	Req	96.2	<56.6	<37.7

ESG Environmental Scientifics Group
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Burton-on-Trent, Staffordshire, DE15 0YZ
Tel +44 (0) 1283 554400
Fax +44 (0) 1283 554422

Client Name EnviroCentre Ltd

Contact [Redacte

Whiteness Grabs

Soil Sample Analysis

Interim Report

Date Printed	**09-Apr-2013**
Report Number	**EFS/131670M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105°C where appr opriate, in accordance with the MCERTS standard.

Units :				% M/M	mg/kg														
Method Codes :				Sub018	WSLM59	PAHMSUS													
Method Reporting Limits :					0.02														
Accreditation Code:					N														
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**^Particle Size Dist**	**Total Organic Carbon**	**PAH (16) by GCMS**														
1307149	G29	**13-Mar-13**		1.31	Req														

ESG Environmental Scientifics Group

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name	**EnviroCentre Ltd**
Contact	[Redacte

Whiteness Grabs

Soil Sample Analysis

Interim Report

Date Printed	**09-Apr-2013**
Report Number	**EFS/131670M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105°C where appr opriate, in accordance with the MCERTS standard.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G29	**Job Number:**	S13_1670M
LIMS ID Number:	CL1307149	**Date Booked in:**	15-Mar-13
QC Batch Number:	130232	**Date Extracted:**	19-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	20-Mar-13
Directory:	1913PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.15	-	**UM**
Acenaphthylene	208-96-8	-	< 0.15	-	U
Acenaphthene	83-32-9	-	< 0.15	-	UM
Fluorene	86-73-7	-	< 0.15	-	UM
Phenanthrene	85-01-8	-	< 0.15	-	UM
Anthracene	120-12-7	-	< 0.15	-	U
Fluoranthene	206-44-0	-	< 0.15	-	UM
Pyrene	129-00-0	-	< 0.15	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.15	-	UM
Chrysene	218-01-9	-	< 0.15	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.15	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.15	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.15	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.15	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.15	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.15	-	UM
Total (USEPA16) PAHs	-	-	< 2.42	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	140
Acenaphthene-d10	133
Phenanthrene-d10	145
Chrysene-d12	160
Perylene-d12	150

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	102
Terphenyl-d14	104

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polychlorinated Biphenyls (congeners)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs	**Matrix:**	SOIL
Job Number:	S13_1670M	**Date Booked in:**	15-Mar-13
QC Batch Number:	130062	**Date Extracted:**	18-Mar-13
Directory:	0319PCB.GC8	**Date Analysed:**	19-Mar-13
Method:	Ultrasonic		
Accreditation code:	N		

			Concentration, (µg/kg)						
	Sample ID	**Customer ID**	**PCB28**	**PCB52**	**PCB101**	**PCB118**	**PCB153**	**PCB138**	**PCB180**
*	CL1307149	G29	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where approp riate, in accordance with the MCERTS standard.

ASBESTOS ANALYSIS RESULTS - SOIL ANALYSIS

ESG Asbestos limited Certificate of Analysis for Asbestos in Soils

1089

Detection limit of Method SCI-ASB-020 is 0.001%

Sampling has been carried out by client

Client:	ESG Environmental Chemistry	**Page 1 of 1**	
Address:	Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent	**Report No:**	**ANO-0488-5760**
For the attention of:	EnviroCentre Ltd	**Report Date:**	**25/03/2013**
Site Address:		**Project Number:**	**S131670**

Sample Number	Sample Date	Sample Location	Test Date	Total Sample Dry Weight (g)	Weight of <2mm Fraction (g)	Asbestos(g) in >8mm+>2mm	Asbestos(g) in <2mm	% Asbestos by weight of Total Dried Sample	Asbestos Fibre Types Identified
CL/1307149	13/03/13	G29	25/03/2013					Screen Only	NADIS

Keys

NAACR = Not Analysed at Clients Request

NAIIS = No Asbestos Identified in Sample (Screens Only)

NADIS = No Asbestos Detected in Sample (ID & Quant Only)

Name:	Louise James	Authorised Signatory:
Position:	Lab Project Manager	

The sample analysis for the above results was carried out using the procedures detailed in ESG Asbestos Limited in house method (SCI-ASB-020) based on HSE document MDHS 90 - Asbestos Contaminated Land - Draft 5 - November 1997 (withdrawn). Fibre identification was carried out using ESG Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), based on HSE's HSG 248. The analysis of fine fraction for asbestos content only includes fibres and does not discriminate non-asbestos fibres. All fibres are assumed, unless specified, to be amphiboles. All tests were carried out at ESG Asbestos Laboratory, Ashbourne House, Bretby Business Park, Ashby Road, Burton-upon-Trent, Staffordshire. DE15 0XD, UKAS Laboratory Number 1089.

Where individual results are flagged see report notes for status.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S131670

Customer EnviroCentre Ltd
Site Whiteness Grabs
Report No S131670

Consignment No S34150
Date Logged 15-Mar-2013

Report Due 25-Mar-2013

ID Number	Description	MethodID	AMMAR	CustServ	ICPMSS								MCertS	PAHMSUS	PCBUSECOAR	PHSOIL	Sub002a	Sub005			Sub018	TMSS	WSLM59
		Sampled	Exchange.Ammonium AR	REPORT A	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Zinc (MS)	MCertS Analysis	PAH (16) by GCMS	PCB-7 Congeners Analysis	pH units (AR)	^Asbestos Screen	^Dibutyltin	^Tributyltin	^Triphenyltin	^Particle Size Dist	Tot.Moisture @ 105C	Total Organic Carbon
Accredited to ISO17025			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓					✓	
CL/1307149	G29	13/03/13																					

Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.

In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	AMMAR	As Received	Determination of Exchangeable Ammonium in Soil using potassium chloride extraction, discrete colorimetric detection
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PCBUSECDAR	As Received	Determination of Polychlorinated Biphenyl (PCB) congeners/aroclors by hexane/acetone extraction followed by GCECD detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	WSLM59	Air Dried	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined **N.Det** Not detected
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : EnviroCentre Ltd

Site : Whiteness Grabs

Report Number : S13_1670M

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1307149	G29	Grey SILT

END OF REPORT

Our Ref: EFS/131670M (Ver. 4)
Your Ref: 363854j

April 9, 2013

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

[Redacted]
EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

For the attention of [Redacted]

Dear [Redacted]

Soil Sample Analysis - Whiteness Grabs

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 26/04/13 when they will be discarded. Please call 01283 554467 for an extension of this date.
Please be aware that our policy for the retention of paper based laboratory records and analysis reports is 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Laboratory and Analytical) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for ESG
[Redacted]

Project Co-ordinator
[Redacted]

Environmental Chemistry, ESG, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Environmental Scientifics Group Limited.
Registered No: 2880501

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Report No. EFS/131670M (Ver. 4)

EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

Site: Whiteness Grabs

The 1 sample described in this report were registered for analysis by ESG on 15-Mar-2013. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Apr-2013

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by ESG.

The following tables are contained in this report:

[Redacted]

On behalf of
ESG :

Date of Issue: 09-Apr-2013

[Redacted] Operations Director
Laboratory and Analytical Business

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105^{o}C unless otherwise stated. (except QC samples)
ESG accepts no responsibility for any sampling not carried out by our personnel.

Units :			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	pH Units		%	µg/kg	ug/kg	ug/kg	ug/kg
Method Codes :			AMMAR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	PHSOIL	Sub002a	TMSS	PCBUSECDAR	Sub005	Sub005	Sub005
Method Reporting Limits :			0.5	0.3	0.2	1.2	1.6	0.7	0.5	2	16			0.2		5	5	20
Accreditation Code:			UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	U	U		N	N	N
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Exchange.Ammonium AR**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Zinc (MS)**	**pH units (AR)**	**^Asbestos Screen**	**Tot.Moisture @ 105C**	**PCB-7 Congeners Analysis**	**^Dibutyltin**	**^Tributyltin**	**^Triphenyltin**
1307149	G29	13-Mar-13	15.8	5.7	<0.2	13.3	7.9	10.8	<0.50	7.6	47.6	7.5	NAIIS	47.0	Req	96.2	<56.6	<37.7

ESG Environmental Scientifics Group
Bretby Business Park, Ashby Road
Burton-on-Trent, Staffordshire, DE15 0YZ
Tel +44 (0) 1283 554400
Fax +44 (0) 1283 554422

Client Name EnviroCentre Ltd

Contact [Redacte

Whiteness Grabs

Soil Sample Analysis

Date Printed	**09-Apr-2013**
Report Number	**EFS/131670M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Units :				% M/M	mg/kg														
Method Codes :				Sub018	WSLM59	PAHMSUS													
Method Reporting Limits :					0.02														
Accreditation Code:					N														
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**^Particle Size Dist**	**Total Organic Carbon**	**PAH (16) by GCMS**														
1307149	G29	**13-Mar-13**	Req	1.31	Req														

ESG Environmental Scientifics Group
Bretby Business Park, Ashby Road
Burton-on-Trent, Staffordshire, DE15 0YZ
Tel +44 (0) 1283 554400
Fax +44 (0) 1283 554422

Client Name	**EnviroCentre Ltd**
Contact	[Redacte

Soil Sample Analysis

Whiteness Grabs

Date Printed	**09-Apr-2013**
Report Number	**EFS/131670M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G29	**Job Number:**	S13_1670M
LIMS ID Number:	CL1307149	**Date Booked in:**	15-Mar-13
QC Batch Number:	130232	**Date Extracted:**	19-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	20-Mar-13
Directory:	1913PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.15	-	**UM**
Acenaphthylene	208-96-8	-	< 0.15	-	U
Acenaphthene	83-32-9	-	< 0.15	-	UM
Fluorene	86-73-7	-	< 0.15	-	UM
Phenanthrene	85-01-8	-	< 0.15	-	UM
Anthracene	120-12-7	-	< 0.15	-	U
Fluoranthene	206-44-0	-	< 0.15	-	UM
Pyrene	129-00-0	-	< 0.15	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.15	-	UM
Chrysene	218-01-9	-	< 0.15	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.15	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.15	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.15	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.15	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.15	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.15	-	UM
Total (USEPA16) PAHs	-	-	< 2.42	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	140
Acenaphthene-d10	133
Phenanthrene-d10	145
Chrysene-d12	160
Perylene-d12	150

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	102
Terphenyl-d14	104

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polychlorinated Biphenyls (congeners)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs	**Matrix:**	SOIL
Job Number:	S13_1670M	**Date Booked in:**	15-Mar-13
QC Batch Number:	130062	**Date Extracted:**	18-Mar-13
Directory:	0319PCB.GC8	**Date Analysed:**	19-Mar-13
Method:	Ultrasonic		
Accreditation code:	N		

			Concentration, (µg/kg)						
Sample ID	**Customer ID**	**PCB28**	**PCB52**	**PCB101**	**PCB118**	**PCB153**	**PCB138**	**PCB180**
* CL1307149	G29	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where approp riate, in accordance with the MCERTS standard.

Environmental Scientifics Group
2 Newton Close
Drayton Fields Industrial Estate
Daventry
Northants NN11 8RR
Telephone: +44 (0) 1327 703828
Facsimile: +44 (0) 1327 300154

ESG Environmental Scientifics Group

UKAS TESTING
0001

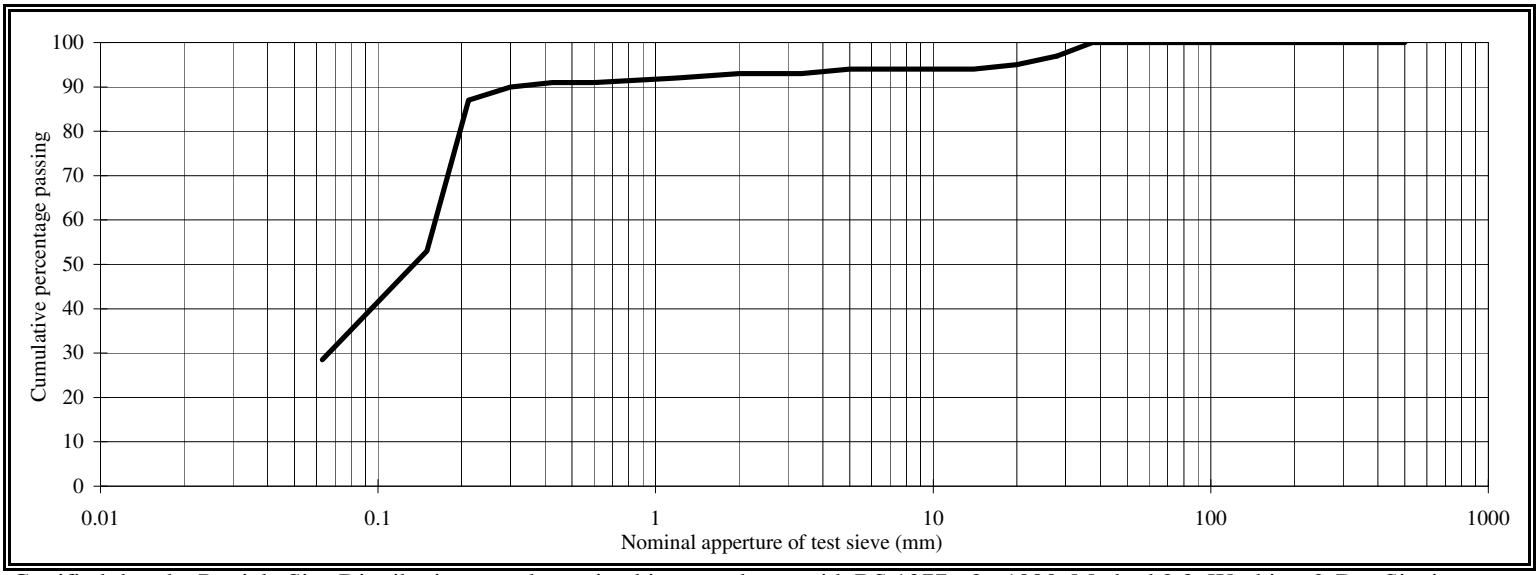
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171694/13/01
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040669 45181638
Postcode:	DE15 0XD	Client Ref:	G29
Site:	Job Number: S131670		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	05.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.0
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS

BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	97	
20	95	
14	94	
10	94	
6.3	94	
5	94	
3.35	93	
2	93	
1.18	92	
0.600	91	
0.425	91	
0.300	90	
0.212	87	
0.150	53	
0.063	28.5	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

Signed: [Redacted]

For and on behalf of Environmental Scientifics Group

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

ESG Asbestos Limited

ASBESTOS ANALYSIS RESULTS - SOIL ANALYSIS

ESG Asbestos limited Certificate of Analysis for Asbestos in Soils

UKAS TESTING 1089

Detection limit of Method SCI-ASB-020 is 0.001%

Sampling has been carried out by client

Client:	ESG Environmental Chemistry	**Page 1 of 1**	
Address:	Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent	**Report No:**	**ANO-0488-5760**
For the attention of:	EnviroCentre Ltd	**Report Date:**	**25/03/2013**
Site Address:		**Project Number:**	**S131670**

Sample Number	Sample Date	Sample Location	Test Date	Total Sample Dry Weight (g)	Weight of <2mm Fraction (g)	Asbestos(g) in >8mm+>2mm	Asbestos(g) in <2mm	% Asbestos by weight of Total Dried Sample	Asbestos Fibre Types Identified
CL/1307149	13/03/13	G29	25/03/2013					Screen Only	NADIS

Keys

NAACR = Not Analysed at Clients Request

NAIIS = No Asbestos Identified in Sample (Screens Only)

NADIS = No Asbestos Detected in Sample (ID & Quant Only)

Name:	Louise James	Authorised Signatory:
Position:	Lab Project Manager	

The sample analysis for the above results was carried out using the procedures detailed in ESG Asbestos Limited in house method (SCI-ASB-020) based on HSE document MDHS 90 - Asbestos Contaminated Land - Draft 5 - November 1997 (withdrawn). Fibre identification was carried out using ESG Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), based on HSE's HSG 248. The analysis of fine fraction for asbestos content only includes fibres and does not discriminate non-asbestos fibres. All fibres are assumed, unless specified, to be amphiboles. All tests were carried out at ESG Asbestos Laboratory, Ashbourne House, Bretby Business Park, Ashby Road, Burton-upon-Trent, Staffordshire. DE15 0XD, UKAS Laboratory Number 1089.

Where individual results are flagged see report notes for status.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S131670

Customer EnviroCentre Ltd
Site Whiteness Grabs
Report No S131670

Consignment No S34150
Date Logged 15-Mar-2013

Report Due 25-Mar-2013

ID Number	Description	MethodID	AMMAR	CustServ	ICPMSS								MCertS	PAHMSUS	PCBUSECOAR	PHSOIL	Sub002a	Sub005			Sub018	TMSS	WSLM59
		Sampled	Exchange.Ammonium AR	REPORT A	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Zinc (MS)	MCertS Analysis	PAH (16) by GCMS	PCB-7 Congeners Analysis	pH units (AR)	^Asbestos Screen	^Dibutyltin	^Tributyltin	^Triphenyltin	^Particle Size Dist	Tot.Moisture @ 105C	Total Organic Carbon
Accredited to ISO17025			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓					✓	
CL/1307149	G29	13/03/13																					

Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.

In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	AMMAR	As Received	Determination of Exchangeable Ammonium in Soil using potassium chloride extraction, discrete colorimetric detection
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PCBUSECDAR	As Received	Determination of Polychlorinated Biphenyl (PCB) congeners/aroclors by hexane/acetone extraction followed by GCECD detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	WSLM59	Air Dried	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l
Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined **N.Det** Not detected
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : EnviroCentre Ltd

Site : Whiteness Grabs

Report Number : S13_1670M

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1307149	G29	Grey SILT

END OF REPORT

Our Ref: EFS/131671M (Ver. 4)
Your Ref: 363854j

April 9, 2013

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

[Redacted]
EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

For the attention of [Redacted]

Dear [Redacte

Soil Sample Analysis - Whiteness Grabs

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 26/04/13 when they will be discarded. Please call 01283 554467 for an extension of this date.
Please be aware that our policy for the retention of paper based laboratory records and analysis reports is 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Laboratory and Analytical) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for ESG
[Redacted]

Project Co-ordinator
[Redacted]

Environmental Chemistry, ESG, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Environmental Scientifics Group Limited.
Registered No: 2880501

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Report No. EFS/131671M (Ver. 4)

EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

Site: Whiteness Grabs

The 20 samples described in this report were registered for analysis by ESG on 15-Mar-2013. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Apr-2013

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by ESG.

The following tables are contained in this report:

[Redacted]

On behalf of
ESG :

Date of Issue: 09-Apr-2013

[Redacted] Operations Director
Laboratory and Analytical Business

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105^{o}C unless otherwise stated. (except QC samples)
ESG accepts no responsibility for any sampling not carried out by our personnel.

Units :			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	pH Units		%	µg/kg	ug/kg	ug/kg	ug/kg
Method Codes :			AMMAR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	PHSOIL	Sub002a	TMSS	PCBUSECDAR	Sub005	Sub005	Sub005
Method Reporting Limits :			0.5	0.3	0.2	1.2	1.6	0.7	0.5	2	16			0.2		5	5	20
Accreditation Code:			UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	U	U		N	N	N
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Exchange.Ammonium AR**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Zinc (MS)**	**pH units (AR)**	**^Asbestos Screen**	**Tot.Moisture @ 105C**	**PCB-7 Congeners Analysis**	**^Dibutyltin**	**^Tributyltin**	**^Triphenyltin**
1307150	G1	13-Mar-13	<0.06	2.3	0.27	7	3.3	3.9	<0.5	3.8	<16.1	8.0	NAIIS	22.2	Req	34.7	<38.6	<25.7
1307155	G11	13-Mar-13	<0.06	1.2	<0.2	3.1	<1.6	1.5	<0.5	<2.0	<15.9	8.0	NAIIS	19.2	Req	<24.8	<37.1	<24.8
1307156	G13	12-Mar-13	<0.06	1.1	<0.2	6	<1.6	2.3	<0.5	<2.0	<15.8	8.0	NAIIS	16.7	Req	<24.0	<36.0	<24.0
1307157	G15	12-Mar-13	<0.06	1.2	<0.2	4.7	1.7	1.9	<0.5	<2.1	<16.8	8.2	NAIIS	16.8	Req	<24.0	<36.1	<24.0
1307158	G16	13-Mar-13	<0.06	1.2	<0.2	4	1.7	1.8	<0.5	<2.0	<15.9	8.2	NAIIS	17.4	Req	41.2	<36.3	<24.2
1307159	G17	13-Mar-13	3.0	1.2	<0.2	3.3	<1.6	1.6	<0.5	<2.0	<16	8.3	NAIIS	17.7	Req	<24.3	<36.5	<24.3
1307160	G19	12-Mar-13	<0.06	1.7	<0.2	4.3	6.2	4.3	<0.5	3.1	29	8.4	NAIIS	14.2	Req	78.1	<35.0	<23.3
1307161	G20	12-Mar-13	<0.06	1	<0.2	2.6	<1.6	1.3	<0.5	<2.0	<16.1	8.2	NAIIS	18.7	Req	30.8	<36.9	<24.6
1307162	G21	12-Mar-13	<0.06	1	<0.2	3.4	2.2	1.9	<0.5	<2.0	<15.9	8.3	NAIIS	18.5	Req	42.9	<36.8	<24.5
1307163	G22	12-Mar-13	<0.06	1	<0.2	3.3	1.9	1.7	<0.5	<2.0	<15.9	8.3	NAIIS	17.9	Req	30.5	<36.5	<24.4
1307164	G23	12-Mar-13	<0.06	1.3	<0.2	3.8	1.6	1.6	<0.5	2.1	<16.0	8.4	NAIIS	20.8	Req	<25.3	<37.9	<25.3
1307165	G24	12-Mar-13	9.6	3.8	<0.2	11.4	57.7	36.1	<0.5	6.9	412.5	8.2	NAIIS	21.7	Req	90.7	<38.3	<25.5
1307166	G25	12-Mar-13	2.3	1.2	<0.2	3.1	2.8	2.1	<0.5	<2.0	<16.1	8.2	NAIIS	17.2	Req	<24.2	<36.2	<24.2
1307167	G26	12-Mar-13	2.5	1.6	<0.2	6.3	2.6	2.4	<0.5	3	16.4	8.4	NAIIS	20.4	Req	<25.1	<37.7	<25.1
1307168	G27	13-Mar-13	2.5	1.4	<0.2	4.7	2.4	1.8	<0.5	2.4	<15.8	8.4	NAIIS	19.3	Req	27.3	<37.2	<24.8
1307169	G28	13-Mar-13	1.1	1.1	<0.2	4.1	<1.6	1.7	<0.5	<2.0	<16.0	8.4	NAIIS	18.9	Req	39.5	<37.0	<24.7
1307151	G3	13-Mar-13	<0.06	2.1	<0.2	7.3	2.6	3.8	<0.5	4	<15.9	8.4	NAIIS	10.4	Req	70.3	<33.5	<22.3
1307152	G5	13-Mar-13	<0.06	1.1	<0.2	3.2	<1.6	1.9	<0.5	<2.0	<15.9	8.3	NAIIS	17.1	Req	68.8	<36.2	<24.1
1307153	G7	13-Mar-13	<0.06	1.1	<0.2	3.2	<1.6	1.7	<0.5	<2.0	<16.1	8.3	NAIIS	19.3	Req	58.2	<37.2	<24.8
1307154	G9	13-Mar-13	<0.06	1.1	<0.2	3	<1.6	1.5	<0.5	<2.0	<16.0	8.1	NAIIS	17.7	Req	94	<36.5	<24.3

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Bretby Business Park, Ashby Road
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Tel +44 (0) 1283 554400
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Client Name EnviroCentre Ltd

Contact [Redacte

Whiteness Grabs

Soil Sample Analysis

Date Printed	**09-Apr-2013**
Report Number	**EFS/131671M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Units :				% M/M	mg/kg														
Method Codes :			Sub018	WSLM59	PAHMSUS														
Method Reporting Limits :				0.02															
Accreditation Code:				N															
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**^Particle Size Dist**	**Total Organic Carbon**	**PAH (16) by GCMS**														
1307150	G1	13-Mar-13	Req	0.24	Req														
1307155	G11	13-Mar-13	Req	0.08	Req														
1307156	G13	12-Mar-13	Req	0.08	Req														
1307157	G15	12-Mar-13	Req	0.07	Req														
1307158	G16	13-Mar-13	Req	0.09	Req														
1307159	G17	13-Mar-13	Req	0.10	Req														
1307160	G19	12-Mar-13	Req	0.08	Req														
1307161	G20	12-Mar-13	Req	0.08	Req														
1307162	G21	12-Mar-13	Req	0.11	Req														
1307163	G22	12-Mar-13	Req	0.09	Req														
1307164	G23	12-Mar-13	Req	0.14	Req														
1307165	G24	12-Mar-13	Req	0.27	Req														
1307166	G25	12-Mar-13	Req	0.08	Req														
1307167	G26	12-Mar-13	Req	0.15	Req														
1307168	G27	13-Mar-13	Req	0.14	Req														
1307169	G28	13-Mar-13	Req	0.12	Req														
1307151	G3	13-Mar-13	Req	0.14	Req														
1307152	G5	13-Mar-13	Req	0.11	Req														
1307153	G7	13-Mar-13	Req	0.09	Req														
1307154	G9	13-Mar-13	Req	0.09	Req														

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Client Name **EnviroCentre Ltd**

Contact [Redacte

Whiteness Grabs

Soil Sample Analysis

Date Printed	**09-Apr-2013**
Report Number	**EFS/131671M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G1	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307150	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.65	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	95
Acenaphthene-d10	98
Phenanthrene-d10	99
Chrysene-d12	101
Perylene-d12	99

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	86
Terphenyl-d14	73

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G3	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307151	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.09	-	**UM**
Acenaphthylene	208-96-8	-	< 0.09	-	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	-	< 0.09	-	UM
Phenanthrene	85-01-8	5.49	0.10	96	UM
Anthracene	120-12-7	-	< 0.09	-	U
Fluoranthene	206-44-0	6.79	0.32	80	UM
Pyrene	129-00-0	7.07	0.27	91	UM
Benzo[a]anthracene	56-55-3	8.72	0.16	95	UM
Chrysene	218-01-9	8.77	0.16	93	UM
Benzo[b]fluoranthene	205-99-2	10.24	0.13	89	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	UM
Benzo[a]pyrene	50-32-8	10.66	0.13	94	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	UM
Total (USEPA16) PAHs	-	-	< 2.09	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	98
Phenanthrene-d10	99
Chrysene-d12	102
Perylene-d12	98

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	97
Terphenyl-d14	93

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G5	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307152	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.54	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	96
Acenaphthene-d10	97
Phenanthrene-d10	99
Chrysene-d12	98
Perylene-d12	95

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	99
Terphenyl-d14	93

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G7	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307153	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.59	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	99
Phenanthrene-d10	101
Chrysene-d12	103
Perylene-d12	99

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	90
Terphenyl-d14	78

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G9	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307154	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.56	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	94
Acenaphthene-d10	95
Phenanthrene-d10	96
Chrysene-d12	93
Perylene-d12	90

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	99
Terphenyl-d14	92

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G11	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307155	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.58	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	97
Phenanthrene-d10	98
Chrysene-d12	95
Perylene-d12	91

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	100
Terphenyl-d14	94

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G13	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307156	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.54	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	98
Phenanthrene-d10	100
Chrysene-d12	97
Perylene-d12	91

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	99
Terphenyl-d14	92

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G15	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307157	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.54	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	90
Acenaphthene-d10	91
Phenanthrene-d10	91
Chrysene-d12	85
Perylene-d12	79

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	90

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G16	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307158	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.55	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	97
Phenanthrene-d10	97
Chrysene-d12	98
Perylene-d12	92

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	96
Terphenyl-d14	93

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G17	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307159	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.56	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	98
Phenanthrene-d10	99
Chrysene-d12	97
Perylene-d12	90

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	99
Terphenyl-d14	93

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G19	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307160	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.09	-	**UM**
Acenaphthylene	208-96-8	-	< 0.09	-	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	-	< 0.09	-	UM
Phenanthrene	85-01-8	-	< 0.09	-	UM
Anthracene	120-12-7	-	< 0.09	-	U
Fluoranthene	206-44-0	-	< 0.09	-	UM
Pyrene	129-00-0	-	< 0.09	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.09	-	UM
Chrysene	218-01-9	-	< 0.09	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.09	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.09	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	UM
Total (USEPA16) PAHs	-	-	< 1.49	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	94
Acenaphthene-d10	95
Phenanthrene-d10	95
Chrysene-d12	92
Perylene-d12	85

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	91

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G20	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307161	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.57	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	97
Phenanthrene-d10	95
Chrysene-d12	98
Perylene-d12	93

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	100
Terphenyl-d14	96

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G21	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307162	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.57	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	95
Acenaphthene-d10	96
Phenanthrene-d10	96
Chrysene-d12	96
Perylene-d12	92

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	97
Terphenyl-d14	94

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G22	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307163	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.56	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	96
Acenaphthene-d10	95
Phenanthrene-d10	94
Chrysene-d12	92
Perylene-d12	84

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	93

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G23	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307164	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.62	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	93
Acenaphthene-d10	93
Phenanthrene-d10	93
Chrysene-d12	95
Perylene-d12	88

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	100
Terphenyl-d14	96

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G24	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307165	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.63	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	92
Acenaphthene-d10	94
Phenanthrene-d10	95
Chrysene-d12	93
Perylene-d12	88

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	99
Terphenyl-d14	93

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G25	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307166	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.55	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	95
Acenaphthene-d10	95
Phenanthrene-d10	95
Chrysene-d12	87
Perylene-d12	78

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	90

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G26	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307167	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.61	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	93
Acenaphthene-d10	94
Phenanthrene-d10	94
Chrysene-d12	92
Perylene-d12	83

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	93

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G27	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307168	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.59	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	93
Acenaphthene-d10	94
Phenanthrene-d10	94
Chrysene-d12	88
Perylene-d12	80

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	97
Terphenyl-d14	91

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs		
Sample Details:	G28	**Job Number:**	S13_1671M
LIMS ID Number:	CL1307169	**Date Booked in:**	15-Mar-13
QC Batch Number:	130237	**Date Extracted:**	20-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Mar-13
Directory:	2013PAHMS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.58	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	95
Acenaphthene-d10	95
Phenanthrene-d10	96
Chrysene-d12	91
Perylene-d12	81

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	92

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polychlorinated Biphenyls (congeners)

Customer and Site Details:	EnviroCentre Ltd: Whiteness Grabs	**Matrix:**	SOIL
Job Number:	S13_1671M	**Date Booked in:**	15-Mar-13
QC Batch Number:	130066	**Date Extracted:**	21-Mar-13
Directory:	0321PCB.GC8	**Date Analysed:**	25-Mar-13
Method:	Ultrasonic		
Accreditation code:	N		

			Concentration, (µg/kg)						
	Sample ID	**Customer ID**	**PCB28**	**PCB52**	**PCB101**	**PCB118**	**PCB153**	**PCB138**	**PCB180**
*	CL1307150	G1	<5.02	<5.02	<5.02	<5.02	<5.02	<5.02	<5.02
*	CL1307151	G3	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98
*	CL1307152	G5	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96
*	CL1307153	G7	<5.02	<5.02	<5.02	<5.02	<5.02	<5.02	<5.02
*	CL1307154	G9	<5.01	<5.01	<5.01	<5.01	<5.01	<5.01	<5.01
*	CL1307155	G11	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98
*	CL1307156	G13	<4.92	<4.92	<4.92	<4.92	<4.92	<4.92	<4.92
*	CL1307157	G15	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25
*	CL1307158	G16	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95
*	CL1307159	G17	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96
*	CL1307160	G19	<4.90	<4.90	<4.90	<4.90	<4.90	<4.90	<4.90
*	CL1307161	G20	<5.04	<5.04	<5.04	<5.04	<5.04	<5.04	<5.04
*	CL1307162	G21	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98	<4.98
*	CL1307163	G22	<4.97	<4.97	<4.97	<4.97	<4.97	<4.97	<4.97
*	CL1307164	G23	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
*	CL1307165	G24	<5.10	<5.10	<5.10	<5.10	<5.10	<5.10	<5.10
*	CL1307166	G25	<5.05	<5.05	<5.05	<5.05	<5.05	<5.05	<5.05
*	CL1307167	G26	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99
*	CL1307168	G27	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where approp riate, in accordance with the MCERTS standard.

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ESG Environmental Scientifics Group

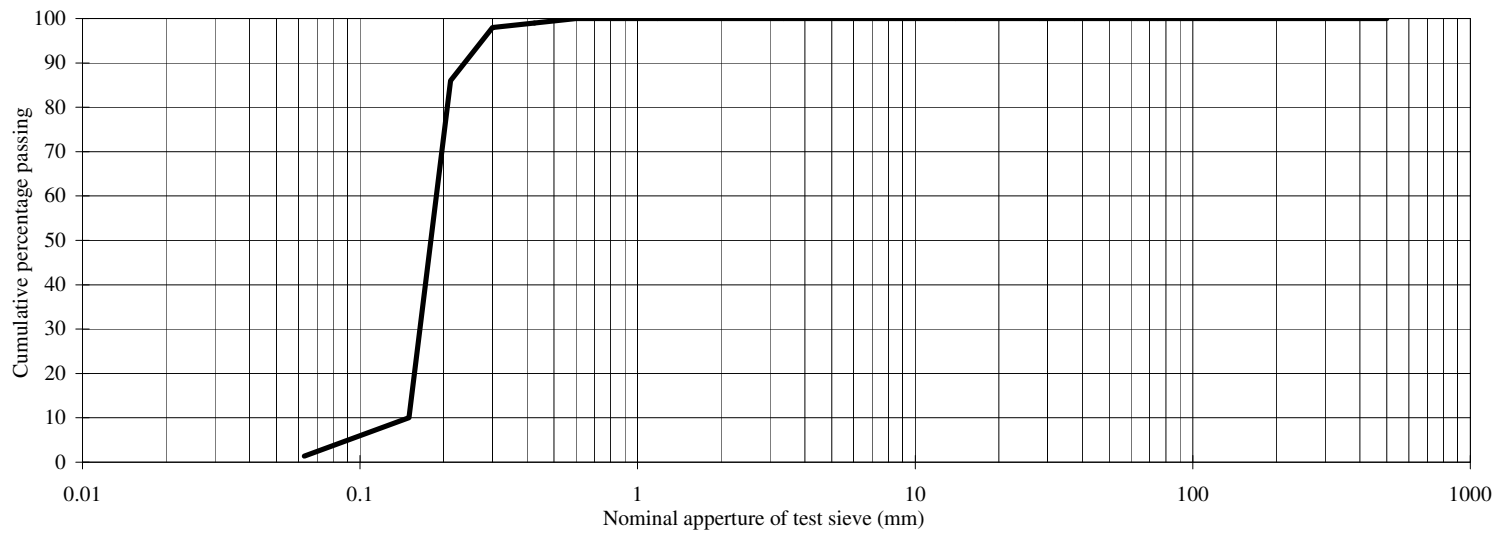
UKAS TESTING
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/01
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180804
Postcode:	DE15 0XD	Client Ref: Location:	S1307150 G1
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	0.8
Description:	Grey brown SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	99	
0.300	98	
0.212	86	
0.150	10	
0.063	1.4	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

Signed: [Redacted]

For and on behalf of Environmental Scientifics Group

[ ] [Redacted] - Section Manager
[✓] [Redacted] - Laboratory Manager

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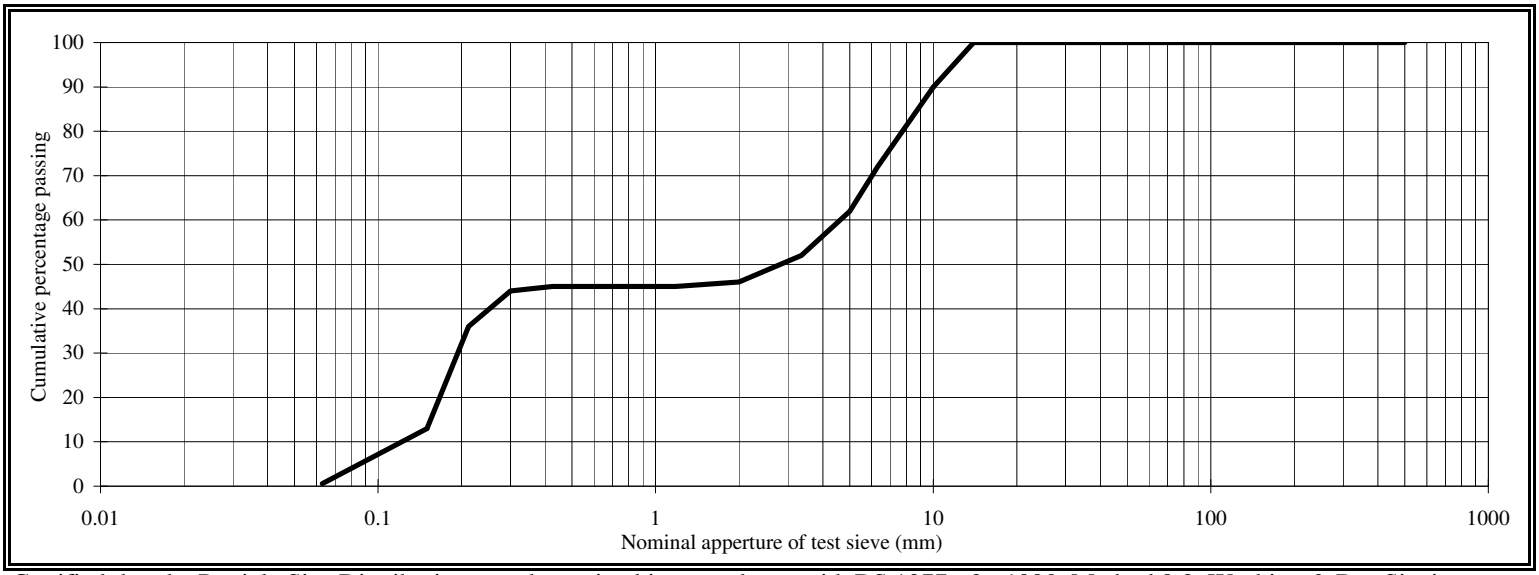
UKAS TESTING
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/02
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180805
Postcode:	DE15 0XD	Client Ref: Location:	S1307151 G3
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	0.5
Description:	Brown grey gravelly SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	90	
6.3	72	
5	62	
3.35	52	
2	46	
1.18	45	
0.600	45	
0.425	45	
0.300	44	
0.212	36	
0.150	13	
0.063	0.6	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

Signed: [Redacted]

For and on behalf of Environmental Scientifics Group

[ ] [Redacted] - Section Manager
[✓] [Redacted] - Laboratory Manager

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ESG Environmental Scientifics Group

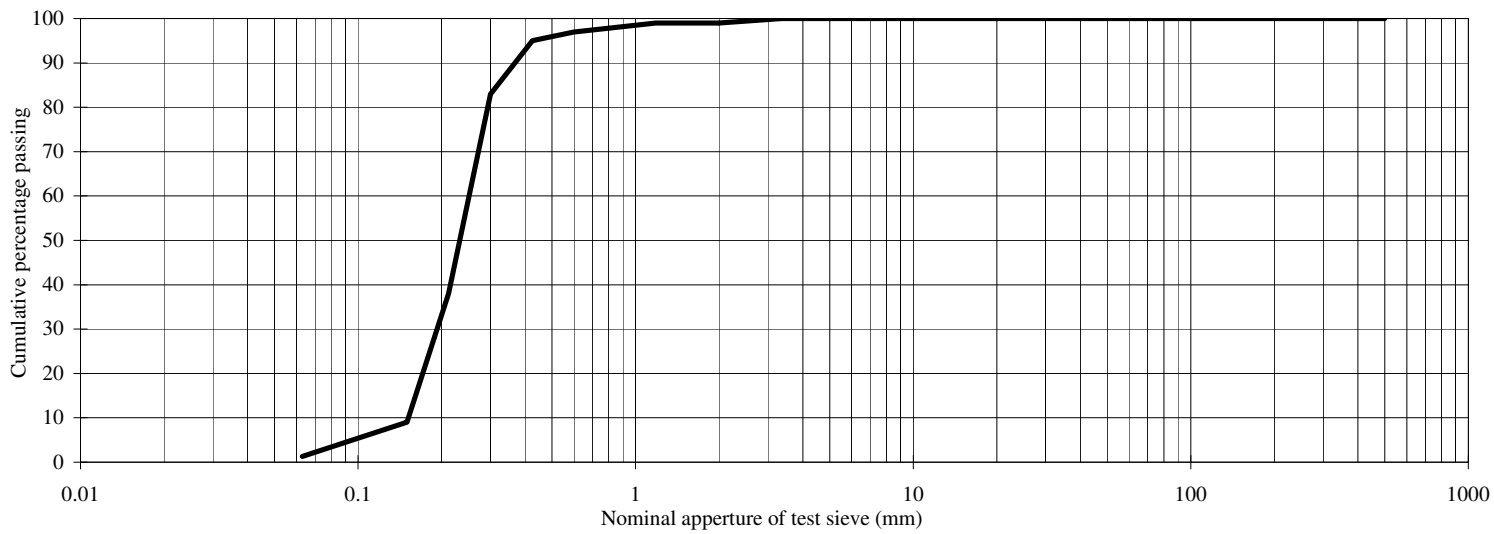
UKAS TESTING
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/03
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180806
Postcode:	DE15 0XD	Client Ref: Location:	S1307152 G5
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.1
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	99	
1.18	99	
0.600	97	
0.425	95	
0.300	83	
0.212	38	
0.150	9	
0.063	1.3	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

Signed: [Redacted]

For and on behalf of Environmental Scientifics Group

[ ] [Redacted] - Section Manager
[✓] [Redacted] Laboratory Manager

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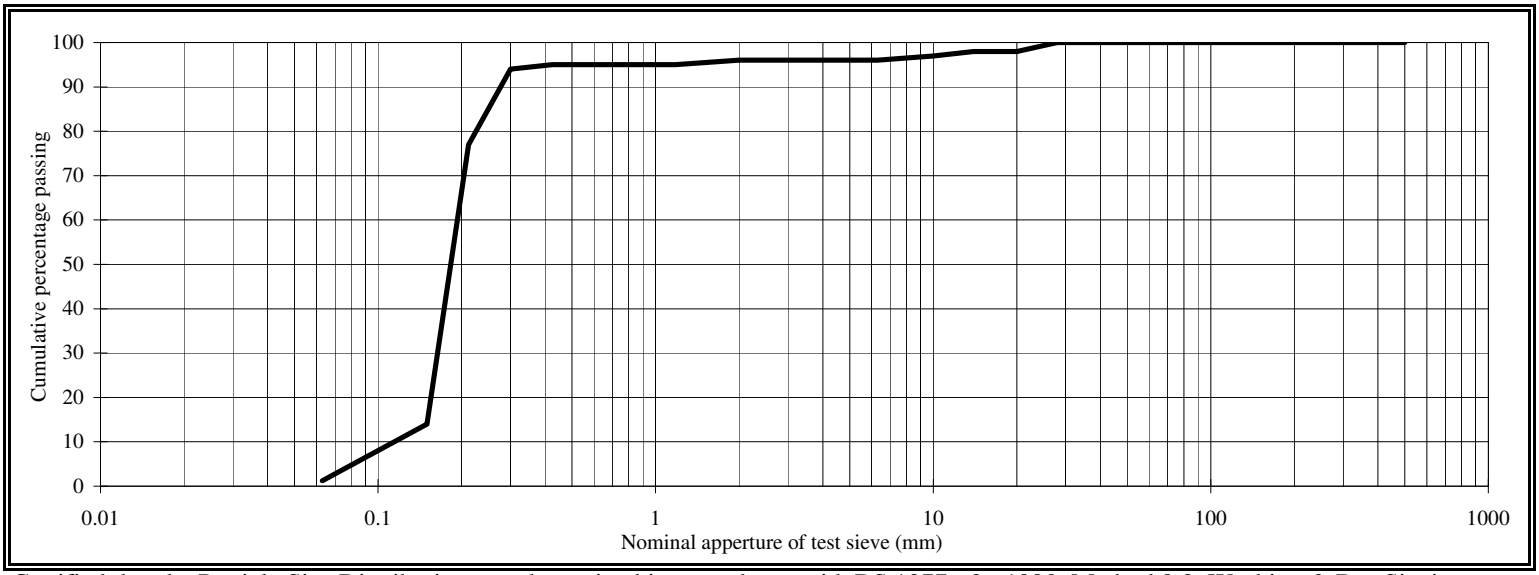
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/04
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180807
Postcode:	DE15 0XD	Client Ref: Location:	S1307153 G7
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	98	
14	98	
10	97	
6.3	96	
5	96	
3.35	96	
2	96	
1.18	95	
0.600	95	
0.425	95	
0.300	94	
0.212	77	
0.150	14	
0.063	1.2	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

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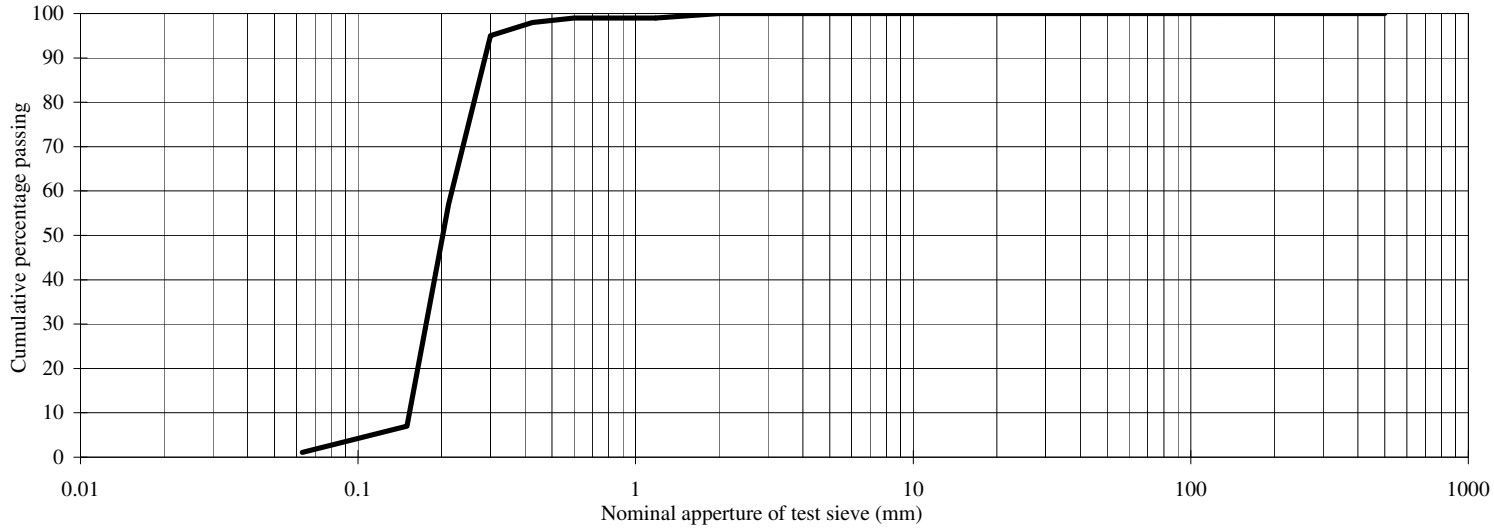
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/05
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180808
Postcode:	DE15 0XD	Client Ref: Location:	S1307154 G9
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.2
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	99	
0.600	99	
0.425	98	
0.300	95	
0.212	57	
0.150	7	
0.063	1.1	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

[Redacted]

Page: 1 of 1
Date: 08.04.13

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

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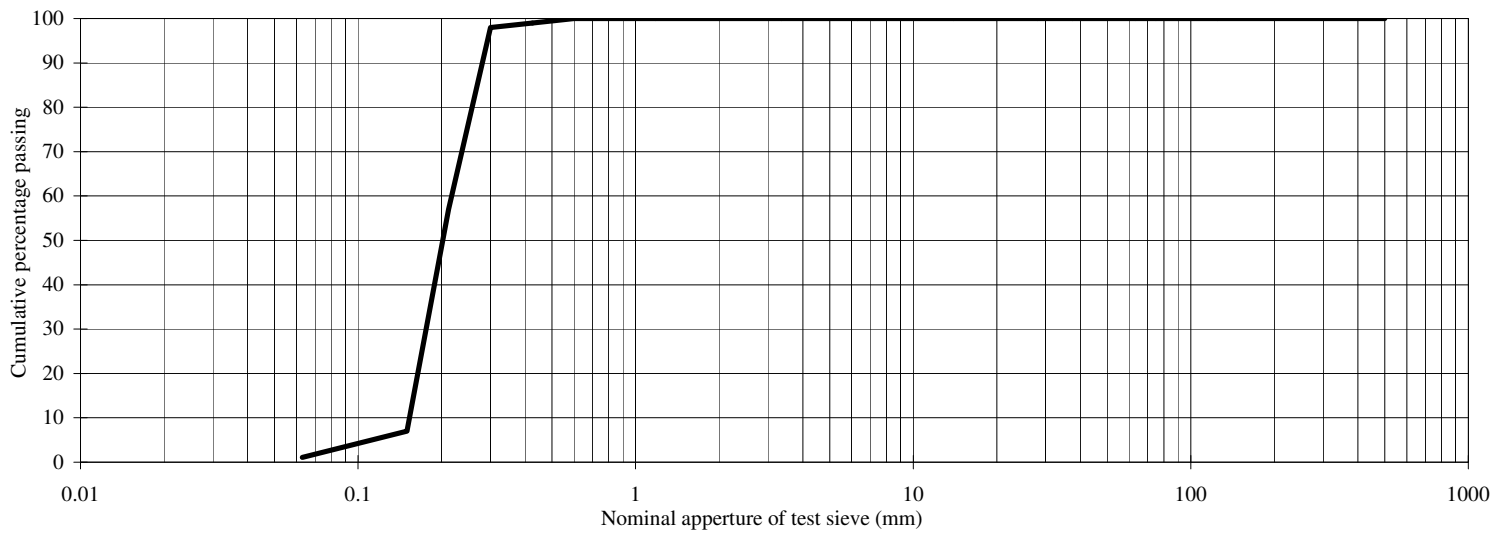
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/06
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180809
Postcode:	DE15 0XD	Client Ref: Location:	S1307155 G11
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.2
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	99	
0.300	98	
0.212	57	
0.150	7	
0.063	1.1	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____ [ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

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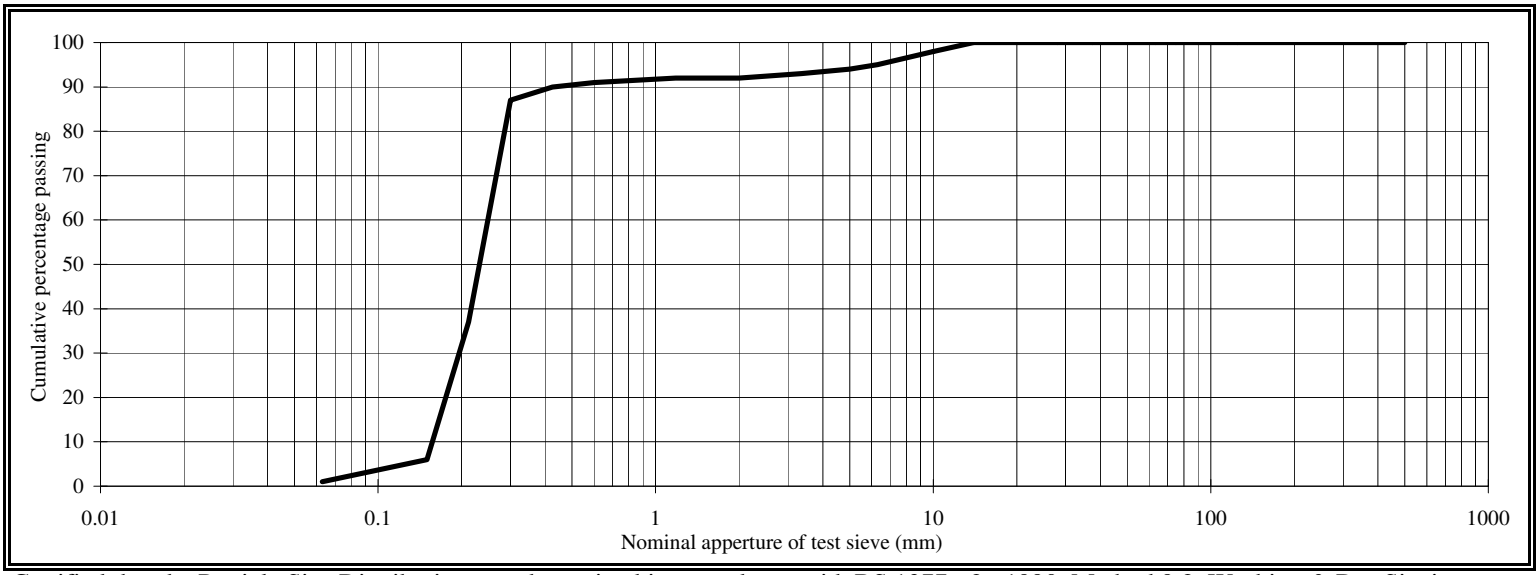
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/07
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180810
Postcode:	DE15 0XD	Client Ref: Location:	S1307156 G13
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.2
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	98	
6.3	95	
5	94	
3.35	93	
2	92	
1.18	92	
0.600	91	
0.425	90	
0.300	87	
0.212	37	
0.150	6	
0.063	1.0	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

[Redacted]

Page: 1 of 1
Date: 08.04.13

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redacte - Laboratory Manager

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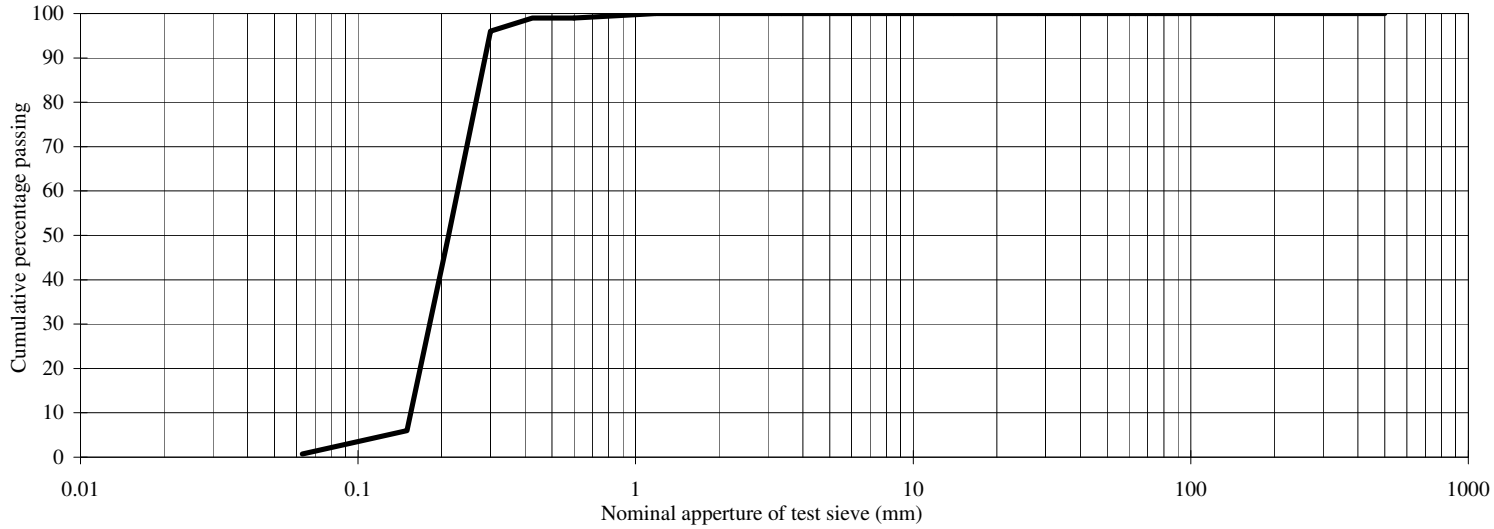
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/08
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180811
Postcode:	DE15 0XD	Client Ref: Location:	S1307157 G15
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.1
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	99	
0.425	99	
0.300	96	
0.212	50	
0.150	6	
0.063	0.7	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

Signed: [Redacted]

[ ] [Redacted] - Section Manager
[✓] [Redacted] - Laboratory Manager

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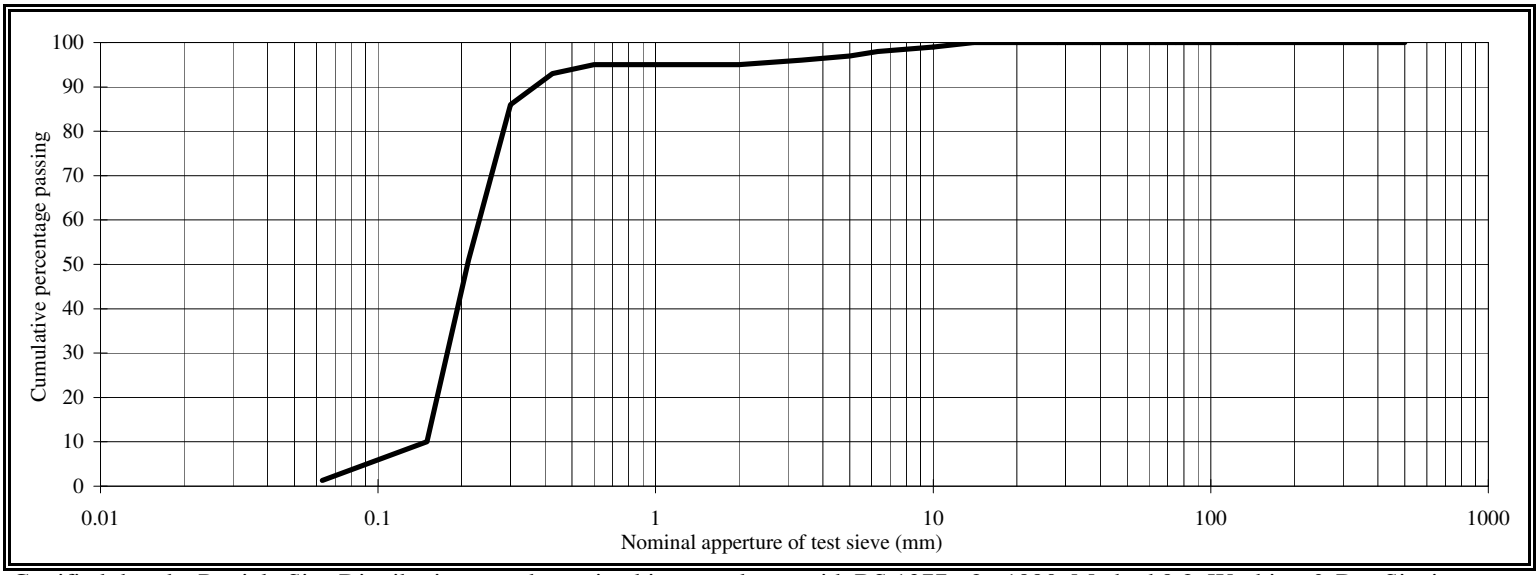
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/09
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180812
Postcode:	DE15 0XD	Client Ref: Location:	S1307158 G16
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.2
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	99	
6.3	98	
5	97	
3.35	96	
2	95	
1.18	95	
0.600	95	
0.425	93	
0.300	86	
0.212	51	
0.150	10	
0.063	1.3	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

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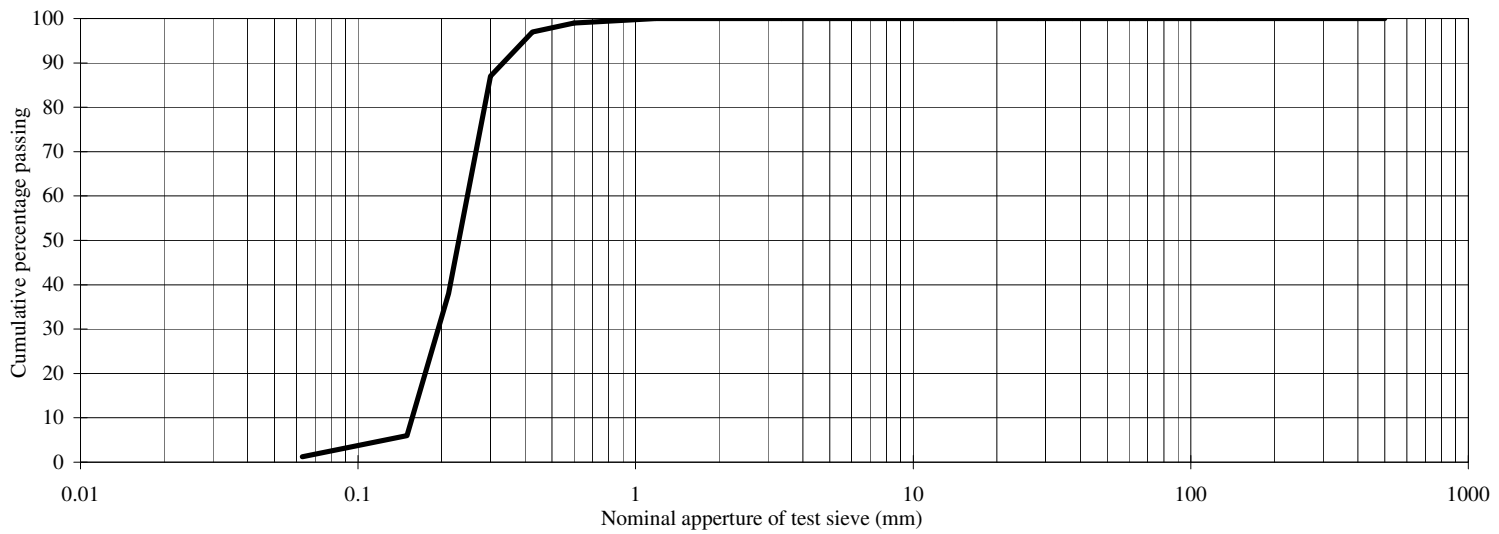
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/10
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180813
Postcode:	DE15 0XD	Client Ref: Location:	S1307159 G17
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	0.9
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	99	
0.425	97	
0.300	87	
0.212	38	
0.150	6	
0.063	1.2	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

Signed: [Redacted]

For and on behalf of Environmental Scientifics Group

[ ] [Redacted] - Section Manager
[✓] [Redacted] - Laboratory Manager

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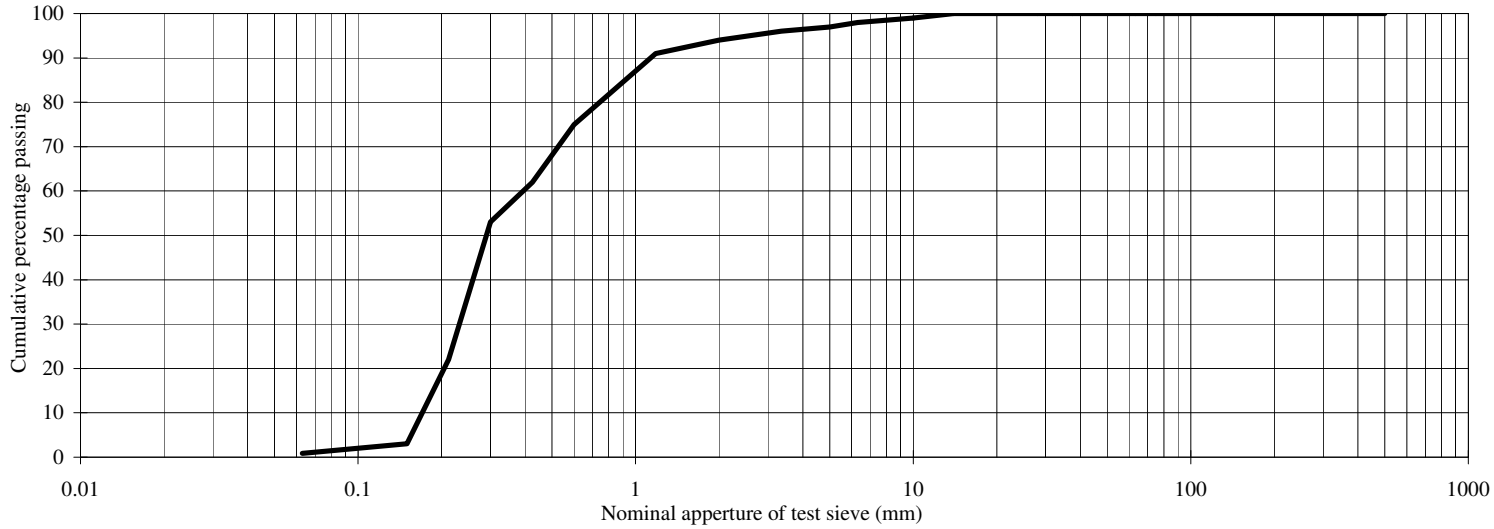
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/11
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180814
Postcode:	DE15 0XD	Client Ref: Location:	S1307160 G19
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.3
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	99	
6.3	98	
5	97	
3.35	96	
2	94	
1.18	91	
0.600	75	
0.425	62	
0.300	53	
0.212	22	
0.150	3	
0.063	0.9	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

[Redacted]

Page: 1 of 1
Date: 08.04.13

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

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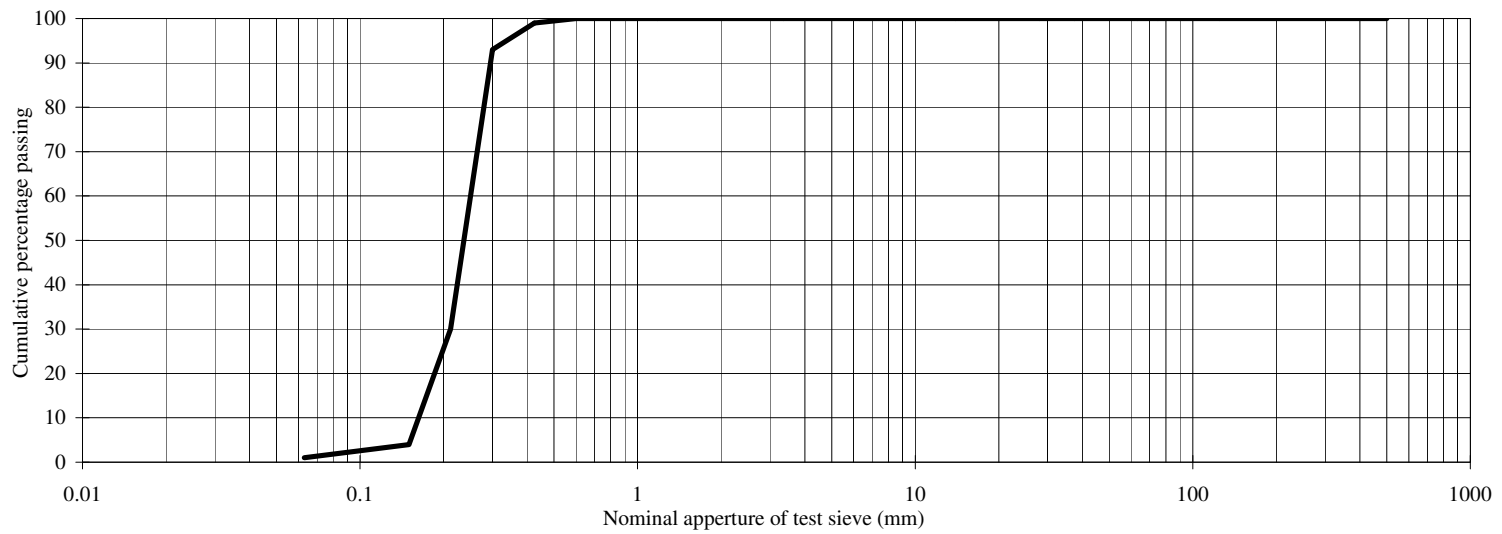
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/12
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180815
Postcode:	DE15 0XD	Client Ref: Location:	S1307161 G20
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	0.7
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	99	
0.300	93	
0.212	30	
0.150	4	
0.063	1.0	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

[Redacted]

Page: 1 of 1
Date: 08.04.13

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

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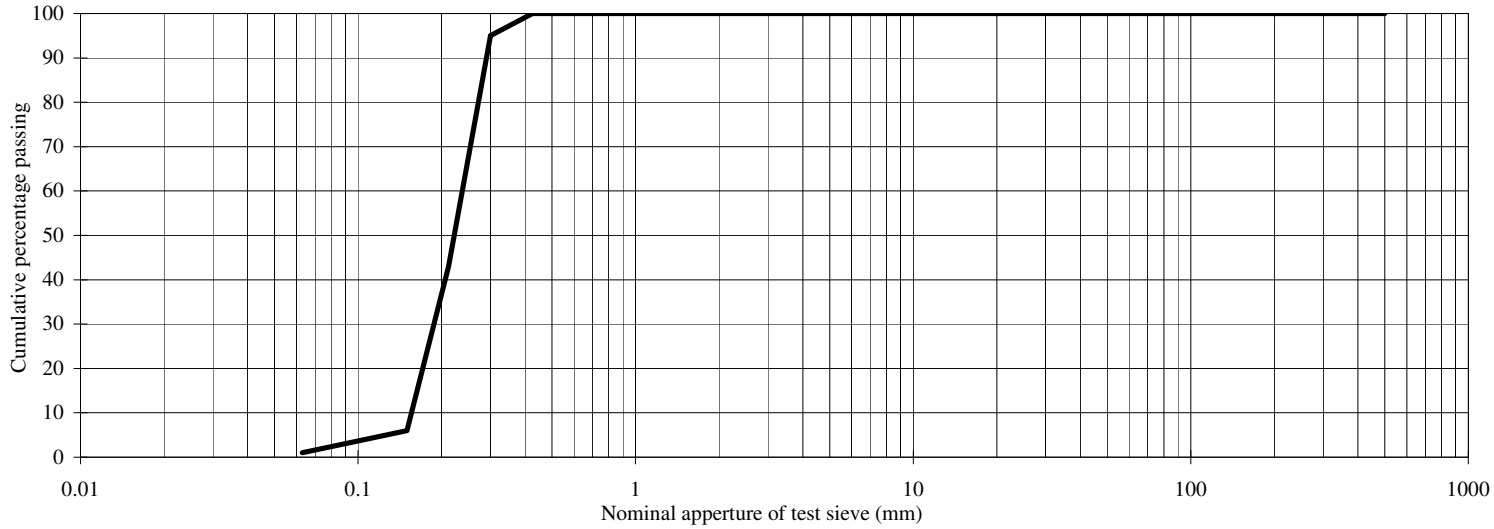
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/13
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180816
Postcode:	DE15 0XD	Client Ref: Location:	S1307162 G21
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	0.9
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	100	
0.300	95	
0.212	43	
0.150	6	
0.063	1.0	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

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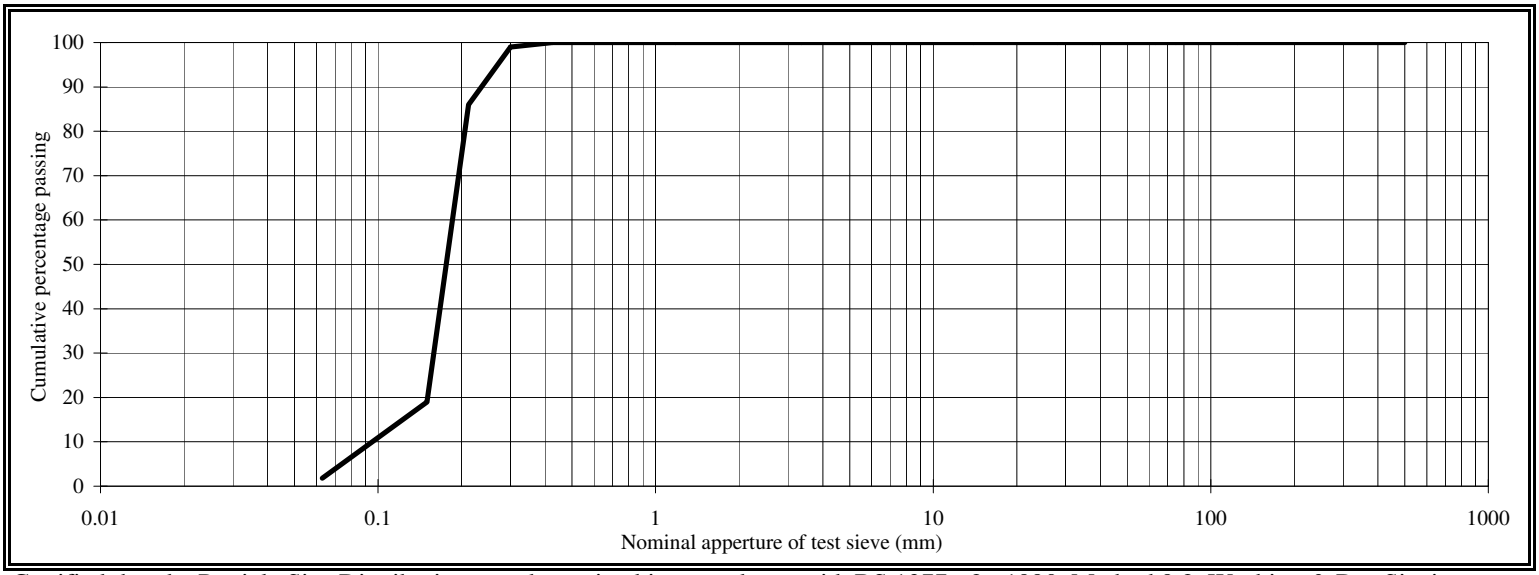
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/14
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180817
Postcode:	DE15 0XD	Client Ref: Location:	S1307163 G22
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	28.03.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	100	
0.300	99	
0.212	86	
0.150	19	
0.063	1.8	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____

[ ] [Redact] Section Manager
[✓] [Redact] - Laboratory Manager

For and on behalf of Environmental Scientifics Group

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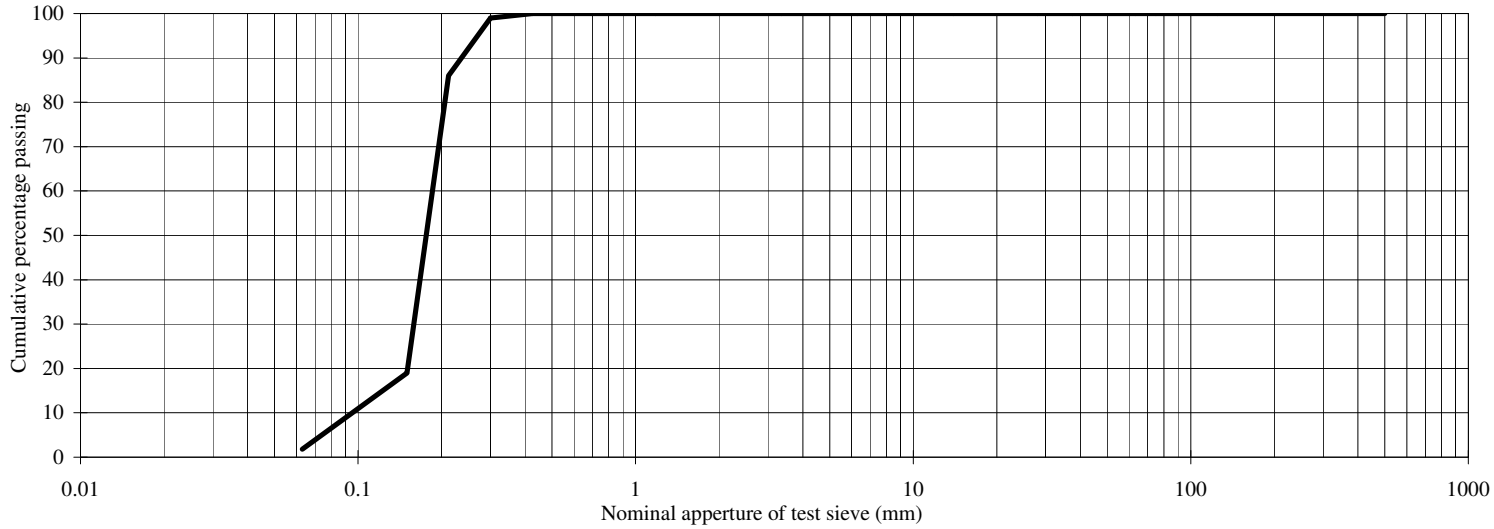
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/14
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180817
Postcode:	DE15 0XD	Client Ref: Location:	S1307163 G22
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	28.03.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	100	
0.300	99	
0.212	86	
0.150	19	
0.063	1.8	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

Signed: [Redacted]

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

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Northants NN11 8RR
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Facsimile: +44 (0) 1327 300154

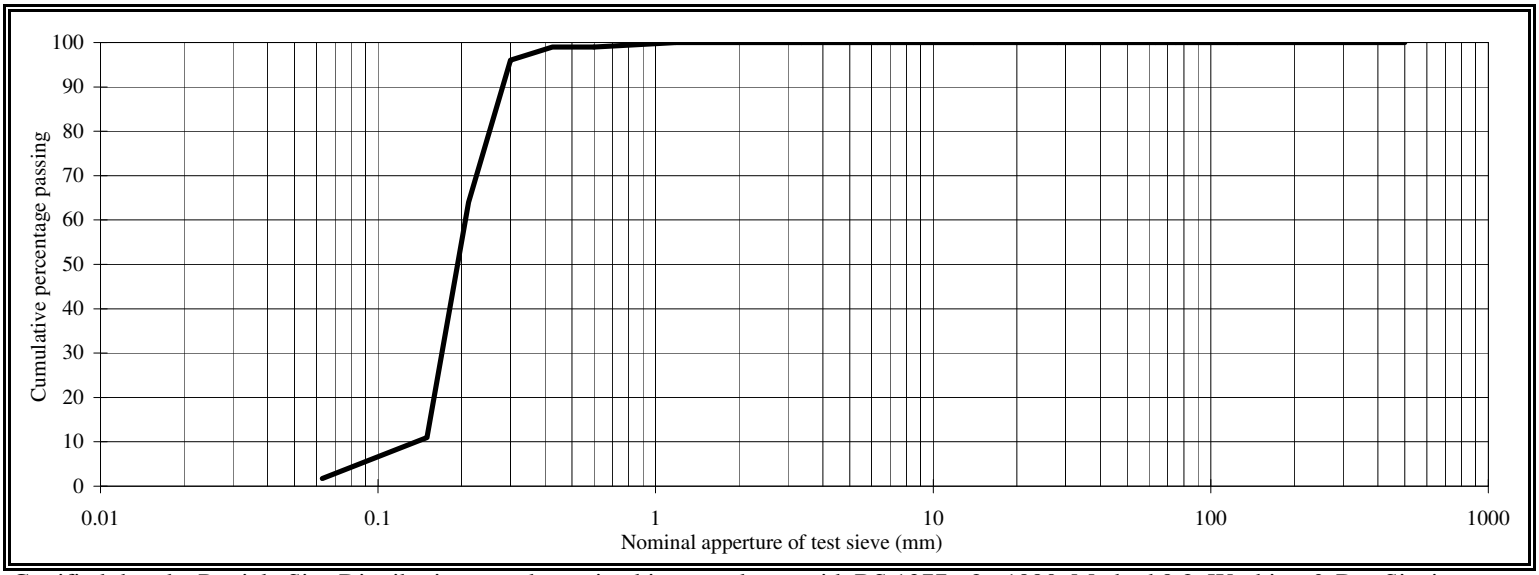
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/15
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180818
Postcode:	DE15 0XD	Client Ref: Location:	S1307164 G23
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	03.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.2
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	99	
0.425	99	
0.300	96	
0.212	64	
0.150	11	
0.063	1.7	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____

For and on behalf of Environmental Scientifics Group

[ ] [Reda - Section Manager
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ESG Environmental Scientifics Group

UKAS TESTING
0001

TEST REPORT

Determination of Particle Size Distribution

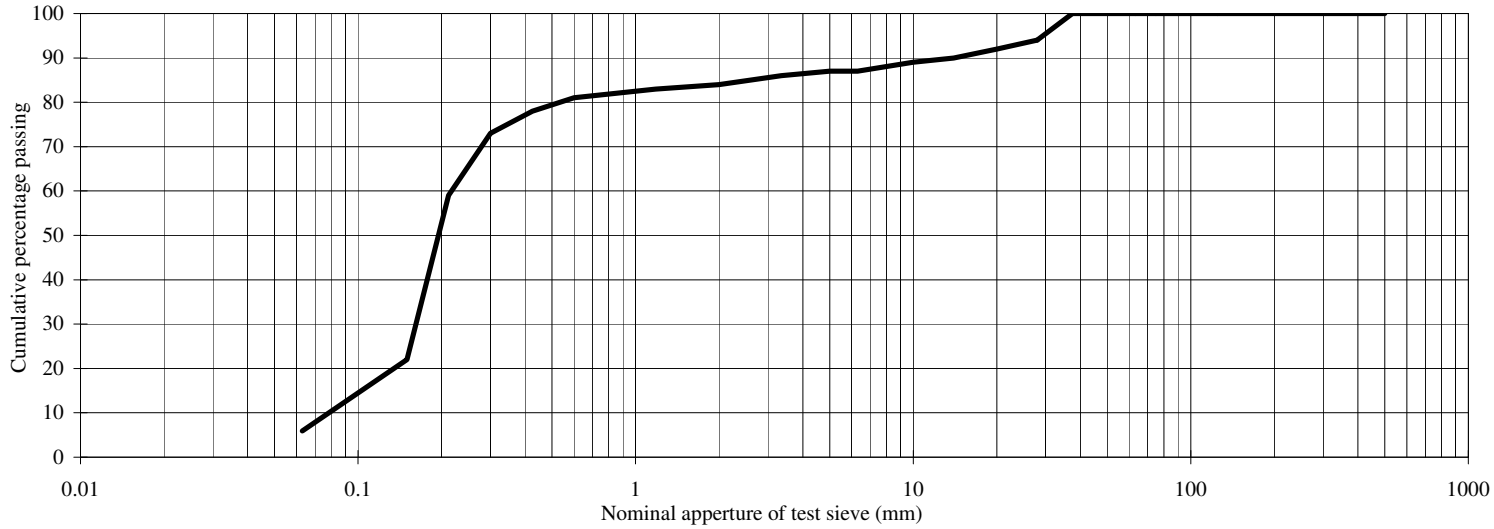
Client:	Scientifics Ltd	Report No:	50171428/13/16
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180819
Postcode:	DE15 0XD	Client Ref: Location:	S1307165 G24
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	05.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	0.8

Description: Brown grey SAND with occasional Gravel

Specification: Not Required

Comments:

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	94	
20	92	
14	90	
10	89	
6.3	87	
5	87	
3.35	86	
2	84	
1.18	83	
0.600	81	
0.425	78	
0.300	73	
0.212	59	
0.150	22	
0.063	5.9	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____

For and on behalf of Environmental Scientifics Group

[ ] [Redac - Section Manager
[✓] [Redact - Laboratory Manager

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ESG Environmental Scientifics Group

UKAS TESTING
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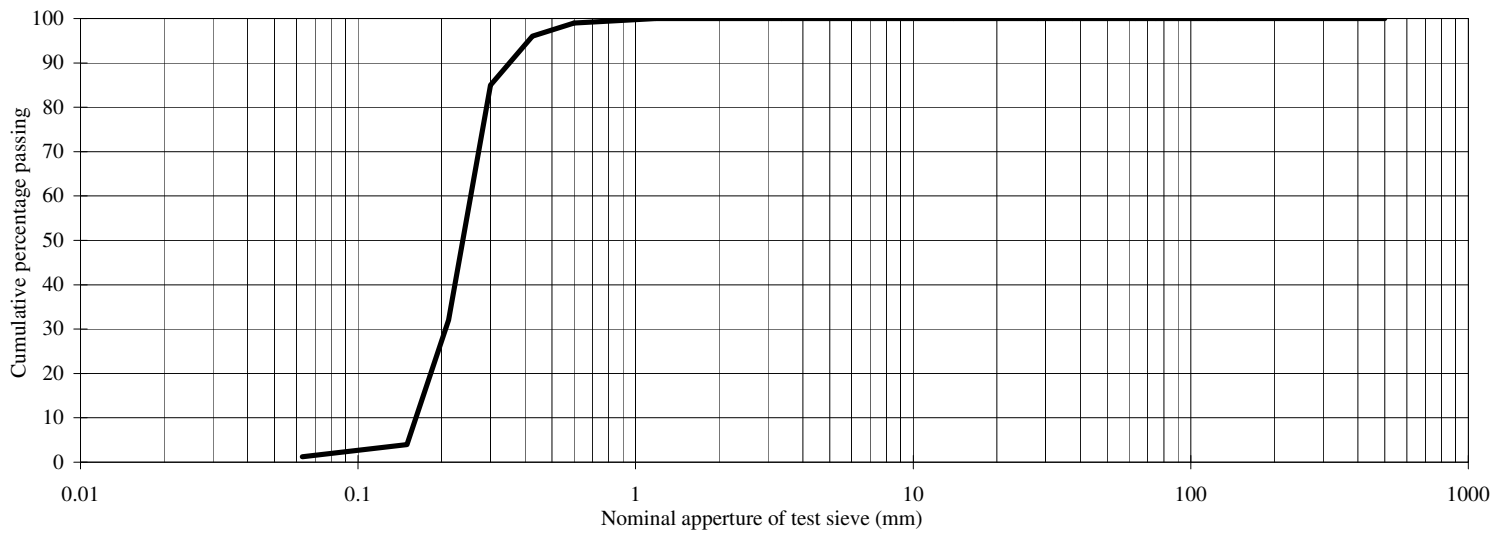
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/17
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180820
Postcode:	DE15 0XD	Client Ref: Location:	S1307166 G25
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	05.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	0.6
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	99	
0.425	96	
0.300	85	
0.212	32	
0.150	4	
0.063	1.2	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

[Redacted]

Page: 1 of 1
Date: 08.04.13

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

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ESG Environmental Scientifics Group

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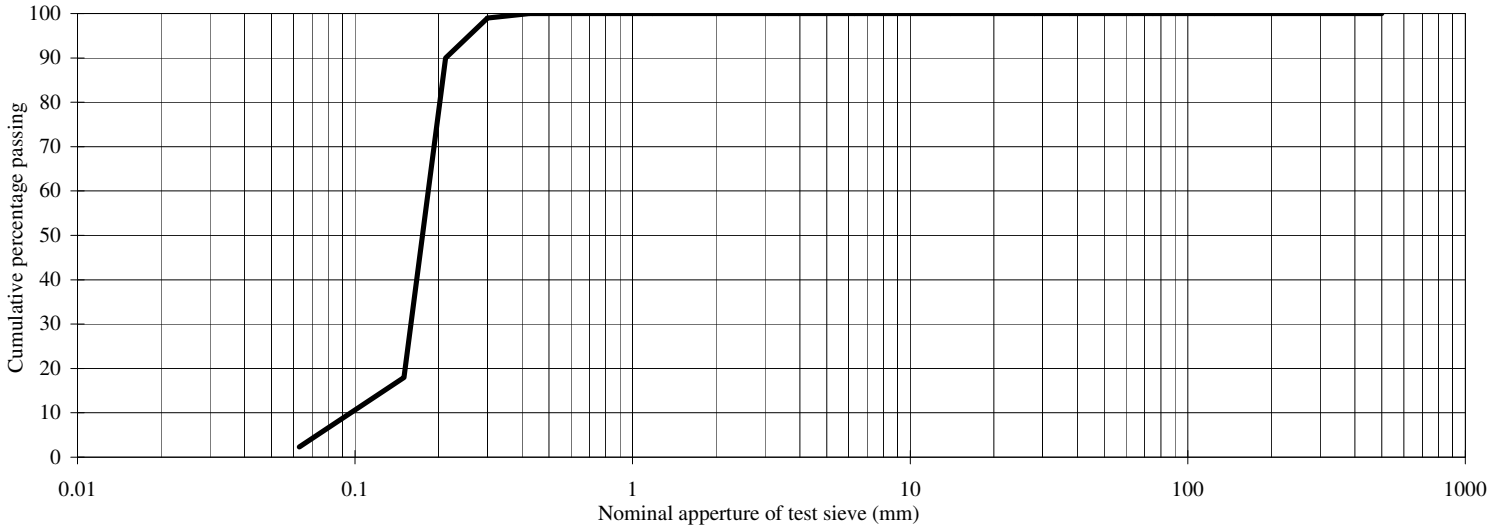
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/18
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180821
Postcode:	DE15 0XD	Client Ref: Location:	S1307167 G26
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	05.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.1
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	100	
0.300	99	
0.212	90	
0.150	18	
0.063	2.3	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____

For and on behalf of Environmental Scientifics Group

[ ] [Reda - Section Manager
[✓] [Redacte Laboratory Manager

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ESG Environmental Scientifics Group

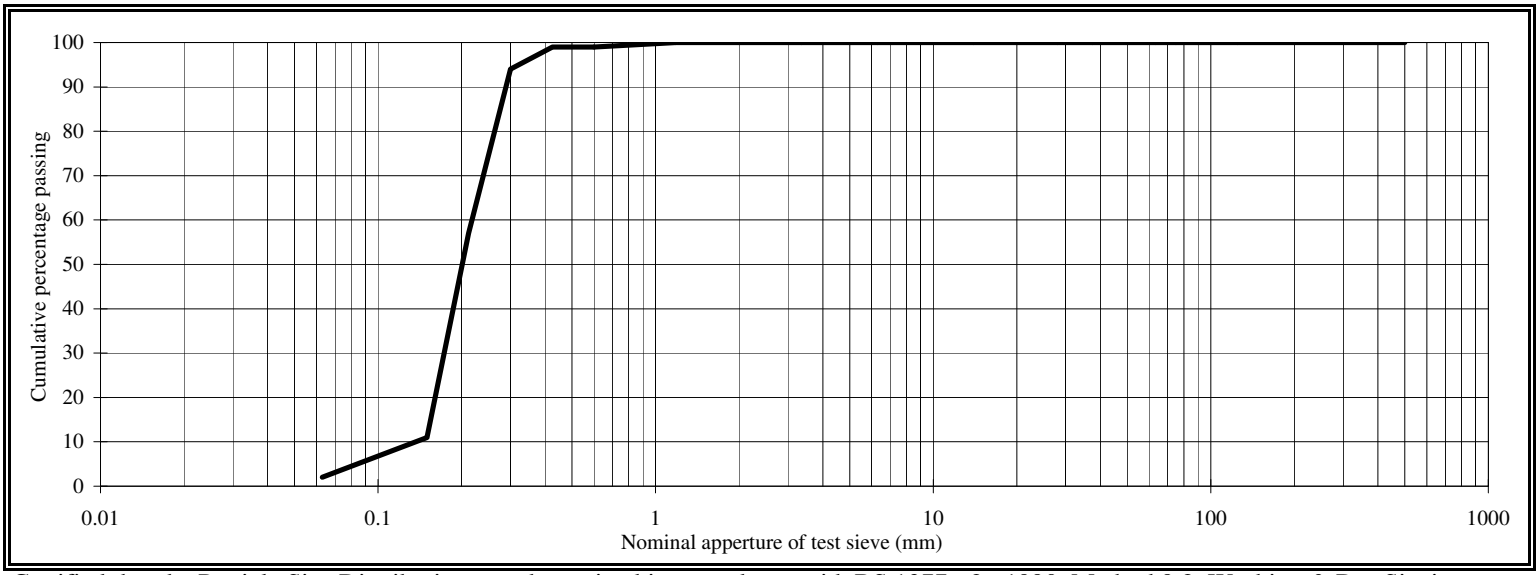
UKAS TESTING
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/19
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180822
Postcode:	DE15 0XD	Client Ref: Location:	S1307168 G27
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	05.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	1.4
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	99	
0.425	99	
0.300	94	
0.212	57	
0.150	11	
0.063	2.0	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

[Redacted]

Page: 1 of 1
Date: 08.04.13

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

ESG Asbestos Limited

ASBESTOS ANALYSIS RESULTS - SOIL ANALYSIS

ESG Asbestos limited Certificate of Analysis for Asbestos in Soils

UKAS TESTING 1089

Detection limit of Method SCI-ASB-020 is 0.001%

Sampling has been carried out by client

Client:	ESG Environmental Chemistry	**Page 1 of 2**	
Address:	Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent	**Report No:**	**ANO-0488-5765**
For the attention of:	EnviroCentre Ltd	**Report Date:**	**26/03/2013**
Site Address:		**Project Number:**	**S131671**

Sample Number	Sample Date	Sample Location	Test Date	Total Sample Dry Weight (g)	Weight of <2mm Fraction (g)	Asbestos(g) in >8mm+>2mm	Asbestos(g) in <2mm	% Asbestos by weight of Total Dried Sample	Asbestos Fibre Types Identified
CL/1307150	13/03/13	G1	25/03/2013					Screen Only	NADIS
CL/1307151	13/03/13	G3	25/03/2013					Screen Only	NADIS
CL/1307152	13/03/13	G5	25/03/2013					Screen Only	NADIS
CL/1307153	13/03/13	G7	25/03/2013					Screen Only	NADIS
CL/1307154	13/03/13	G9	25/03/2013					Screen Only	NADIS
CL/1307155	13/03/13	G11	25/03/2013					Screen Only	NADIS
CL/1307156	12/03/13	G13	25/03/2013					Screen Only	NADIS
CL/1307157	12/03/13	G15	25/03/2013					Screen Only	NADIS
CL/1307158	13/03/13	G16	25/03/2013					Screen Only	NADIS
CL/1307159	13/03/13	G17	25/03/2013					Screen Only	NADIS
CL/1307160	12/03/13	G19	25/03/2013					Screen Only	NADIS
CL/1307161	12/03/13	G20	25/03/2013					Screen Only	NADIS
CL/1307162	12/03/13	G21	25/03/2013					Screen Only	NADIS
CL/1307163	12/03/13	G22	25/03/2013					Screen Only	NADIS
CL/1307164	12/03/13	G23	25/03/2013					Screen Only	NADIS
CL/1307165	12/03/13	G24	25/03/2013					Screen Only	NADIS
CL/1307166	12/03/13	G25	25/03/2013					Screen Only	NADIS
CL/1307167	12/03/13	G26	25/03/2013					Screen Only	NADIS
CL/1307168	13/03/13	G27	25/03/2013					Screen Only	NADIS
CL/1307169	13/03/13	G28	25/03/2013					Screen Only	NADIS

Keys

NAACR = Not Analysed at Clients Request

NAIIS = No Asbestos Identified in Sample (Screens Only)

NADIS = No Asbestos Detected in Sample (ID & Quant Only)

Name:	[Redact	Authorised Signatory:
Position:	Lab Project Manager	[Redacted]

The sample analysis for the above results was carried out using the procedures detailed in ESG Asbestos Limited in house method (SCI-ASB-020) based on HSE document MDHS 90 - Asbestos Contaminated Land - Draft 5 - November 1997 (withdrawn). Fibre identification was carried out using ESG Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), based on HSE's HSG 248. The analysis of fine fraction for asbestos content only includes fibres and does not discriminate non-asbestos fibres. All fibres are assumed, unless specified, to be amphiboles. All tests were carried out at ESG Asbestos Laboratory, Ashbourne House, Bretby Business Park, Ashby Road, Burton-upon-Trent, Staffordshire. DE15 0XD, UKAS Laboratory Number 1089.

Where individual results are flagged see report notes for status.

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0001

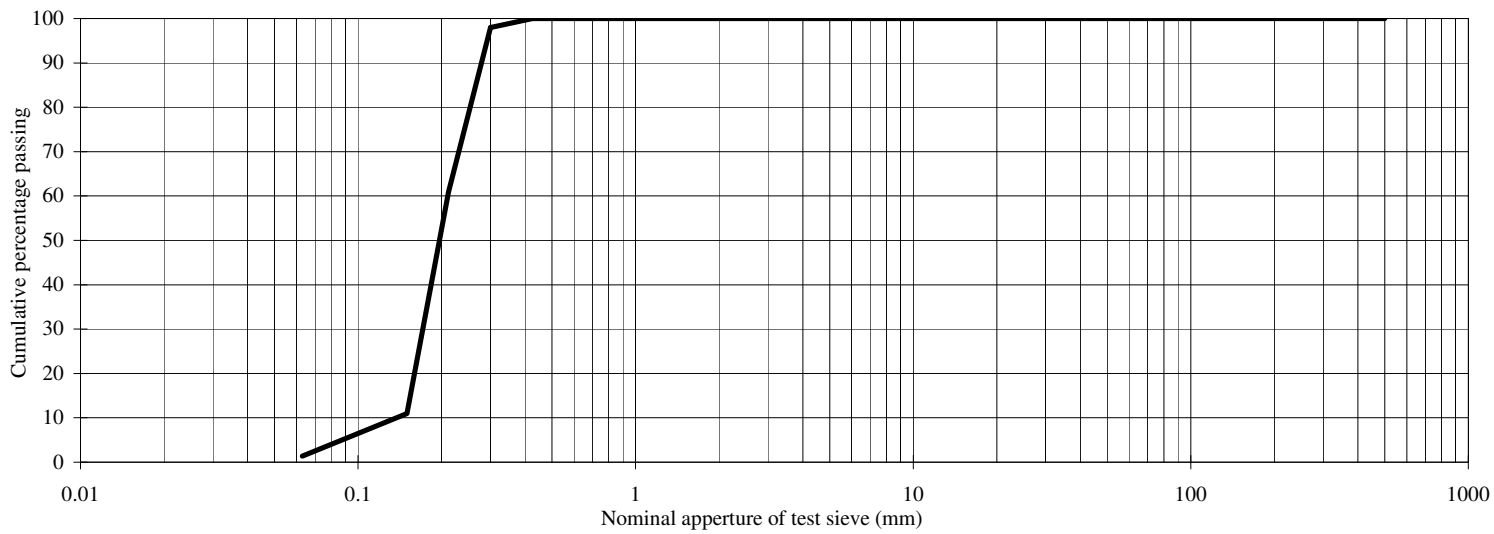
TEST REPORT

Determination of Particle Size Distribution

Client:	Scientifics Ltd	Report No:	50171428/13/20
Client Address:	PO Box 100 Ashby Road, Burton on Trent, Staffordshire	Batch Number: Lab Ref:	DAM0040487 45180823
Postcode:	DE15 0XD	Client Ref: Location:	S1307169 G28
Site:	Job Number: S131671		
		Date Sampled:	13.03.13
Sampled by:	Client	Date Received:	21.03.13
Sampled from:	Site	Date Tested:	05.04.13
Supplier:	Client	Sample Type:	Disturbed
Source:	Site	Sample Mass (kg):	0.9
Description:	Brown grey SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS

BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	100	
0.300	98	
0.212	61	
0.150	11	
0.063	1.4	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 08.04.13

[Redacted]

Signed: _____

[ ] [Reda - Section Manager
[✓] [Redact - Laboratory Manager

For and on behalf of Environmental Scientifics Group

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S131671

Customer EnviroCentre Ltd
Site Whiteness Grabs
Report No S131671

Consignment No S34150
Date Logged 15-Mar-2013

Report Due 25-Mar-2013

ID Number	Description	MethodID	AMMAR	CustServ	ICPMSS								MCertS	PAHMSUS	PCBUSECOAR	PHSOIL	Sub002a	Sub005			Sub018	TMSS	WSLM59
		Sampled	Exchange.Ammonium AR	REPORT A	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Zinc (MS)	MCertS Analysis	PAH (16) by GCMS	PCB-7 Congeners Analysis	pH units (AR)	^Asbestos Screen	^Dibutyltin	^Tributyltin	^Triphenyltin	^Particle Size Dist	Tot.Moisture @ 105C	Total Organic Carbon
Accredited to ISO17025			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓					✓	
CL/1307150	G1	13/03/13																					
CL/1307151	G3	13/03/13																					
CL/1307152	G5	13/03/13																					
CL/1307153	G7	13/03/13																					
CL/1307154	G9	13/03/13																					
CL/1307155	G11	13/03/13																					
CL/1307156	G13	12/03/13																					
CL/1307157	G15	12/03/13																					
CL/1307158	G16	13/03/13																					
CL/1307159	G17	13/03/13																					
CL/1307160	G19	12/03/13																					
CL/1307161	G20	12/03/13																					
CL/1307162	G21	12/03/13																					
CL/1307163	G22	12/03/13																					
CL/1307164	G23	12/03/13																					

Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.

In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Customer EnviroCentre Ltd
Site Whiteness Grabs
Report No S131671

Consignment No S34150
Date Logged 15-Mar-2013

Report Due 25-Mar-2013

ID Number	Description	MethodID	AMMAR	CustServ	ICPMSS								MCertS	PAHMSUS	PCBUSECOAR	PHSOIL	Sub002a	Sub005			Sub018	TMSS	WSLM59
		Sampled	Exchange.Ammonium AR	REPORT A	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Zinc (MS)	MCertS Analysis	PAH (16) by GCMS	PCB-7 Congeners Analysis	pH units (AR)	^Asbestos Screen	^Dibutyltin	^Tributyltin	^Triphenyltin	^Particle Size Dist	Tot.Moisture @ 105C	Total Organic Carbon
Accredited to ISO17025			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓					✓	
CL/1307165	G24	12/03/13																					
CL/1307166	G25	12/03/13																					
CL/1307167	G26	12/03/13																					
CL/1307168	G27	13/03/13																					
CL/1307169	G28	13/03/13																					

Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.

In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	AMMAR	As Received	Determination of Exchangeable Ammonium in Soil using potassium chloride extraction, discrete colorimetric detection
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PCBUSECDAR	As Received	Determination of Polychlorinated Biphenyl (PCB) congeners/aroclors by hexane/acetone extraction followed by GCECD detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	WSLM59	Air Dried	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined **N.Det** Not detected
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : EnviroCentre Ltd

Site : Whiteness Grabs

Report Number : S13_1671M

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1307150	G1	Brown SAND
CL/1307151	G3	Grey Stone SILT
CL/1307152	G5	Brown SAND
CL/1307153	G7	Brown SAND
CL/1307154	G9	Brown SAND
CL/1307155	G11	Brown SAND
CL/1307156	G13	Brown Stone SAND
CL/1307157	G15	Brown Stone SAND
CL/1307158	G16	Brown Stone SAND
CL/1307159	G17	Grey SAND
CL/1307160	G19	Brown Stone SILT
CL/1307161	G20	Brown SAND
CL/1307162	G21	Brown SAND
CL/1307163	G22	Brown SAND
CL/1307164	G23	Grey SAND
CL/1307165	G24	Grey Stone SAND
CL/1307166	G25	Brown SAND
CL/1307167	G26	Grey SAND
CL/1307168	G27	Grey SAND
CL/1307169	G28	Brown SAND

END OF REPORT

Our Ref: EFS/131753M (Ver. 2)
Your Ref:

April 9, 2013

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

[Redact
EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

For the attention o [Redacte

Dear [Redac

Soil Sample Analysis - Whiteness

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 01/05/13 when they will be discarded. Please call 01283 554467 for an extension of this date.
Please be aware that our policy for the retention of paper based laboratory records and analysis reports is 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Laboratory and Analytical) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for ESG
[Redacted]

Project Co-ordinator
01283 554467

Environmental Chemistry, ESG, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Environmental Scientifics Group Limited.
Registered No: 2880501

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Report No. EFS/131753M (Ver. 2)

EnviroCentre Ltd
Craighall Business Park
8 Eagle Street
Glasgow
G4 9XA

Site: Whiteness

The 9 samples described in this report were registered for analysis by ESG on 20-Mar-2013. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Apr-2013

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by ESG.

The following tables are contained in this report:

[Redacted]

On behalf of
ESG :

Date of Issue: 09-Apr-2013

[Redacted] Operations Director
Laboratory and Analytical Business

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105^{o}C unless otherwise stated. (except QC samples)
ESG accepts no responsibility for any sampling not carried out by our personnel.

Units :		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	µg/kg	ug/kg	ug/kg	ug/kg	% M/M	mg/kg	
Method Codes :		ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	TMSS	PCBUSECDAR	Sub005	Sub005	Sub005	WSLM59	PAHMSUS	
Method Reporting Limits :		0.3	0.2	1.2	1.6	0.7	0.5	2	16	0.2		5	5	20	0.02		
Accreditation Code:		UM	UM	UM	UM	UM	UM	UM	UM	U		N	N	N	N		
LAB ID Number CL/	**Client Sample Description**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Zinc (MS)**	**Tot.Moisture @ 105C**	**PCB-7 Congeners Analysis**	**^Dibutyltin**	**^Tributyltin**	**^Triphenyltin**	**Total Organic Carbon**	**PAH (16) by GCMS**	
1307549	BH15 0.50	2.6	<0.20	13.1	27	18.9	<0.5	7.3	153.9	4.6	Req	<21.0	<21.0	<21.0	0.13	Req	
1307551	BH15 15.00	1.3	<0.2	4.5	<1.6	1.8	<0.5	2.3	19.4	12.3	Req	<22.8	<22.8	<22.8	0.08	Req	
1307550	BH15 8.00	1.3	<0.2	4.1	1.7	2	<0.5	2.2	<15.9	17.0	Req	<24.1	<24.1	<24.1	0.09	Req	
1307552	BH18 0.50	1.5	<0.2	8.4	25.8	13.7	<0.5	5.8	178.9	5.2	Req	60.1	<21.1	<21.1	0.12	Req	
1307553	BH18 10.00	0.8	<0.2	3.7	1.7	1.9	<0.5	2	22	18.5	Req	47.9	<24.5	<24.5	0.08	Req	
1307554	BH18 14.00	1.1	<0.2	4.2	<1.6	1.7	<0.5	2.1	25.4	18.6	Req	115.5	<24.6	<24.6	0.08	Req	
1307555	BH24 0.50	1	<0.2	3.4	2.1	2.3	<0.5	<2.0	18.0	4.5	Req	37.7	<20.9	<20.9	0.08	Req	
1307557	BH24 14.00	1.1	<0.2	3.3	<1.6	1.5	<0.5	2	17.4	19.3	Req	38.4	<24.8	<24.8	0.07	Req	
1307556	BH24 8.00	1	<0.2	2.9	<2	1.4	<0.5	<2.0	<15.8	18.1	Req	<24.4	<24.4	<24.4	0.07	Req	

ESG Environmental Scientifics Group
Bretby Business Park, Ashby Road
Burton-on-Trent, Staffordshire, DE15 0YZ
Tel +44 (0) 1283 554400
Fax +44 (0) 1283 554422

Client Name EnviroCentre Ltd

Contact [Redac

Whiteness

Soil Sample Analysis

Date Printed	**09-Apr-2013**
Report Number	**EFS/131753M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105°C where appr opriate, in accordance with the MCERTS standard.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH15 0.50	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307549	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.08	-	**UM**
Acenaphthylene	208-96-8	-	< 0.08	-	U
Acenaphthene	83-32-9	-	< 0.08	-	UM
Fluorene	86-73-7	-	< 0.08	-	UM
Phenanthrene	85-01-8	-	< 0.08	-	UM
Anthracene	120-12-7	-	< 0.08	-	U
Fluoranthene	206-44-0	-	< 0.08	-	UM
Pyrene	129-00-0	-	< 0.08	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.08	-	UM
Chrysene	218-01-9	-	< 0.08	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.08	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.08	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-	UM
Total (USEPA16) PAHs	-	-	< 1.34	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	98
Phenanthrene-d10	98
Chrysene-d12	101
Perylene-d12	99

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	92

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH15 8.00	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307550	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.54	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	97
Phenanthrene-d10	99
Chrysene-d12	101
Perylene-d12	96

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	88
Terphenyl-d14	77

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH15 15.00	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307551	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.09	-	**UM**
Acenaphthylene	208-96-8	-	< 0.09	-	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	-	< 0.09	-	UM
Phenanthrene	85-01-8	-	< 0.09	-	UM
Anthracene	120-12-7	-	< 0.09	-	U
Fluoranthene	206-44-0	-	< 0.09	-	UM
Pyrene	129-00-0	-	< 0.09	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.09	-	UM
Chrysene	218-01-9	-	< 0.09	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.09	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.09	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	UM
Total (USEPA16) PAHs	-	-	< 1.46	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	98
Phenanthrene-d10	97
Chrysene-d12	98
Perylene-d12	94

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	91

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH18 0.50	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307552	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.08	-	**UM**
Acenaphthylene	208-96-8	-	< 0.08	-	U
Acenaphthene	83-32-9	-	< 0.08	-	UM
Fluorene	86-73-7	-	< 0.08	-	UM
Phenanthrene	85-01-8	-	< 0.08	-	UM
Anthracene	120-12-7	-	< 0.08	-	U
Fluoranthene	206-44-0	-	< 0.08	-	UM
Pyrene	129-00-0	-	< 0.08	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.08	-	UM
Chrysene	218-01-9	-	< 0.08	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.08	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.08	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-	UM
Total (USEPA16) PAHs	-	-	< 1.35	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	94
Acenaphthene-d10	96
Phenanthrene-d10	96
Chrysene-d12	96
Perylene-d12	90

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	97
Terphenyl-d14	94

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH18 10.00	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307553	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.57	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	98
Phenanthrene-d10	96
Chrysene-d12	94
Perylene-d12	87

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	92

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH18 14.00	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307554	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.57	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	95
Acenaphthene-d10	95
Phenanthrene-d10	93
Chrysene-d12	92
Perylene-d12	85

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	85
Terphenyl-d14	80

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH24 0.50	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307555	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.08	-	**UM**
Acenaphthylene	208-96-8	-	< 0.08	-	U
Acenaphthene	83-32-9	-	< 0.08	-	UM
Fluorene	86-73-7	-	< 0.08	-	UM
Phenanthrene	85-01-8	-	< 0.08	-	UM
Anthracene	120-12-7	-	< 0.08	-	U
Fluoranthene	206-44-0	-	< 0.08	-	UM
Pyrene	129-00-0	-	< 0.08	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.08	-	UM
Chrysene	218-01-9	-	< 0.08	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.08	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.08	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-	UM
Total (USEPA16) PAHs	-	-	< 1.34	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	98
Phenanthrene-d10	98
Chrysene-d12	97
Perylene-d12	91

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	92

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH24 8.00	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307556	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.56	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	97
Phenanthrene-d10	97
Chrysene-d12	98
Perylene-d12	92

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	96
Terphenyl-d14	92

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	EnviroCentre Ltd: Whiteness		
Sample Details:	BH24 14.00	**Job Number:**	S13_1753M
LIMS ID Number:	CL1307557	**Date Booked in:**	20-Mar-13
QC Batch Number:	130265	**Date Extracted:**	28-Mar-13
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Mar-13
Directory:	2813PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.59	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	99
Phenanthrene-d10	99
Chrysene-d12	100
Perylene-d12	93

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	91

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polychlorinated Biphenyls (congeners)

Customer and Site Details:	EnviroCentre Ltd: Whiteness	**Matrix:**	SOIL
Job Number:	S13_1753M	**Date Booked in:**	20-Mar-13
QC Batch Number:	130071	**Date Extracted:**	27-Mar-13
Directory:	0327PCB.GC8	**Date Analysed:**	27-Mar-13
Method:	Ultrasonic		
Accreditation code:	N		

			Concentration, (µg/kg)						
	Sample ID	**Customer ID**	**PCB28**	**PCB52**	**PCB101**	**PCB118**	**PCB153**	**PCB138**	**PCB180**
*	CL1307549	BH15 0.50	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99	<4.99
*	CL1307550	BH15 8.00	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96	<4.96
*	CL1307551	BH15 15.00	<4.88	<4.88	<4.88	<4.88	<4.88	<4.88	<4.88
*	CL1307552	BH18 0.50	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95	<4.95
*	CL1307553	BH18 10.00	<4.92	<4.92	<4.92	<4.92	<4.92	<4.92	<4.92
*	CL1307554	BH18 14.00	<5.07	<5.07	<5.07	<5.07	<5.07	<5.07	<5.07
*	CL1307555	BH24 0.50	<4.97	<4.97	<4.97	<4.97	<4.97	<4.97	<4.97
*	CL1307556	BH24 8.00	<4.93	<4.93	<4.93	<4.93	<4.93	<4.93	<4.93
*	CL1307557	BH24 14.00	<4.90	<4.90	<4.90	<4.90	<4.90	<4.90	<4.90

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where approp riate, in accordance with the MCERTS standard.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S131753

Customer EnviroCentre Ltd
Site Whiteness
Report No S131753

Consignment No S34189
Date Logged 20-Mar-2013

Report Due 02-Apr-2013

ID Number	Description	MethodID	ICPMSS								MCertS	PAHMSUS	PCBUSECOAR	Sub005			TMSS	WSLM59
		Sampled	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Zinc (MS)	MCertS Analysis	PAH (16) by GCMS	PCB-7 Congeners Analysis	^Dibutyltin	^Tributyltin	^Triphenyltin	Tot.Moisture @ 105C	Total Organic Carbon
Accredited to ISO17025			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	
CL/1307549	BH15 0.50	D																
CL/1307550	BH15 8.00	D																
CL/1307551	BH15 15.00	D																
CL/1307552	BH18 0.50	D																
CL/1307553	BH18 10.00	D																
CL/1307554	BH18 14.00	D																
CL/1307555	BH24 0.50	D																
CL/1307556	BH24 8.00	D																
CL/1307557	BH24 14.00	D																

Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.

In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PCBUSECDAR	As Received	Determination of Polychlorinated Biphenyl (PCB) congeners/aroclors by hexane/acetone extraction followed by GCECD detection
Soil	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	WSLM59	Air Dried	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined **N.Det** Not detected
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : EnviroCentre Ltd

Site : Whiteness

Report Number : S13_1753M

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1307549	BH15 0.50	Brown Gravel SAND
CL/1307550	BH15 8.00	Brown SAND
CL/1307551	BH15 15.00	Brown SAND
CL/1307552	BH18 0.50	Brown SAND Stone
CL/1307553	BH18 10.00	Brown SAND
CL/1307554	BH18 14.00	Brown SAND
CL/1307555	BH24 0.50	Brown Gravel SAND
CL/1307556	BH24 8.00	Brown SAND
CL/1307557	BH24 14.00	Brown SAND

END OF REPORT